Sustainable Energy for All; INCLUDING THE STREET FOOD SECTOR

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"Energy is central to the achievement of both the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change." (UN 2018) Sustainable Development Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all is one of 17 SDGs that aim to end poverty, protect the planet and ensure prosperity for all. It is important to consider the sustainable energy needs of the street food sector (SFS) in particular for a number of reasons:

- The sector is an essential source of daily food for the urban poor;
- The sector is an important source of income for the hawkers, vendors, traders and entrepreneurs that operate street food enterprises;
- iii) It is a sector with low barriers to entry, especially for women who dominate this sector in many countries including SA;
- iv) The sector relies heavily on energy for cooking, processing and preparing meals and food products, as well as the appliances needed for these purposes;
- v) It is also a sector that has potential to grow.

Supporting clean and modern energy use in the informal street food sector can contribute to achieving multiple SDGs, which South Africa is committed to:

SDG 1 | No poverty | End poverty in all its forms everywhere SDG 2 | Zero Hunger | achieve food security SDG 7 | Affordable and clean energy | Ensure access to affordable, reliable, sustainable and modern energy for all SDG 5 | Gender equality | Achieve gender equality and empower all woman and girls SDG 8 | Decent Work and economic growth | Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all SDG 15 | Life on Land | sustainably manage forests

It is first important to understand how energy is currently used and what contextual factors affect the gendered use of energy and appliances in the SFS. Led by the University of Twente in the Netherlands, with local research partner the Energy Research Centre (ERC) at the University of Cape Town (UCT), qualitative and quantitative research was conducted in South Africa (as well as Senegal and Rwanda). The research design targeted informal, semi-formal and formal enterprises operating only in urban areas, and were defined as follows:

- Informal (not paying any fees nor tax) 125 of 271
- Semi-formal (paying rent and/or local permit and/or license fees) 110 of 271
- Formal (tax registered and paying to the national revenue services) 36 of 271

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The figures below summarize the South African sample in more detail. The sector is clearly dominated by women owners at 79% compared to men at 21%. And while we only targeted a small portion of formal enterprises (13%), the majority of enterprises operate from formal permanent structures (57%) compared to those that operate from informal impermanent structures (30%), at home (4%) or are mobile (9%).



This policy brief provides evidence of energy consumption patterns among men and women in this sector in South Africa and how operating an enterprise empowers both women and men. There are few sectors where women dominate and are empowered as a result of owning and operating a business. Efforts to develop and support this sector are therefore highly relevant for achieving gender equality and empowering women and girls. Based on this evidence, a number of policy recommendations are made.

Main Findings

In the street food sector (SFS), **enterprises use multiple sources of energy**, averaging at 2.33 energy carriers per business activity across the three countries. Men diversify slightly more, and this is linked to their higher use of electricity, mostly for non-food related appliances, such as TVs and radios.

Liquid Petroleum Gas is the most common energy source used by all enterprises in South Africa and is preferred because it is fast to use. All enterprises also use electricity except for men operating informal enterprises. The preferences for electricity are varied and no major differences between genders emerge.



Energy sources used by gender, South

Both men and women recognise the benefits of using gas and electricity. While most respondents are of the opinion

that modern energy services (MES) such as electricity and gas would make tasks easier and quicker. Despite the willingness of owners to use MES, certain traditional methods of cooking require traditional sources of energy such using wood, charcoal or briquettes for barbequed meat. Using wood is most common among women operating informal enterprises and the stated preferences are affordability and best for product.

Electricity for lighting is a valued service even for street food enterprises. Our data shows that 26% of respondents in South Africa consider electricity for lighting to be important for ease of working, whereas 21% value lighting for extending working hours.

88% of enterprises in the SFS state that the main reason for wanting new appliances (such as Radio and TVs) is to attract more customers. This supports the finding that **all respondents aspire to grow their business**. Other common reasons for wanting new appliances are to increase efficiency and simplicity in processes. In terms of cooking appliances: **gas cookers and electric hot plates are among the top desired appliances** in South Africa.

For most enterprises, **affordability and access to capital are the main barriers** to expanding their business and investing in new equipment. This is slightly worse for women in South Africa: 46% of female enterprise owners compared to 31% of males could not access capital to start their business, and 22% of females did not have start-up capital compared to 14% of males.





Location is important to attract customers and determines what energy services enterprises can use. A majority (85%) of South African respondents agreed with the statement: "It is a good place to attract customers". However regardless of type of structure, **gas stoves and traditional open fires are the most popular across all enterprises**. Even at home or in formal structures where enterprises have access to electricity, enterprises still use open fires to prepare food. This is an important consideration for town planners and developers when designing the appropriate built environment: there is a demand for food prepared on open fires in both formal and informal locations.



The informal supply and use of scrap wood and waste wood in the SFS poses health and safety risks (Nissing and von Blottnitz 2010), however this fuel is considered the only affordable option for many enterprises. Appropriate infrastructure and supportive policies are required to promote a transition to clean, healthy and safe cooking operations in the SFS for enterprise owners, their customers and the public environment.

Another important finding is that **home energy sources are** used by owners and employees for productive uses in their enterprises. Indigent households receiving electricity subsidies' use them to support their enterprises. 38% of those who receive electricity subsidies agreed that their enterprises rely on this subsidy to survive and 83% of them were female. This shows that energy subsidies are important and do benefit income generating activities for the low-income households without formal employment.

Like other sectors of the informal economy, women are attracted to the street food sector as a means to earn livelihoods (see the narratives of Nomsa and Faith). In our study, 75% of all respondents identified themselves as the main breadwinner in their household - this was similar for both men and women. Also the data shows that while 91% of both men and women are necessity driven, they also aspire to grow their enterprise. Being necessity driven and growth orientated are not mutually exclusive, and development policies should not neglect the enterprises in this sector.

