

Inequalities between Men and Women in Access to Energy Resources in the Western Savannah Region of Togo



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SUMMARY: Access to energy resources in most developing countries, and in Togo in particular, is marked by a low rate of access to electricity from the centralized national grid and high consumption of biomass as the main energy resource for cooking. This masks strong inequalities, particularly those linked to gender, to the disadvantage of female-headed households and female household members. The aim is to analyze gender inequalities in access to energy resources in households in the western Savanes Region of Togo. This work is based on a qualitative and quantitative methodological approach using documentary analysis, field surveys, interview guides and interviews. Descriptive and economic statistical tools were used to process the data collected. The results of the study show that access to modern cooking energy resources is difficult for female-headed households, 45.1% of which still use agricultural residues, compared with 4.2% for male-headed households. Furthermore, the rate of access to electricity from the national grid for female-headed households is only 21.7%, compared with 48.7% for male-headed households. These disparities, which are more pronounced in rural areas, vary from prefecture to prefecture.

KEYWORDS: Gender, access, energy resources, household, Togo

INTRODUCTION

Access to energy resources is a key development issue, given its implications for our societies. Linking the issue of gender to that of access to energy resources opens the way to achieving the Sustainable Development Goals (SDGs), in line with Goals 5 and 7. All over the world, and even more so in tropical Africa, populations depend on access to energy resources for cooking and lighting. The most common household energy resources are biomass, more advanced energies such as charcoal, electricity and liquefied petroleum gas.

The global population with access to electricity has risen from 83 % in 2010 to 91% in 2020, giving more than a billion people access over the period (United Nations, 2022, p. 40). However, in Africa, 48% of the population had no access to electricity in 2017. Biomass and charcoal still dominate the energy mixes of African countries, both in terms of production and consumption (R. Berahab, 2019, p.18). In Togo, the national electrification rate has risen from 23 % in 2010 to 60 % in 2021. This rate stands at 80 % in urban areas and 10 % in rural areas (GIZ, 2022, p. 1). Biomass accounts for 76 % of the country's total energy consumption (SIE-UEMOA, 2019, p. 5). Gender inequalities persist, however, as access to energy resources, such as modern cooking energy sources and electricity from centralized or decentralized national grids, is already limited for men, but more so for women. The western Savanes Region, located in the Savanes region of northern Togo, is not immune to this situation. Households in the western part of the Savanes Region have been living for several decades in this context of difficult access to energy resources. This situation creates vulnerabilities and needs in terms of lighting and cooking, giving rise to greater inequalities among female-headed households and female members of the household.

As a result, discrimination and lack of gender mainstreaming limit both women's and men's choices and capabilities, and in turn, their potential for economic production. According to Sustainable Development Goal (SDG) 7, all the world's citizens have the right to enjoy "reliable, sustainable and modern energy services at affordable cost". But in Togo's western Savanes region, as in other countries in sub-Saharan Africa, inequalities persist between men and women in access to energy sources, despite public investment. Given this observation, the following question is posed: in what terms are gender inequalities expressed in terms of access to energy resources in households in the western Savanes Region of Togo? The hypothesis formulated is as follows in Togo's western Savannah Region, women and men have different access to energy resources, due to their weak economic power and the sexual division of labor. The aim of the study is to analyze gender inequalities in access to energy resources in households in the western

Inequalities between Men and Women in Access to Energy Resources in the Western Savanes Region of Togo

Savanes Region of Togo. The present work is structured in four parts: description of the geographical framework, methodological approach, presentation of results and discussion.

1. Presentation of the geographical context of the study

Located in the Savanes administrative region, the study area lies to the west of the Savanes region between 0° 10' west longitude and 0° 24' east longitude, and from south to north between 10° 25' and 10° 79' north latitude. It is bordered to the north by Burkina-Faso, to the west by Ghana, and to the east by the prefecture of Kpendjal- ouest and to the south by the prefecture of Oti, which constitute its administrative boundaries (map 1). With a surface area of 2,529 km², the western part of the Savanes Region, located in a semi-arid environment, presents a constraining physical environment. It is an area characterized by high annual insolation, a fragile ecology, high population densities (on average 236 hbts/km²), and varied social organization and cropping systems. It enjoys a contrasting tropical Sudanian climate, marked by a long dry season (November to May) and a 4-month wet season (June to October).

Agriculture is the population's main activity. Dependent on the climate, it is family-based. Although livestock production plays a key role in socio-economic activities, plant production predominates in agricultural activities. Heavily degraded plant formations are dominated by savannah. To meet this scientific challenge, it is essential to define an appropriate research method.

2. METHODOLOGICAL APPROACH

The methodological approach adopted combines qualitative and quantitative approaches. For the quantitative survey, a sample of heads of household was selected. To select the populations to be surveyed, it was necessary to draw up a sample.

Prior to administering the questionnaire to the heads of households who make up the study's target population, a sampling method was set up to obtain reliable results that were above all representative of the population studied. The sampling method focused on the localities and populations to be surveyed. It involved selecting primary, secondary, tertiary and quaternary samples.

