

Gender and Energy in the Street Food Sector

POLICY CONSIDERATIONS FOR SENEGAL

Policy Brief | November 2018

Maimouna Diouf and Sécou Sarr | maimouna.diouf@endaenergie.org

Context

Gender and productive use of energy in the informal food sector is much more than an issue of women's access to energy. It is above all a subject that has a socio-economic dimension in terms of job creation and poverty reduction, and a political dimension in terms of mainstreaming gender in the sector. It also has to do with measures to be taken to ensure an energy transition, reduction of Greenhouse Gas (GHG) emissions and air pollution, preventing harmful anthropogenic actions on forest resources. The latest census of companies in Senegal's economic structure showed that 97% of the 407,882 economic units identified at the end of 2016 are in the informal sector (ANSD, 2017). Among the difficulties faced by informal food businesses, is the access to clean energy services and its costs, which are major constraints to development.

To provide both qualitative and quantitative responses, a research project titled "*Gender and Productive Use of Energy in the Informal Food Sector in South Africa, Rwanda and Senegal*" has been conducted since 2015 by a research consortium composed of the University of Cape Town (South Africa), MARGE (Rwanda) and Enda Energie (Senegal),



coordinated by the University of Twente (Netherlands).¹

In total, 856 enterprises were included in the three country research which included 751 quantitative surveys and 105 qualitative interviews. The research in Senegal, covered 275 food enterprises, including 240 quantitative surveys and 35 qualitative interviews, particularly in the Kaolack and Dakar regions. The program tries to answer the various questions about gender and the productive use of energy in the informal food sector (IFS). These entrepreneurs (women and men) use a number of equipment and sources of energy to run their business.

¹ The preparation of this publication was supported by the ENERGIA Gender and Energy Research Programme, funded by the UK Department for International Development (DFID); but the views and opinions expressed are the responsibility of the authors and should not be attributed to ENERGIA or DFID.

Main Conclusions of the Research Programme in Senegal

Analysis of the collected quantitative and qualitative data led to three main conclusions:

- (i) The use of mix energy (or multiple energy use) is common in food businesses because enterprises use different energy sources in their activities (gas (LPG), charcoal, electricity, wood);
- (ii) Despite the large number of women surveyed in the food sector, there is little difference in energy use between men and women, and gender difference has little impact on the type of energy used (energy use is dependent on activity performed rather than on gender);
- (iii) Women are dominant in the informal and formal food sector, but men use more modern energy services.
- (iv) Women benefit more than men from the opportunity to operate a food business while also completing domestic responsibilities.

Some lessons learned from Senegal's experience

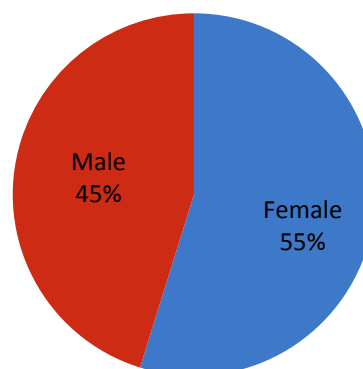
Out of the 240 companies surveyed, 77% are in the preparation and sale of food products (catering), 20% in food processing, while the simple sale of food products represents only 3%, which shows the importance of energy needs in this sector. In addition, the analysis of these enterprises shows a dominance of women in the food sector 55% of women against 45% of men.

An analysis of the types of locations reveals a predominance of women in non-permanent street side locations compared to men.

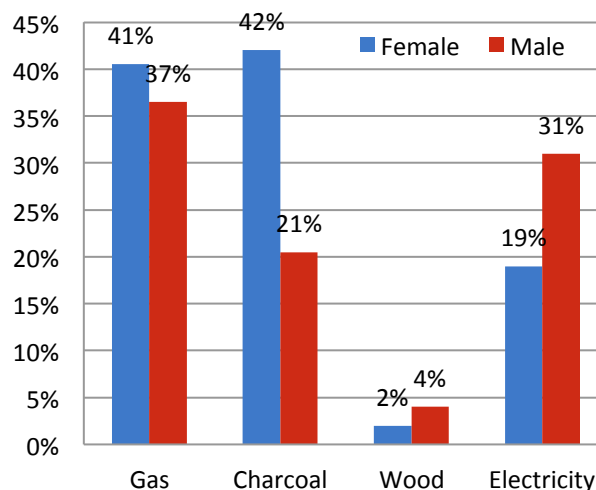
Energy uses in the informal food sector in Senegal

There is a combination of fuels in the formal and informal sector. The energy mix (multiple energy use) is common. Gas is dominant and regardless of the type of business (formal or informal), and type of location. Among women in the informal sector, the gas utilization rate is 41% compared to 37% for men. In the formal sector, this rate of gas use is 58% for women and 33% for men. These figures confirm a high rate of LPG acceptance in Senegal in the

Gender and food business in Senegal



Energy sources used in informal food businesses



informal food sector. Charcoal is the second largest source of energy used in the informal sector, 42% for women and 21% for men. Women use twice as much charcoal as men in the informal sector.