Barriers to becoming an entrepreneur in SFS, South Africa, % per gender





I could not access capital

There are low barriers to entry in this sector, and no formal education is required. 89% of women in this sector have secondary education or lower compare to 76% of men. And more formalised businesses are directly correlated with higher levels of education, for example 80% of owners of formal enterprises have a tertiary qualification or university degree whereas, 73% and 68% of owners of informal and semi-formal enterprises only have secondary education

Agree that business relies on energy subsidy for survival



The lady in this picture is Nomsa.



Nomsa has a sheep head trading enterprise and she has always been in this business, which she inherited from her mother. She, as so many women in her township in South Africa, is the head of the household and bears the full responsibility for her children as there has never been any input from the children's father. Now, she is glad he is gone as she feels she can stand on her own two feet and determine her destiny. Nomsa realised early on the need for a solid income, and to achieve this, she has sold about 20 sheep heads a day for the past 20 years. She indicates that this does not sound like much, especially not with the hard work and high energy costs that go into this business. But, she proudly emphasizes that it has been enough to send her three girls to school from the money, with one of them ready to go to university. Nomsa takes great pride in her enterprise and proudly showed the interviewer all aspects of the business, from preparing and cooking the heads to a detailed explanation of how she manages her business. She says 'it is hard work, but fulfilling ... and with wonderful social contacts'.

How enterprises in SFS would like to expand their enterprise, South Africa % per gender

Implications for SA policymakers

In South Africa there are national and local policies that promote the formalisation of the informal or "second" economy. However there are many reasons why the informal food sector continues to play an important role in the overall economy of the country (Skinner and Haysom, 2016). As cities become more densely populated, demand for affordable and nutritious meals for the working class will increase. If allowed, this sector can grow to meet the demand and create more entrepreneurs, and more breadwinners. In addition to urban food security, the SFS is also a local attraction for foreign tourists interested in tasting local cuisine. Mzoli's in Cape Town, eYadini and KwaMax in Durban are star success stories and have attracted many foreign tourists. If adequately supported, the sector as a whole can attract tourism.

Energy access and use is a necessary condition to ownership and working in the SFS and facilitates other benefits such as empowerment for those active in this sector. Achieving Sustainable Energy For All needs to include the productive uses of energy and the potential for income generation in sectors such as the SFS.

Household energy subsidies (FBE and FBAE) are important for income generating activities. Enterprises in the SFS benefit from subsidies and would invest in modern energy services if they could afford to. They would benefit from the roll-out of affordable appliances that could improve the health and hygiene standards of street food sellers, such as gas cookers and electric refrigerators, on top of household energy subsidies.

Energy stacking and the use of multiple fuels is common among enterprises in this sector and the use of traditional energy sources such as wood and charcoal continues even in formal enterprises. Both appropriate modern energy services (MES) and the sustainable supply of traditional energy sources and the adoption of cleaner cooking methods and technologies need to be addressed.

Based on the evidence gathered in this research, we argue that developing the economic potential of the SFS will go hand in hand with increased use of modern energy services in the sector, and the social and economic empowerment of men and women operating street food enterprises.







She had an informal vetkoek shop in one of the are a savoury snack made from deep-fried dough and served with filling of stew, mince, cheese, or just plain. After working for 7 years in her vetkoek shop, Faith closed the shop. She indicated that her husband has been supportive of her from the beginning, even though she made the important felt valued during her time of running the vetkoek shop, both by her family and the community. However the reason she closed the shop was because she desired to go back to school and study money from the income she generated in her shop to pay her own way in furthering her education and achieving her dream. Faith has been married for 10 years, but she indicated that the felt a strong drive to be financially independent. It took close the shop and go back to school.

Challenges to address

- i. Low barriers to entry make this sector attractive but this also means that the sector is extremely competitive, with low profit margins and opportunities for investment.
- ii. The low uptake of affordable, modern and clean energy services makes it difficult to improve the health and safety standards and the attractiveness of these businesses, which could increase the profitability of the sector and attract tourism.
- iii. Energy subsidies for household consumption are not designed to foster productive uses of energy and income generating opportunities.
- iv. Lack of appropriate finance mechanisms to increase the uptake of modern appliances to those who cannot access loans, for example through breaks on income taxes, or guarantee mechanisms.

Calls to action

The following policy recommendations are presented as calls to action:

- 1. Support the willingness and capability of businesses in the SFS to grow, given their key role in the livelihood of poor people and the affordability of food for urban dwellers; take care that these interventions and those following below do not implicitly benefit men more than women;
- 2. *Do not increase barriers to entry*, but rather stimulate the increase of health and hygiene standards for those already in the sector;
- 3. Set new cooking energy policies, which take into account productive uses at the household level, and at the enterprise level, because household energy subsidies do benefit women's productive uses and income generating activities.
- 4. *Include the SFS in urban spatial planning and accommodate the reliance of SFS on foot traffic,* where most clients are daily commuters passing by and need to stop by easily and access to cheap food;
- 5. Support sustainable energy supply chains and investment in modern energy infrastructures, that can facilitate daily processing tasks, and increase the attractiveness of businesses through improved health, safety and modernity;
- 6. *Promote appropriate clean energy technologies, fuels and clean cooking methods* through pilot projects and investment in the SFS
- 7. *Provide innovative financing mechanisms,* with a specific focus on women, who have less access to credit than men, for the purchase or rental of modern appliances, such as gas cookers and refrigerators;
- 8. Create platforms and link with existing networks for information dissemination and sharing of best practice

Video

Watch a short video about energy use in the SFS: <u>https://www.youtube.com/watch?v=juoeFgX8GLk&t=28s</u>

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ⁱ Free Basic Electricity (FBE)