Based on the most widely used energy resources in the Savanes Region (RGPH-5, 2022), the analysis of access to energy resources in each household takes into account all of the following energy resources: firewood, charcoal, agricultural residues and liquefied petroleum gas (LPG) for cooking, and electricity from the CEET distribution network, non-rechargeable dry batteries and individual solar installations for lighting.

The choice of the western part of the Region was guided by a number of criteria, including demographic weight, environmental degradation and the location of survey sites in relation to main roads. Considering the data from the fourth General Census of Population and Housing (RGPH-5, 2022) and the impossibility of surveying all households in the western Savanes Region, which amounts to 107 904 households, it appeared necessary to determine a minimum sample value based on the formula of D. Schwartz (1995).

$$n = \frac{z_{\alpha}^2 \cdot p \cdot q}{i^2}$$

Where: n= the minimum number of households to be selected; Z_α= 95% confidence level with a standard value of 1.96 ; p = n/N; p= proportion of selected households (n) to the total number of households in the western Savanes Region (N); q= 1-p and i = the margin of error of the estimate set at a value of 4 % with a standard value of 0.04 ; the value of p was estimated at 0.60 following an exploratory survey of 60 randomly selected households.

$$n = \frac{1,96^2 \cdot 0,60 \cdot 0,4}{0,04^2}$$

$$n=576$$

Based on this sample of 576 households, a sampling rate of 20 % is applied in each locality to find the households to be surveyed (Table 1).

Table no. 1: Sample size distribution by survey location

Prefecture	Communes	Locations surveyed	Population size	Household size	Survey rate (%)	Sample
Cinkassé	Cinkassé 1	Boadé centre	2 558	205	20	40
		Silmissi	1 200	109	20	22
		Tantchingo	1 237	131	20	26
		Zoumbeko	556	107	20	21
Tône	Tône 1	Sibortoti	2 930	378	20	74
		Kpakaoate	3 098	604	20	119
		Kourientre centre	2 942	280	20	57
		Pana-Bagou	1 734	301	20	61
Tandjouaré	Tandjouaré 1	Bogou centre	1 108	321	20	63
		Boulogou	576	125	20	25

Inequalities between Men and Women in Access to Energy Resources in the Western Savannah Region of Togo

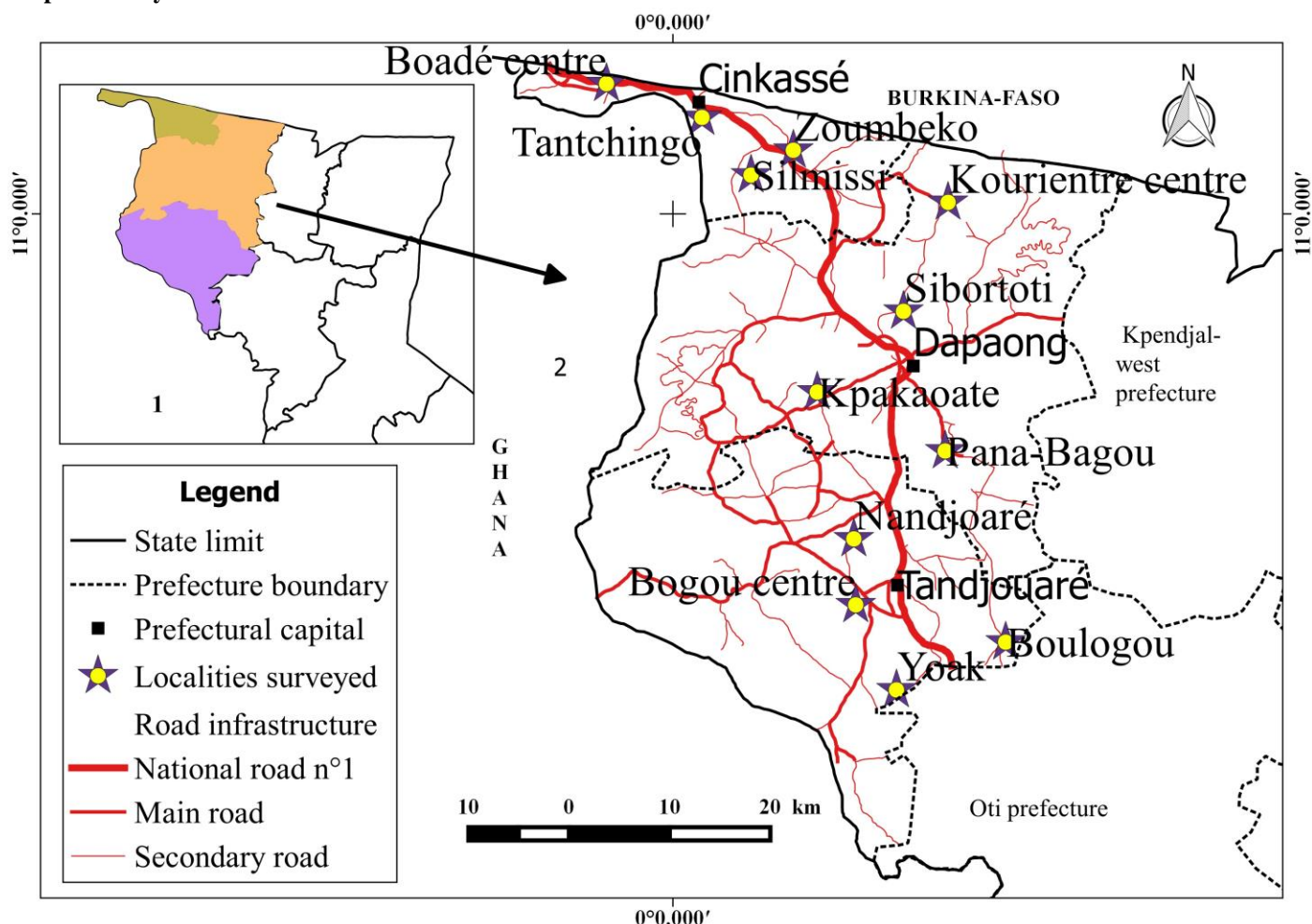
	Yoak	1 234	168	20	33
	Nandjoaré	889	175	20	35
Total		20 062	2 904	20	576