The formalization of enterprise does not affect the use of charcoal. In the formal sector, women also use charcoal more than men, the ratio indicates 40% for women and 30% for men. These figures show a strong use of charcoal in the food sector in Senegal and indicate a high exposure of women to risks (health, safety).

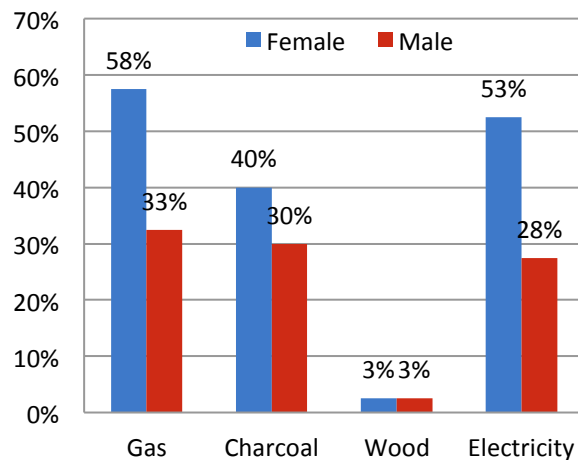
We noted a strong correlation between formalization and the use of electricity. More women in the formal sector use more electricity than those in the informal sector with 53% and 19%, respectively.

Gender-Location-Energy Preference

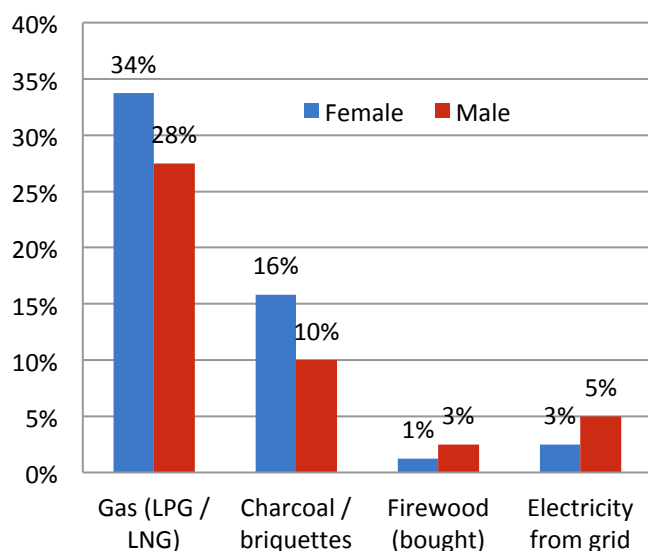
Among the energy sources used in companies, the preference is mainly LPG 34% for women and 28% for men, followed by charcoal 16% for women, and 10% for men. The preference is less about electricity because of the high cost and partly because of the low level of electrical equipment.

The analysis of preference of energy sources by gender in informal enterprises indicates that the usability and affordability are important for both men and women; even if men give more importance than women to the cleanliness aspects of the energy source and the quality of the product. The three main reasons for energy preferences of gas among the energy sources used by women are energy cost reduction (15%), improvement of product quality (10%), easiness of the task (5%) and by men improvement of the product quality (10%), reducing the cost of electricity (8%) and easiness of the task (8%).

Gender and energy sources used in formal food businesses



Preferred energy sources among those used



Entrepreneurs with adapted facilities in the informal food sector would like to use renewable energy (48% of women and 40% of men would like to use the solar PV system) and also promote energy efficiency through electrical appliances and low energy technologies.

Stakes at play and challenges of energy transition in the Informal Food Sector

Despite the large number of businesses in the informal sector representing 97% of companies in the economic structure of Senegal, the informal sector generates only

16.3% of the global turnover compared to 83.7% for the formal sector (ANSD 2013). These figures show a negative correlation between the informal nature of businesses and their low capacity for wealth creation. The informal food sector is not immune to this reality.

