

Fuel Substitution

Poverty Impacts on Biomass Fuel Suppliers (Kenya, Uganda, Ethiopia)

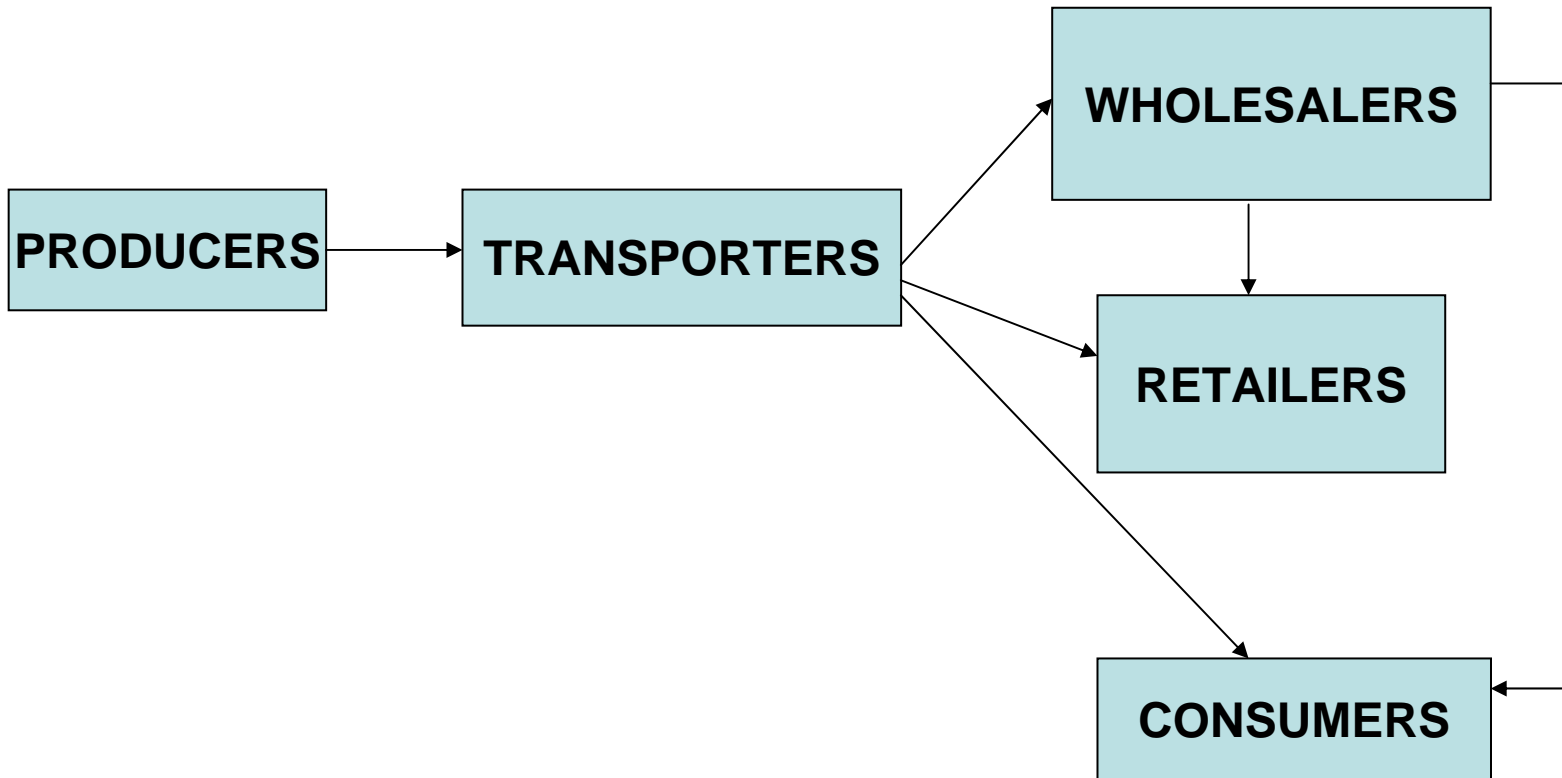
DfID Knowledge and Research (KaR) Project

Livelihood Aspects of Traditional Fuel Supply in Kampala

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- Producers
 - All over the country
 - Traditional Commercial Charcoal Producing areas include Masindi, Nakasongola, Mukono-Kayunga,
 - New Production Areas include Mbarara, Masaka ranching areas

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- **Transporters are categorised into:-**

Lorry-firewood 5%

Lorry-charcoal 19%

Pickup-firewood 3%

Pickup-charcoal 62%

Bicycle-charcoal 8%

Wheelbarrow-char 3%

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- Wood fuel transportation is the reserve of men. Mean Age 33 years
- Highest level of educ. Secondary school but most upper primary
- the nature of wood fuel has changed more from a centralised vending at designated/gazetted markets to widely dispersed vending points in the residential areas i.e. Kiosks/roadside vending.
- Av. Period in business 6 years

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- Dedication is 50:50
- Firewood supply - The highest earner grossing 962,132/= per month and the others averaged 537,868/= per month; this would translate to 32,000/= and 17,929/= per day. By the local standard this is a reasonable level of earning.
- Among the charcoal dealers the average gross income stands at 397,500/= one grosses as much as 1,600,000/= per month. Altogether, the charcoal dealers earn half as much as the firewood dealers.