Source: Based on RGPH data (2022) and our calculations (2023)

According to the data in Table 1, a total of 576 heads of household were surveyed in nine localities (Map 1). This number corresponds to a sampling rate or average sampling rate of 20% of the total household population, selected using a simple probabilistic method (without discounting). As a reminder, the distribution of resident households in Togo according to the gender of the head of household gives a proportion of 74.2% male-headed households versus 25.8% female-headed households (QUIBB-Togo, 2015, p.74 and RGPH-5, 2022). For reasons of representativeness of the target population, this survey has approximately this characteristic that interests us. Of the 576 households surveyed, 76.2% were male-headed and 23.8% female-headed.

The questionnaire survey was supplemented by individual and group interviews with the following resource persons or actors: heads of female-headed households, heads of male-headed households, household members, local CEET branch managers and local women's associations/NGOs. This approach enables each actor or group to give their perception and experience of the situation and related problems. A total of 52 stakeholders were surveyed in six localities. At the end of the data collection phase, the information was processed using Excel, SPSS and Arc Gis software, before being analyzed in depth. A total of 52 stakeholders were surveyed in six localities. At the end of data collection, the information gathered was processed using Excel, SPSS and Arc Gis software, before being analyzed in depth.

Map 1: Survey locations



Source: IGN-France, 1989.

Based on the location of the surveyed localities, Map 2 shows that the selected sites cover the study area geographically.

3. RESULTS

The results are presented under three headings: gender and household energy consumption, energy accessibility and vulnerabilities by gender, and power relations between women and men involving energy in the household.

Inequalities between Men and Women in Access to Energy Resources in the Western Savannah Region of Togo

3.1. Gender and household energy consumption

Gender differences and inequalities lead to inequitable situations between men and women when it comes to their access to energy resources.

3.1.1. Gender and consumption of energy resources for cooking in households

An analysis focusing solely on household consumption, without distinguishing between the different energy uses and needs of male- and female-headed households, would not be complete (table no.2).

Table 2: Breakdown of cooking energy sources by gender of head of household

Gender of head of household	Main sources of cooking energy in %				Total
	Drink heating	Charcoal	LPG	Agricultural residues	
Feminine	17,7	13,7	11,5	62,5	17,7
Male	82,3	86,3	88,5	37,5	82,3
Together	100,0	100,0	100,0	100,0	100,0

Source: Field surveys, January 2023.

The data listed in Table 2 show that, given the differences between them, female-headed households have difficulty accessing more advanced energy sources (charcoal), modern energy sources (LPG) and even firewood. Indeed, for a number of reasons, female-headed households are over-represented among the poor who have no access to modern energy by collecting traditional fuels, notably agricultural residues (62.5 %) and to a lesser extent firewood (17.7 %).

Inequalities remain in access to cooking energy resources, particularly those linked to gender, to the disadvantage of female-headed households. This gap is more pronounced in rural than in urban areas (table n°3).

Table 3: Breakdown of cooking energy sources by gender and place of residence

Residence \ Source energy	Rural environment		Urban	
	Feminine	Male	Feminine	Male
Firewood	11.1	88.9	32	68
Charcoal	11.1	11.9	16	84
Agricultural residues	74.5	25.5	91.1	8.9
LPG	0	0	11.5	88.5

Source: Field surveys, January 2023.

Contrary to the idea that energy choices take into account and affect men and women in the same way, energy needs and uses are not gender-neutral. In this vein, female-headed households have a domestic use of energy (cooking), while male-headed households are more represented in productive uses of energy, i.e. income generation.

To the question of “*what energy needs would you like to improve within your household?*”. A forty-year-old female head of household in Pana-Bagou responds in these terms:

“We women would like to have technologies that improve cooking and which can have an impact on the health of women and children who will be less exposed to smoke and the risk of burns, and result in time savings.”

