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Consequences of Fuel Wood Scarcity on Women Gender Development as a Barrier to (SDGS).

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ABSTRACT
Fuel wood is a forest commodity produced in a large quantities and is the principal component of rural domestic energy in many developing countries. It is an alarming fact that today in the 21st century there are still billions of people who totally rely on fuel wood for cooking food. Fuel wood is consumed in diverse ways and at different levels and the life of most rural dwellers depends either directly or indirectly on fuel wood. The over dependence on fuel wood for energy is chiefly because of its relatively low prices and accessibility. Other reason are constraints in the supply of the conventional fuels and the growing population with a larger segment still falling below incomes that carnal afford the cost of conventional fuels. Influence on the fuel wood scarcity on rural women gender development the study evaluation the influence of fuel wood scarcity of rural women gender development. The fuel wood from the community to the fuel source.The finding shows that the effect of fuel wood scarcity affect mostly women gender development, also the problem of fuel wood scarcity affect mostly women gender development also the problem of fuel wood scarcity affect their educational status of this respondent this three villages that were surveyed which indicated that the average of this respondents did not attend school which half of the majority attended primary school, secondary leaver in the three community were on this average, diploma holders and university graduate in this community was the least economic and livelihood status of women in the study area, this result showed that the average income per-trade respondent of women in the study area, fuel wood retailing and condiments production and the most successful petty trading in this community and this least successfully are beans cake production mildly spices.

I. INTRODUCTION

The scarcity of fuel wood has increased the time burden especially of women, who are traditionally responsible for collecting fuelwood for domestic purposes in many parts of developing countries. With the increase in the scarcity of fuel wood, women and girls most walk many miles to get a head load of fuel wood every day. As we know that collecting fuel wood is a time consuming and exhausting task. Women time burden for the collection of fuel wood tends to increase in cases where men migrate to urban centers in research of employment (Kabir, 2018).

Also, women can suffer serious long-term physical damage from strenuous work without sufficient recuperation. This risk, as well as the hazard of falls from tree, insect bites, or human assault etc. rises steeply the further from home women must walk. Fuelwood scarcity places major demands on women and children's time, limiting their opportunities to obtain an education and undertake income generating activities. An increase in the fuelwood collection time may force girls to drop out of schools to assist their mothers in household and other chores, thus hindering their education (Knight & Rosa, 2012).

Fuel wood scarcity adversely have affected women's income generating activities like sewing, handcrafts etc. and direct impact on women health-rates of maternal death, impact on their participation in important activities like family planning programmes, health and nutrition programmes, participation in creating new laws and public policies (Variander&Prakash, 2014).

They have a concerns with the risk associated with the scarcity of fuel wood (e.g. breaking their legs while running, financial penalties etc.) from private forests since they did not have access to community forests. Fuelwood scarcity also affects their cooking habits; women do not boil water enough, cook food items with low

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nutritional value that require less cooking time. This in turn, affects family health. (Chen et al, 2006)

Even though intervention preferences in form of some substitutions are also available at some villages such as dung cake, electricity, kerosene, in some cases LPGs etc. rural women still prefer fuelwood for preparing local dishes due to various economic, social, and religious causes. There is a dearth of information per the most preferred and sustainable interventions rural women would prefer for alleviating fuelwood dependence and scarcity in developing countries especially in Nigeria (Kabir, 2019).

With a suitable intervention, time burden of women may be reduced. Where modern and alternative technologies are available for use, men also share the cooking and domestic energy sourc responsibility and thus save time for women and their income generating activities and participating in welfare activities. Affordable and clean energy is central to nearly major challenge and opportunity (SDG GOAL 7) etc. but where alternative technologies are absent women and children are mostly responsible. (Warris&Antal, 2014)

II. LITERATURE REVIEW

2.1 United Nations Sustainable Development Goals (UNSDGs)

The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a set of objectives within a universal agreement to end poverty, protect all that makes the planet habitable, and ensure that all people enjoy peace and prosperity, now and in the future. The Goals were adopted by all member states of United Nations formally in 2015, for the period 2016–30 to address the overwhelming empirical and scientific evidence that the world needs a radically more sustainable approach. The goals provide a well consulted framework that is sufficiently scientifically robust, politically acceptable, and publicly intuitive. The goals provide us with our best chance of ensuring the necessary collaboration and alignment as we implement global approaches to securing a fair, healthy, and prosperous future for ourselves, our children, and grandchildren (Pencheon& Squires, 2017)

2.1.1 UNSDG Goals Relevant to Fuelwood Scarcity and Gender Development

Goal 4: Quality Education: Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for All

First, the bad news on education. Poverty, armed conflict, and other emergencies keep many, many kids around the world out of school. In fact, kids from the poorest households are four times more likely to be out of school than those of the richest households. Now for some good news. Since 2000, there has been enormous progress on the goal to provide primary education to all children worldwide: the total enrolment rate in developing regions has reached 91%. By measures in any school, that's a good grade. Now, let's get an even better grade for all kids, and achieve the goal of universal primary and secondary education, affordable vocational training, access to higher education and more. (UNDP, 2015)

