

Fuel Substitution: Poverty Impacts on Biomass Fuel Suppliers

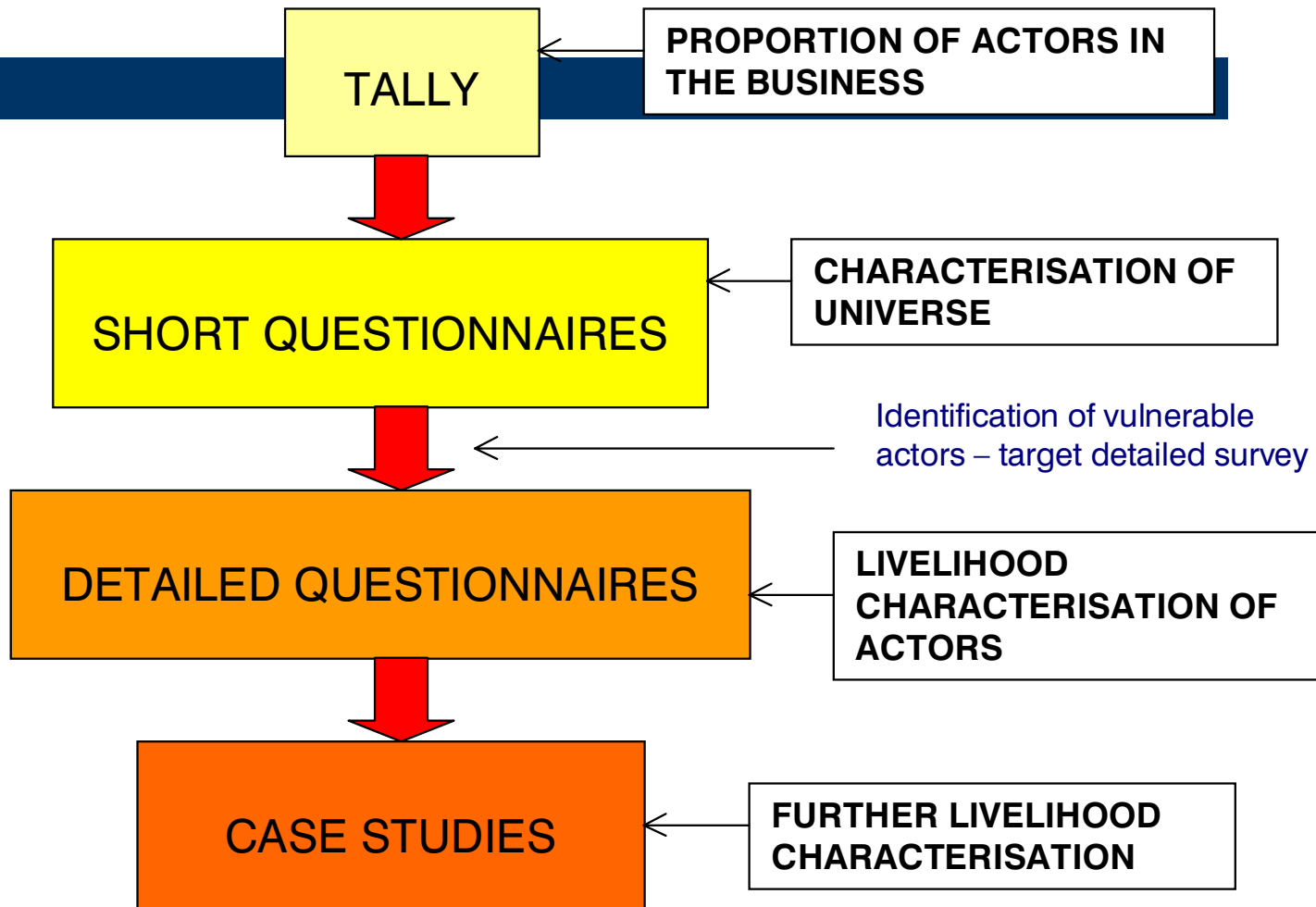
Fuel Suppliers Survey Results

Fairway Hotel , Kampala
25th January–2002

DfID Knowledge and Research

Survey work methodology

Four levels of field work to characterise the universe of biomass fuel urban suppliers and identify the vulnerable actors