However, these technologies are not necessarily perceived positively by men. A fifty-four year-old male head of household, also in Pana-Bagou, replied:

“They say everyone is free to say what they want! But I would prefer to have electricity in my household so that I can watch television after dark, which would save me from having to pay for batteries each time to operate my torch. And finally, it would be an opportunity to operate my motor pump to irrigate my field and develop my little shop.”

The supply of energy resources within households is not neutral.

3.1.1.1. Type and mode of supply of the dominant energy resource (firewood) for cooking

Female-headed households and predominantly female household members spend most of their time on domestic work, such as collecting water and firewood, food processing and preparation, travel, transport and caring for loved ones FIDA (2016, p. 1). Often unpaid, these tasks limit their time and mobility. The sources of firewood acquisition and the time devoted to the collection activity therefore vary according to gender (table n°4).

Inequalities between Men and Women in Access to Energy Resources in the Western Savannah Region of Togo

Table n°4: Distribution of supply method and collection time of firewood according to gender

Gender of head of household	Method of supplying firewood in %			Collection time per week in %		
	Collection	Purchase	Collection and purchase	Less than 10 hours	Between 10-20 hours	More than 20 hours
Feminine	26.3	18.9	54.8	29.7	32.0	38.3
Male	13.9	57.4	28.7	36.9	34.2	28.9

Source: Field surveys, January 2023.

Based on survey data, Table 4 shows that female-headed households are more likely to collect firewood (26.3 %), while male-headed households are more likely to purchase (57.4 %). In addition, female-headed households spend more time collecting firewood, more than 20 hours a week, while their male counterparts spend less than 10 hours a week.

“Almost everything can be bought [...],” states one respondent, to illustrate the main mode of access to different sources of cooking energy in the study environment.

“Almost everything can be bought. Wood heating, rods and charcoal can be purchased. When you came, did you see a stalk here? It's suffering. If you don't plant a tree, where will you find the wood? You have to go to another location before you get it. Here too there are no coal manufacturers, you always have to go elsewhere. », (Woman, 53 years old, Boadé centre).

In view of all the above, it can be stated without reservation that wood and its main by-product (charcoal) dominate all other forms of energy for satisfying cooking needs in households in the study area. Collecting firewood is an arduous operation, and one that is greatly felt by the people responsible for it. In this vein, the survey provided a breakdown of the people involved in firewood collection in households (figure n°1).

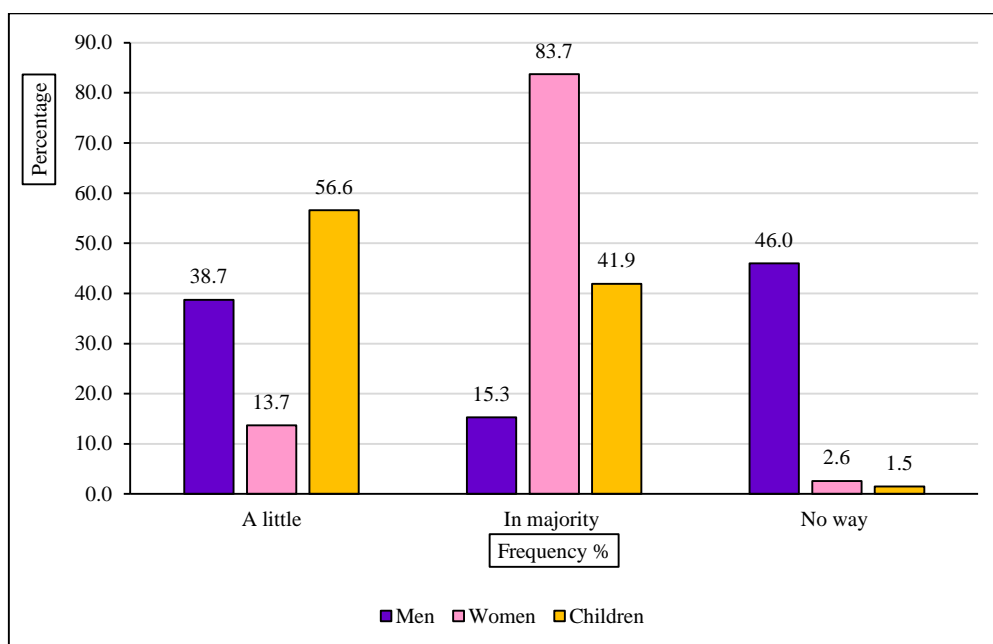


Figure n° 1: Distribution of people concerned by the collection of firewood in households

Source: Field surveys, January 2023.

Figure 1 shows that this activity is mainly carried out by women (83.7 %). Only 15.3 % of men engage in this activity. Children account for 41.9 % of those involved in fuelwood collection. Collecting firewood is a major preoccupation for women, who gather branches and small dead plants, while men are responsible for cutting the trees. In other words, the harvesting of firewood and its transformation into charcoal (carbonization) are often carried out by men. Women, on the other hand, are more involved in markets and product marketing, but in many countries they are also responsible for transporting fuel, sometimes over long distances. Plate 1 shows a photograph of the people involved in collecting and transporting firewood.

Photographic plate n°1: People engaged in the collection and transport of firewood in Nayergou bas



Source: Y. NANGUEPAGUE, view taken in January 2023 .