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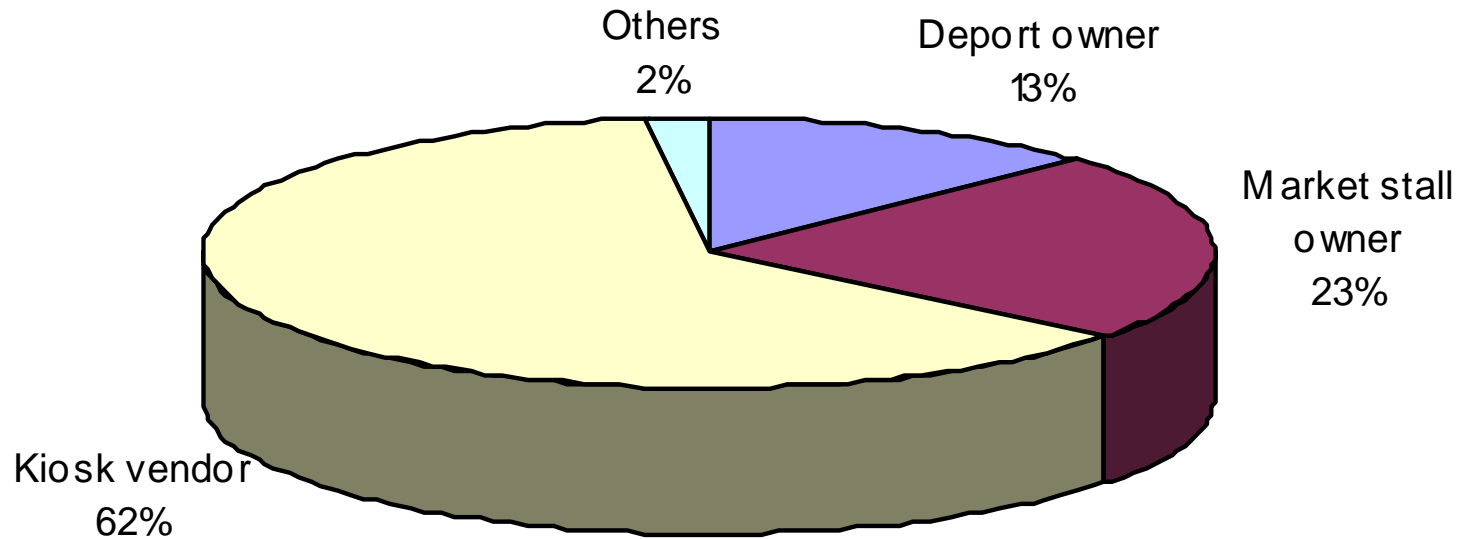
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- **Vendors:** Charcoal vending is a female dominated activity; with women constituting 75% of the group. The trade is generally considered a feminine-petty trade activity by the society and is despised by most men while women do not have any problem doing it

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Categories of Charcoal Vendors



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- The daily **gross earnings** from the sales of fuel wood are range between shillings 250 and Shillings 86,000. The average for the entire group is Shillings 7,515. For comparison, a casual labourer works for between Shillings 800 and 1,500. Only 40% of the sample had other sources of income upon which they obtained income. This strengthens the argument that TF vending is a mainstay.

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- It was noted that the households' in Kampala had multiple energy sources and these had a very direct impact on the relevance of charcoal in the household energy picture
- more than 70% of the households have access to more than one source of energy. Each energy-type is used for a specific cooking or heating purpose

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- The major changes in fuel type were most noticeable among the high and middle class households.
- The greatest change had occurred among the electricity users, where 64% of the households that had switched the energy-type had changed from electricity.
- The most significant impact associated with fuel-switching is household expense related. Only one household (middle-income) linked fuel switching impacts to health

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- **CONCLUSIONS AND RECOMMENDATIONS**
- There are over 3,630 dedicated charcoal vendors in and around the city; and
- 1,401 undedicated ones in Kampala;
- Total of 5,031 charcoal vendors.
- Total of 198 firewood vendors of whom 116 are dedicated and the rest (82) are undedicated.

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- Kampala wood inflow survey – Jan 2002
- 215 dedicated trucks all bearing a total of 3,070 m³ of firewood entered the city over a three-day period.
- Extrapolated over the year would amount to 373,517 m³ per annum or 149,407 tonnes of firewood.
- 340 dedicated carrying 42,864 sacs of charcoal (each 40-50 Kg) over a three-day period.
- This would add up to 714.4 tonnes of charcoal per day and annually 260,756 tonnes of charcoal consumed in Kampala city alone.

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- Further analysis indicate no increase in the quantity of wood fuel consumed in Kampala over the past years. According to the
- In 1994, estimates of charcoal consumption stood at 172,000 tonnes per annum; population stood at 935,244 (National Energy Balance 2002)
- Today the estimated annual consumption stands at 260,756 tonnes per annum while the population is estimated to be 1,547,825 persons.
- Over the past 6 years the population has grown by 165% which is comparable to the growth in charcoal consumption over the same period.