The second characteristic is its strong dependence on energy. Despite these issues of economic and social development, related to this sector of activity, the needs of companies in the informal food sector are not well-known by decision-makers, particularly in terms of their needs for energy services for productivity. In view of the above, such a sector deserves more attention from public authorities and development actors in a perspective of structural transformation of the economy, sustainable and inclusive growth, and poverty reduction that has become today an increasingly urban phenomenon in which women are the most affected.

Therefore, the sustainable access of these companies to modern energy services appears to be a crucial development issue, on account of: i) The high cost of energy in enterprises, and ii) the persistence use of polluting sources of energy.

Such a change cannot take place without really mainstreaming gender in the public policies of development of the energy sector with regard to the important presence of women in the informal food sector (creation of disaggregated data). By real gender mainstreaming, the country will also heighten its attempts to meeting SDG 5 and ensuring gender equality in the informal food sector.

In this respect, it should be noted that Senegal has made significant progress in terms of energy development promotion of

renewable energy and improvement of people's access to electricity, which is also a great achievement towards meeting SDG 7 by providing access to *affordable* and clean energy. The promotion of renewable energies has resulted in the commissioning of several solar power plants in 2017. The rate of rural electrification has increased by 60% in 5 years from 27% to 40% from 2012 to 2017. At the same time, the rate of urban electrification has increased from 88% to 91.82%. (Ministry of Petroleum and Energy - 2018).

Despite these efforts made by Senegal's government to put at disposal of households butane gas through a policy of subsidizing the consumption of gas (LPG), access to clean energy for cooking remains a great challenge for many women including those in the informal food sector.

Constraints to the energy transition in the informal food sector (IFS)

There is a range of both structural and operational constraints to the energy transition in the informal food sector in Senegal.

- (i) Difficult access to financing informal food businesses, particularly because of their informal nature. As a consequence, businesses of the IFS have difficulties to equip themselves with modern energy appliances. These are all difficulties that are putting enterprises in this sector in a vicious circle of energy poverty, depriving them of the use of modern energy services.
- (ii) The high cost of electricity, in terms of available energy solutions.
- (iii) Difficulties accessing a suitable site (isolated site, inappropriate site, or unaffordable due to prohibitive cost)

may be an obstacle to using a number of modern energy sources.

- (iv) Culinary and cultural habits that explain the use of charcoal or firewood for the preparation of some local dishes.
- (v) In addition, there is a low level of education for women, and the lack of access to information on modern energy sources, the high cost, and ignorance of funding opportunities and technical solutions, as well as innovative technologies for access to clean energy (solar photovoltaic, etc.) are factors contributing to low empowerment of women, who are the main actors of the IFS and the persistent use of several polluting sources of energy in the IFS.

Recommendations for decision makers

The IFS is a sector that is growing but needs to be better understood and better mainstreamed into spatial planning, energy policies and business development policies. It has been established that the location of businesses, the type of shelter, the formal or informal status is correlated with the types of energy used and these factors predetermine the transition conditions to modern energy services. Some key

recommendations were made to call for action:

- (i) **Include the informal food sector** in urban planning policies and develop innovative financing mechanisms that favor women's location and modern energy services;
- (ii) **Federate the various stakeholders** including local authorities, the Ministry of Petroleum and Energy, the Ministry of Commerce, the informal sector, production and consumption of local products through a framework of consultation and action coherent to leverage interventions and amplify impacts;
- (iii) Disaggregate data by **distinguishing domestic uses from productive uses**;
- (iv) **Support informal food businesses to formalize and modernize** in order to benefit from public procurement as they play a vital role in urban food because of the affordability of food;
- (v) Integrate **women's capacity building** into hygiene and quality aspects of products and promote the use of modern energy technologies to increase the attractiveness of businesses and facilitate tasks.

References

Agence Nationale de la statistique et de la Démographie (ANSD), 2016, Rapport sur le Recensement Général des Entreprises, 98 Pages

<http://www.ansd.sn/ressources/publications/Rapport%20global-juil-2017.pdf>

Ministère de l'énergie du Sénégal (2012), Lettre de Politique de Développement du Secteur de l'Énergie (LPDSE)

Ministère de l'énergie du Sénégal (2013), système d'information énergétique, Rapport national
Enda Energie (2018), Rapport atelier sur genre et usages productifs de l'énergie dans le secteur alimentaire informel



UNIVERSITY OF TWENTE.