Through plate no. 1, photo no. 1 and photo no. 2 show that it is women and children who are generally engaged in firewood supply operations within households in the middle of study. Given the omnipresence of the method of access by collection for cooking needs, knowledge of the time spent on purchasing energy sources for lighting is equally essential.

3.1.2. Type and consumption of domestic energy resources for lighting

Differences between male-headed and female-headed households are also found in their access to electricity. Information on these data is needed not only to map vulnerabilities, but also to foster more targeted and effective efforts to adopt gender-inclusive policies. Within this framework, the survey determined the rate of access to electricity sources for male-headed and female-headed households (figure n°2).

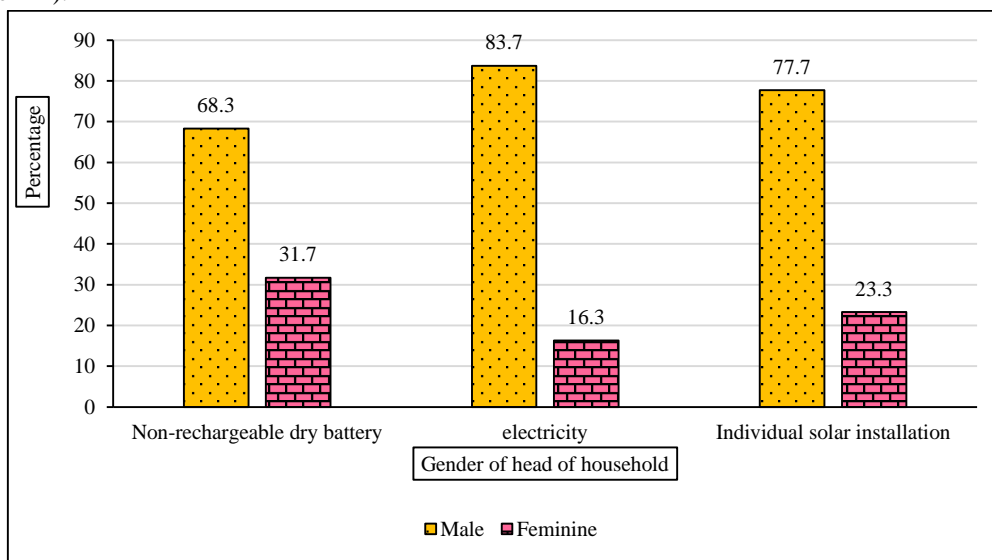


Figure no. 2: Rate of access to main sources of electricity according to gender of head of household

Source: Field surveys, January 2023 .

Figure 2 highlights a clear difference when the gender indicator is introduced: the effective rate of access to CEET electricity in female-headed households is just 16.3 %, compared with 83.7 % for male-headed households.

However, inequalities are even more pronounced when the residence environment variable is introduced. In fact, female-headed households are more deprived in terms of CEET lighting energy resources in both rural and urban areas, and more represented in urban areas in the source of energy (individual solar installation) producing electricity (table n°5).

Inequalities between Men and Women in Access to Energy Resources in the Western Savannah Region of Togo

Table n°5: Distribution of energy sources for lighting according to gender and area of residence

Residence Source energy	Rural environment		Urban	
	Feminine %	Male %	Feminine %	Male %
Non-rechargeable dry battery	33.1	66.9	28.2	71.8
Individual solar installation	9.4	90.6	65.5	34.5
electricity	15.5	84.5	20	80

Source: Field surveys, January 2023 .

For example, when asked if men and women have equal access to electricity? A female head of household in Nayergou bas replies: “No, we women do not have enough income to allow us to use electrical energy. These are torches that are more suited to our income. And what’s more, no one will come and ask you for an unpaid bill.” » (Woman, 35 years old, Nayergou bas).

3.1.2.1. Type and time spent purchasing the dominant energy resource (dry non-rechargeable batteries) for lighting

Households in the study area purchase energy sources in general, and lighting energy sources in particular, with varying frequency. Indeed, the frequency of purchase of non-rechargeable dry batteries varies according to gender (table n°6).

Table 6: Breakdown of time spent buying non-rechargeable dry batteries per week by gender

Weekly access time	Gender of head of household	
	Feminine (%)	Male (%)
< 10 a.m.	61.6	75.2
10-8 p.m.	29.9	9.5
> 8 p.m.	8.5	15.3
Total	100.0	100.0

Source: Field surveys, January 2023.

According to the information provided in Table 6, the majority of households headed by a man or a woman spend less than 10 hours a week on purchasing non-rechargeable dry batteries. Given the omnipresence of wood in satisfying household cooking needs, the analysis of distances travelled, distinguishing between men and women, is important in understanding energy vulnerabilities linked to daily mobility.

3.2. Energy accessibility and vulnerability by gender

With wood resources becoming increasingly scarce and modern energy resources hard to come by, the race to conquer new resources is becoming a daily reality, as a guarantee of relatively sustainable supplies and household survival.

3.2.1. Gender and daily mobility for the supply of the dominant energy resource (firewood) for cooking

The distances covered to obtain firewood obviously vary with the local abundance of wood. Leading from all sides of their homes in search of wood, this race extends distances and walking times.