Goal 5: Gender Equality: Achieve Gender Equality and Empower All Women and Girls

"We can celebrate the great progress the world has made in becoming more prosperous and fairer. But there's a shadow to the celebration. In just about every way, women, and girls lag. There are still gross inequalities in work and wages, lots of unpaid "women's work" such as childcare and domestic work, and discrimination in public decision-making. But there are grounds for hope. More girls are in school now compared to in 2000. Most regions have reached gender parity in primary education. The percentage of women getting paid for their work is on the rise. The Sustainable Development Goals aim to build on these achievements to ensure that there is an end to discrimination against women and girls everywhere." (UNDP, 2015)

Goal 7: Affordable and Clean Energy; Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for All

"Between 1990 and 2010, the number of people with access to electricity increased by 1.7 billion. That's progressed to be proud of. And yet as the world's population continues to rise, still more people will need cheap energy to light their homes and streets, use phones and computers, and do their everyday business. How we get that energy is at issue; fossil fuels and greenhouse gas emissions are making drastic changes in the climate, leading to big problems on every continent. Instead, we can become more energy-efficient and invest in clean energy sources such as solar and wind. That way we'll meet electricity needs and protect the environment. How's that for a balancing act?**'** (UNDP, 2015)

2.2. Fuelwood Scarcity in Yobe State

Fuelwood is the primary source of cooking energy for households in many developing countries. In Nigeria, most of the populace depends

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on forest resources in meeting their various household energy uses. The country lost 81% of its old growth forest in just fifteen (15) years (1990-2005) because of uncontrolled subsistence agriculture and the collection of fuel wood which has destroyed the country's forest (Maryam, 2010). In northern part of Yobe state, accelerated degradation and depletion of wood land resources particular by fuel cutting is one of the most serious environmental problems. Here, woodland resources have long been a target of ruthless destructions through wood collection particularly. It is of little wonder therefore that such practice of indiscriminate felling of trees for fuel wood is on the increase. (Abdulhamidet al, 2020).

Thus, the vegetation cover is rapidly on the decline and in some places, it seems to have been resulting to irreparable destructions of the land. In the past, the source of fuel wood was simple, and the ecological impacts were minimal due to low human population. As human population continue to increase rapidly, man's dependency on fuelwood as a source of fire and energy started showing signs of inadequacy. Today the level of inadequacy is reflected upon the rate at which deforestation is taking place because of man's attempt to have a regular supply of fuelwood. (Abdulhamidet al., 2020)

2.3 Effect of Fuelwood Scarcity on Women and Need for Intervention

The detrimental effects of fuelwood deficits and scarcity of alternative sources of fuel are mostly felt by women as a social group, poor rural women (Zakuet al, 2013). Warris and Anthal (2014) stated that as much as 10 to 12 hours a week per household may be spent on fuel collection under fuel shortage conditions. In a Sudanese study, Agarwal (1985) documented shift from a 15-20 minutes' walk to 1-2 hours as women are forced to walk longer distances to get fuelwood supplies.

The energy crisis has resulted in women's loss of time. The gathering of firewood and fodder, which used to take about 2 hours, now takes a whole day. Agarwal found that time spent on collecting firewood in Sudan has increased fourfold. Das et al (2014) reported that up to 10% of Peruvian women's time is spent from midday to nightfall every day gathering the evening's supply.

Increased time spent on firewood collection and cooking means that women are left with less time for productive, income-generating activities. The more time women spend on biomass collection, preparation, and use, the less time they have for social development such as education and healthcare as well as other domestic functions (for example, childcare, breast-feeding, cooking of meals and sanitation) and income-generating activities (farming; food, production, and processing) (Das et al., 2014).

Increased access to primary education is one of the foundational goals of the Millennium Development Corporation. The time burden associated with resource collection in developing countries is a major hurdle to primary education and reducing the time burden of collecting fuelwood for women and girls is one of the seven priorities adopted by the United Nations Millennium Goal Task Force on Education and Gender Equality (UNDP, 2017).

Both the International Energy Agency and the World Health Organization have recognized the detrimental effect that collecting fuelwood has on gender equality and poverty and have advocated investment in cleaner, more efficient household energy practices (IEA, 20006).

As such, the extent to which collecting fuelwood affects schooling is an important question, both in terms of understanding the tradeoffs for investing in alternative fuels and for prioritizing alternative fuel interventions.

OBJECTIVES

1. To assess the level of fuelwood scarcity in Fune LGA
2. To assess the economic livelihood status of women in the study area
3. To examine the influence of fuelwood scarcity on the livelihood and gender development of women in the study area.

Fuel Wood Scarcity Status in Fune L.G.A Yobe State.