Table 7 shows the distribution of weekly fuelwood supply distances by gender.

Table 7: Distribution of weekly fuelwood supply distances by gender

Gender of head of household	Weekly route, distance % (round trip)				Total
	<10km	10-20 km	20-30km	> 30km	
Feminine	40.6	16.7	18.8	23.9	100.0
Male	58.9	16.4	13.5	11.2	100.0
Together	54.5	16.5	14.8	14.2	100.0

Source: Field surveys, January 2023.

* Weekly: in one week.

According to the data in Table 7, both male-headed and female-headed households cover distances of less than 10 kilometers each week to obtain wood. According to the survey results, households in the study area travel an average of 16.1 kilometers each week

Inequalities between Men and Women in Access to Energy Resources in the Western Savannah Region of Togo

to access wood for energy purposes. These distances are constantly increasing as the nearest wood resources are depleted. This poses a problem of geographical accessibility of energy resources, particularly firewood.

Place of residence combined with distance of firewood supply provides new information. Table 8 shows the distribution of weekly fuelwood supply distances by place of residence.

Table 8: Breakdown of weekly fuelwood supply distances by place of residence

Place of residence	Distance in % (round trip)				Total
	<10km	10-20 km	20-30km	> 30km	
Rural environment	26.3	33.6	24.9	15.2	100.0
Urban	70.1	7.0	9.2	13.7	100.0
Together	54.5	16.5	14.7	14.2	100.0

Source: Field surveys, January 2023.

The data in Table 8 show that firewood is not available in the immediate vicinity of rural households, since they travel between 10 and 20 kilometers round-trip each week to obtain wood. Urban households, on the other hand, travel less than 10 kilometers per week for wood supplies.

3.2.2. Gender and daily mobility for the supply of the dominant energy resource (dry non-rechargeable batteries) for lighting

The low availability and inaccessibility of the electricity grid means that household lighting is difficult. Table 10 shows the breakdown of distances travelled per week for the supply of non-rechargeable dry batteries, by gender.

Table 9: Distribution of distances traveled per week for the supply of dry non-rechargeable batteries, by gender Gender of head of household

Table n°9: Distribution of distances traveled per week for the supply of non-rechargeable dry batteries according to gender

Gender of head of household	Distance in % (round trip)				Total
	<10km	10-20km	20-30km	> 30km	
Feminine	48.6	23.5	14.8	10.1	100.0
Male	58.8	17.2	14.7	10.2	100.0

Source: Field surveys, January 2023.

Overall, Table 9 shows that the majority of households (headed by either men or women) cover a round-trip distance of less than 10 kilometers to access non-rechargeable dry batteries. According to the survey results, households in the study area travel an average of 3.7 kilometers each week to purchase non-rechargeable dry batteries. One of the repercussions of extending access to energy sources is the problem of transport. Means of transport have undergone mutations in the well-known context of fuel scarcity around households.

3.2.3. Means of transport and energy challenges by gender

Domestic energy is transported in a variety of ways. Carrying and walking are the most basic means of transport. At the other extreme are large-scale means of transport. Between these extremes, there is a wide variety of intermediate means of transport that are solutions to local transportation. Figure 3 shows the means of transport for fuelwood supply by type.

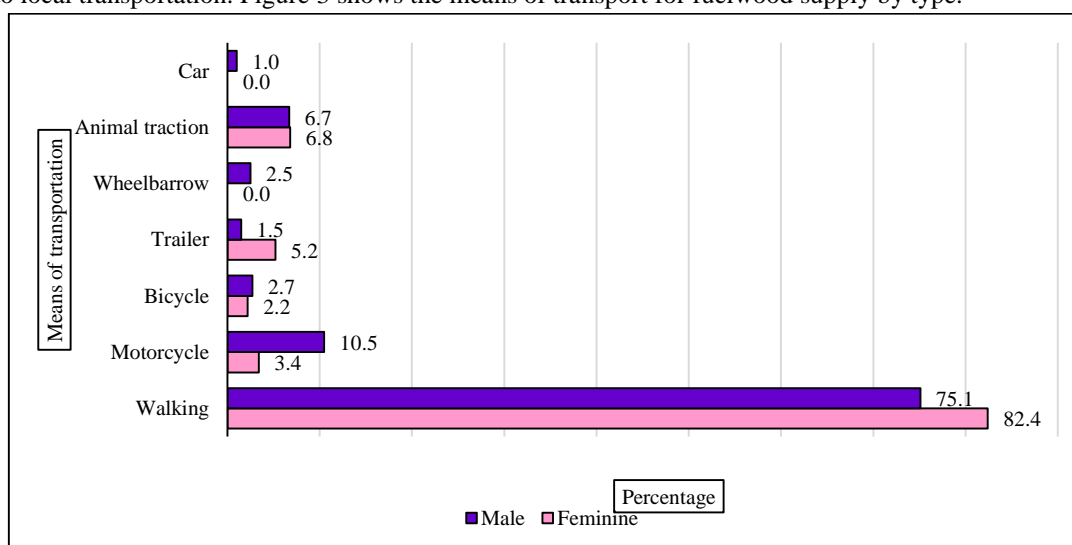


Figure 3: Means of transport for fuelwood supply, by gender

Source: Field surveys, January 2023.

Inequalities between Men and Women in Access to Energy Resources in the Western Savannah Region of Togo

The results in figure 3 show that walking is the most frequently used means of transport in the study area, at 82.4% for women and 75.1 % for men. Women do not use wheelbarrows to transport firewood, whereas men use them at 2.5 %. Women are also less represented in motorized means of transport, notably motorcycles (3.4%) versus (10.5 %) for men.

The survey also identified that 83.8% of households use walking as a means of accessing non-rechargeable dry batteries. Of course, its women and children, especially girls, who generally carry the wood. The gendered division of labor within households entrusts women with domestic tasks: collecting firewood, cooking meals and shopping. They are particularly responsible for almost all the transport involved in collecting wood.

Table 10 shows the distribution of respondents according to their involvement in the supply of firewood and batteries within the household.

Table 10: Distribution of respondents according to their involvement in the supply of firewood and batteries to households

Persons concerned	Energy sources in %	
	Cooking source (firewood)	Lighting source (battery)
Women	61.5	45.3
Man	18.3	22.2
Child	20.2	32.5
Total	100.0	100.0

Source: Field surveys, January 2023.

Table 10 shows that, overall, women are more involved not only in collecting firewood (61.5 %), but also in purchasing batteries (45.3 %). Decision-making power can be understood here as the ability to decide on the use of an energy technology irrespective of gender.

3.3. Power relations between women and men involving energy in households

Gender-based energy power relations in the study area were assessed by analyzing how decisions are made within households.

Table 11 shows the proportion of participation in decision-making by gender in the study environment.

Table 11: Proportion of participation in household decision-making by gender

Decision regarding	People affected in %			Total
	Man	Women	Both	
Financial expenses	77.4	11.5	11.7	100.0
Use of property	75.5	11.6	12.8	100.0
Expensive purchases	61.1	13.7	25.2	100.0
Distribution of tasks	73.1	10.1	16.8	100.0
Energy supply	9.0	84.7	6.3	100.0
Technological choices	84.5	9.0	6.4	100.0
Housework	2.3	96.2	1.6	100.0

Source: Field surveys, January 2023.

Based on the responses given by households, Table 11 shows that the heads of household, in the majority of cases men, are the primary decision-makers, and exercise this power in collaboration with the members of their household.

In the basket of decisions, men are over-represented in decisions concerning expensive purchases (61.1 %), technology choices (84.5 %), task allocation (73.1 %), financial expenditure (77.4 %) and use of goods (75.5 %) within households. However, within households, women's participation in these decisions was low, with respective percentages for expensive purchases, technology choices, task allocation, financial expenditure and use of goods of 13.7 %, 9.0 %, 10.1 %, 11.5 % and 11.6 %. On the other hand, 84.7 % and 96.2 % of energy supply and household chores are performed by women.

The analysis of the perception of discrimination between men and women within households was based on information provided by the respondents. Figure 4 analyses the responses to the question "Do you notice any form of discrimination against women in access to energy services?"

Inequalities between Men and Women in Access to Energy Resources in the Western Savannah Region of Togo

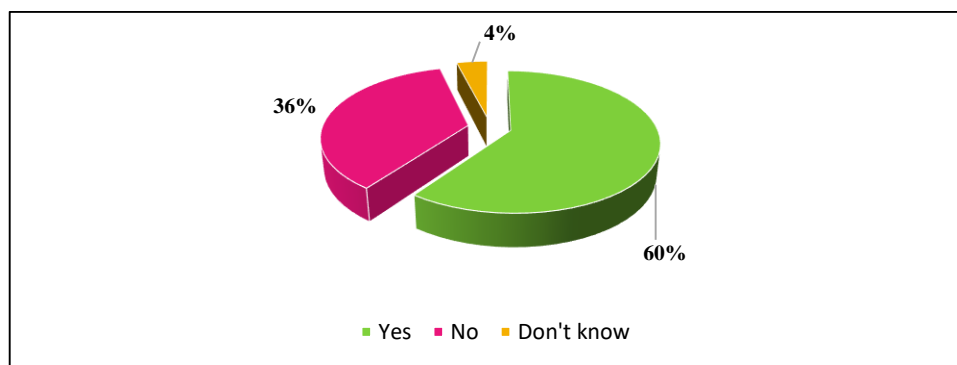


Figure 4: Breakdown of surveyed women's opinions on the existence of discrimination in the household

Source: Field surveys, January 2023.

Looking at the results in Figure 4, more than half of the women surveyed (60 %) claim that women are discriminated against in their households when it comes to accessing energy resources.

These forms of discrimination, which are real and obvious to households, manifest themselves in different ways. Figure 5 shows the distribution of respondents according to the manifestations of forms of discrimination within households in the study area.