Table 3b: shows fuel scarcity status of the study area (Fune L.G.A). in achieving this objective (Fuel Scarcity) two parameters were put into consideration for the assessment; distance from the community to the private fuel wood collection and the time spend to access the fuel wood to the community. The result indicated that 30% (93) respondents affirmed that they had to trekked 5-6km from the community to the point at fuel wood collection, and often spend more than 6hours to access the fuel wood.

However, 24.2% (75) of the responded affirmed that they had to treked 7-8hrs before they access fuel wood from the point at collection and spend 7-8hrs.

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Table 3b: Fuel Wood Scarcity Status in Fune L.G.A Yobe State.

Distance & Time Spent To Access Fuel Wood Scale						
Distance from the community	43* (13.9%)	57* (18.4%)	93* (30.0%)	75* (24.2%)	28* (9.0%)	296 (95.5)
Time Spent from the community	89** (28.7%	91** (29.4%)	46** (14.8%)	52** (16.4%)	18** (5.8%)	296** (95.5)

Key *km **hrs

- Two parameter were used in the assessment of fuel wood scarcity in Fune L.G.A Distance from the community to the point of fuel collection and time spend to access the fuel wood from the community.

Table 3b: shows the Economic/Livelihood Status of the respondents in the study area. The result revealed that 29.7% (88) at the respondents engages on condiment production with a cumulative percentage at (29.7%) ground nut oil production as a petty trading took 23.0% (69) with a cumulative percentage of 53.0%. Milling and spices production in the community 700K 15.2% (45) with a cumulative percentage of 68.2% while beans cake production took 17.9% (53) with a cumulative percentage of 86.1% other petty trading business in the community account 13.9% (41) with a cumulative percentage at 100%.

Table 4: Economic/Livelihood Status of Women in Fune L.G.A

Petty Trading	Frequency	Valid (%)	Vol. (%)	`Cumulative (%)
Condiment Prdt.	88	29.7	29.7	29.7
Ground Nut oil Prdt	69	23.3	23.3	53.0
Milling and spices Pdt	45	15.2	15.2	68.2
Bean cake Prdt	53	17.9	19.9	86.1
Others	41	13.9	13.9	100

Sources: field Survey 2022*

Table 4 shows the average income per trade respondents (women) in the study area. The result indicated that fuel wood retailing (296) with a mean value at 197.30 and standard deviation at 260.45 is the most successful petty trading in the community. Condiment production (296) with a

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mean value of 197.30 and standard deviation at 260.45 is the second must successful petty trading in the community. Beans cake production and milling & spices production are the least successful petty trading in the community with a mean value of 38.45 and 16.65.

III. DISCUSSION

Influence of fueldwood scarcity on rural women gender development, the study evaluate the influence of fuelwood scarcity of rural woman gender development. Time spent distance covered to access fuelwood from the community to the fuel source.

The findings on gender in this study area show that the range of percentage of male in the three village surveyed was smaller than females respondents (Afrian Daily News Paper of Woman, 2000). The result of educational status of the respondent across the three villages indicated that the average of the respondent did not attend school which half of the majority attended primary school. Secondary leaver in the three community were on the average, NCE/Diploma holders and university graduates in the community was the least. (ESMAP. 2000, Rehfuess et al, 2005, Cabraal et al., 2005).

Findings on occupational status indicated that greater majority of the inhabitant of the three communities was either unemployed or were self-employed. The civil servant among them were very few and also people working in private sector and pensioners are also few.

Fuelwood scarcity status indicated that some percentage of the respondents source their wood from wild, while some sources their fuelwood from local vendors within the community and some purchase from local vendors outside the community. Distance from the community to private fuelwood collection and time spent to access the fuelwood to the community, the result indicate some of the respondent affirmed that they hard to trek 5-6 km from the community to the point of fueld wood collection, and obtain spent more than six hours to access the fuel wood (Ishayaet al., 2009).

Economic and livelihood status of woman in the study area, the result shows that the average income par trade respondent of women in the study area, fuelwood retailing and condiment production and are the most successful petty trading in the community, beans cake production, milly spices, are the least successful petty tradition in the community (Hyde &Kolilin, 2000, Chen et al, 2006).

IV. CONCLUSIONS

The research concludes based on the findings such as:

The study reveals the level of fuelwood scarcity in the study area which indicates that most of the respondents travel long distance to gather fuelwood while some respondents believe fuelwood sources are far away from their household and some of the respondents have to gather fuelwood days before they need them.

The study reveals that the major needs for women development as a barrier to SDGs are Women may contribute to higher economic growth

and bring about greater macroeconomic stability, women are often the primary educators and nurturers of children. Gender inequality is a major obstacle in meeting the Sustainable Development Goal (SDG) targets.

The study reveals that the major influence of fuelwood scarcity on the livelihood and gender development of women are land and fuelwood scarcity, climate change and fuelwood scarcity and socio-economic factors in the study area.

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