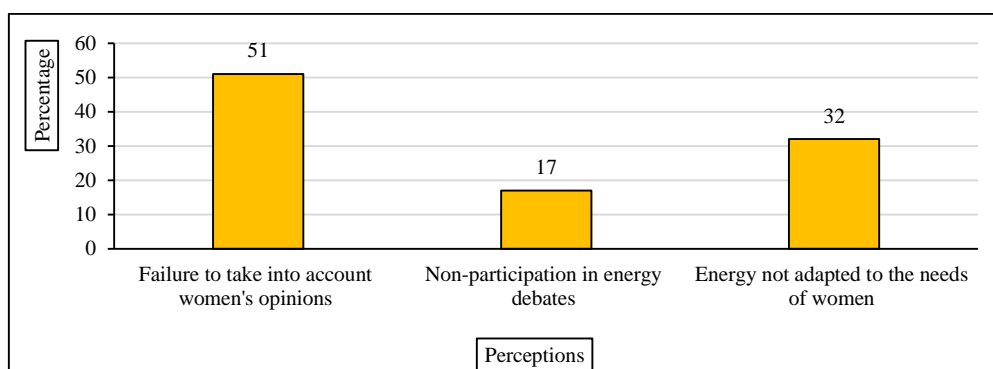


Figure 5: Distribution of respondents according to manifestations of forms of discrimination within households

Source: Field surveys, January 2023.

Figure 5 shows that 51 % of those surveyed perceive discrimination in terms of women's opinions not being taken into account when it comes to access to energy. Women who feel discriminated against because of the unsuitability of energy sources for women's needs represent 32 %. The last form of manifestation is the non-participation of women in energy debates, at 17 %.

4. DISCUSSION

Gender inequalities in access to energy resources are the focus of discussion in this article. Gender and energy have been the subject of research by a number of authors and development projects, all of which have recognized that the balance of energy consumption in especially rural households is dominated by wood fuels, notably wood and its derivatives. In addition to this research, the data put forward by SIE Togo (2017, p.13) and REDD+ Togo (2017, p. 50) confirm the significant share of biomass in national final consumption, which reaches 71 %. This situation results from the fragility of household economies and its free nature in some cases (A. Reddy (2000, p. 45); E. Remedio (2002, p. 14).

For a number of reasons, female-headed households are over-represented among the poor with no access to modern energy, collecting traditional fuels, notably agricultural residues (62.5 %) and firewood (37.5 %). The reasons for the primacy of agricultural residues as an energy resource for cooking among female-headed households are linked to their low income and lack of access to land resources. In Moba-gourma country, the study area, women do not inherit land resources, and many of them have no access to land. Yet land is the support for plant formations.

Existing woodland plantations are owned by private individuals (generally men) and the state. Lacking sufficient means to access charcoal, LPG and firewood, most female-headed households turn to collecting agricultural residues (millet or maize stalks, small dead wood, cow dung, etc.). Female-headed households and predominantly female household members devote most of their time to domestic work, such as collecting water and firewood, processing and preparing food, travelling, transporting and caring for relatives. These findings confirm those of IFAD (2016, p. 1) and AFD (2012, p. 8).

The low rate of access to electricity for female-headed households is explained by the fact that female-headed households are more resource-poor than male-headed households. Especially in the African context, daily mobility is first and foremost a necessity for a

Inequalities between Men and Women in Access to Energy Resources in the Western Savannah Region of Togo

subsistence economy. Indeed, domestic activities account for a very high proportion of household travel, essentially for the transport of water and firewood (J. Allaire, 2009, p. 128). The place of women in the decision-making sphere confirms the gender-related power issues within households (C. March et al., 1999, p.18; A. Reddy, 2000, p. 48; S. Louargant, 2002, p. 407 and AFD, 2012, p. 7). Indeed, the traditional model of family organization, particularly the participation or otherwise of women in decision-making within the household, is indicative of gender relations in society. Decision-making power and the ways in which it is exercised within households are a key element in gender relations.

CONCLUSION

The present study has shed light on gender inequalities in household access to energy resources in households in the western Savanes Region of Togo. More specifically, the aim was to establish the situation of energy consumption practices according to gender. It focused on the analysis of documentary data, interviews and data from the questionnaire survey, which established the reality of gender-based discrimination in access to energy resources.

This shows that 62.5 % of female-headed households still use agricultural residues, compared with 37.5 % of male-headed households. In addition, the rate of access to electricity for female-headed households is only 16.3 %, compared with 83.7 % for male-headed households. There are also gender-based social inequalities in access to energy resources within households, ranging from access to energy resources for cooking and lighting, to the collection, purchase and transport of energy, and its use within households. This situation results in ever-increasing vulnerabilities to the detriment of household members, especially women in the study area.

In view of these results, it is important to develop strategies that enhance traditional cooking practices through improved cooking stoves that are accessible in terms of cost. Attention should also be focused on modern, affordable and more environmentally-friendly energies, through the development of the liquefied petroleum gas (LPG) market and the installation of decentralized mini-grid power plants. For greater access to electricity from the centralized grid, it is also important to set a preferential tariff for female-headed households, but also to move towards multifunctional platforms that reduce drudgery and free up time for income-generating activities.

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