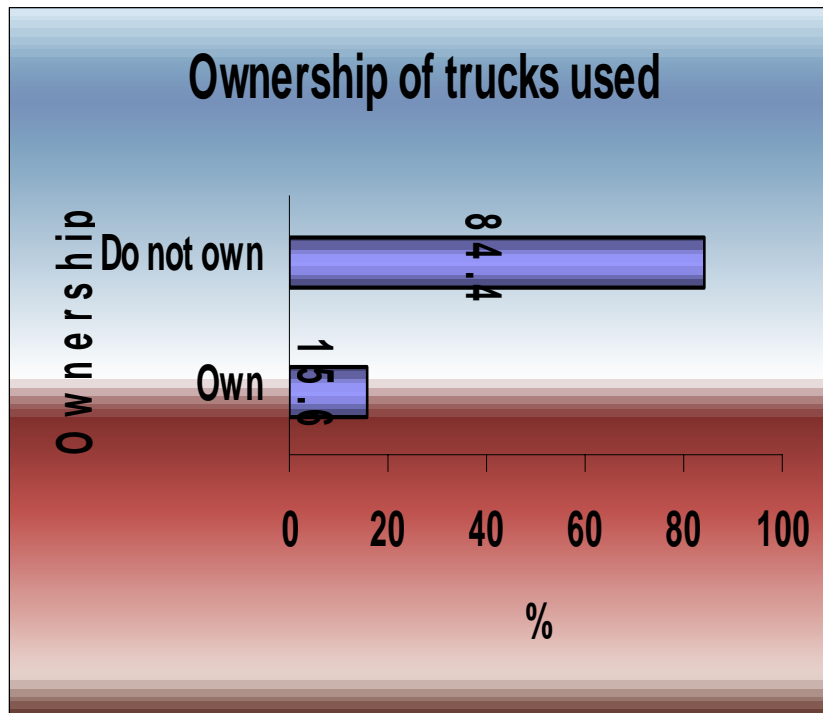


Survey work methodology cont'd

- First level TALLY survey has been completed. Data not yet analysed
- SHORT QUESTIONNAIRES administered to 3 categories of suppliers
 - **64 LORRY DRIVERS (completed)**
 - **437 VENDORS (completed) &**
 - **NON MOTORISED TRANSPORTERS**
- Multiple choice answers all reported.

Survey work - LORRY DRIVERS

Ownership of lorries



- Only 15.6% owned the lorries they were driving, while 84.4% do not own the vehicles they were driving.
- Hire of the lorries was most common ways through which charcoal transporters accessed them 50 (78.1%), as compared to non-hire 14 (21.9%)

Survey work - LORRY DRIVERS

Occupation of the charcoal transporters

- 81.3% of respondents answered that driving was main activity, 15.6% were doing other businesses amongst which farming, charcoal selling etc.
- 42 of charcoal transporters were dedicated, as they had no other activity they engaged in (66.7%), others did also transport other goods despite charcoal.

Other activities done	No	%
None	42	66.7
Bar Operation	3	4.8
Transportation of Produce	11	17.5
Farming	5	7.9
Construction	1	1.6
Charcoal vending	3	4.8
Total responses	65	103.2

Survey work - LORRY DRIVERS

Business details

- The quantity of charcoal transported was mainly 50 to 100 sacs (54.7%), and more than 100 sacs (25%). Few transported 20 to 50 bags (20.3%).
- Most of the transporters did not own the charcoal they transported 53 (82.8%). This indicates they had to buy it and transport it to the city to sell it.
- It was also reported that in most cases the amount of charcoal transported varies in quantity according to the seasons or other reasons 52 (81.3%) while very few said it does not vary 12 (18.8%)

Survey work - LORRY DRIVERS

Variations in quantities of charcoal transported

Reasons for fluctuating qty of charcoal	No	%
Season	27	45.8
Demand Size	10	16.9
Not sure	4	6.8
Production levels	11	18.6
Distance to source	1	1.7
Drivers' decision	2	3.4
Price	1	1.7
Capital availability	2	3.4
Poor roads	1	1.7
Total responses	59	100

- Main reasons for the fluctuations in quantity of charcoal supplied were changing seasons, changing production levels, and changes in demand.

Survey work - LORRY DRIVERS

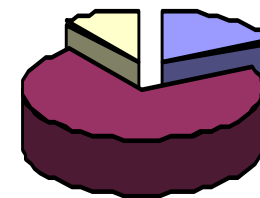
Seasonal Variation

- Most of charcoal is transported during the dry season. This may be due to the fact that most of the charcoal production takes place during this season. Other studies (Masindi woody biomass report), indicate that people go into charcoal production in dry season since less cultivation is done in this season. The other reason could be that roads to the production sites are not so bad for the old charcoal trucks.

Season more charcoal is transported

Rainy Season
18%

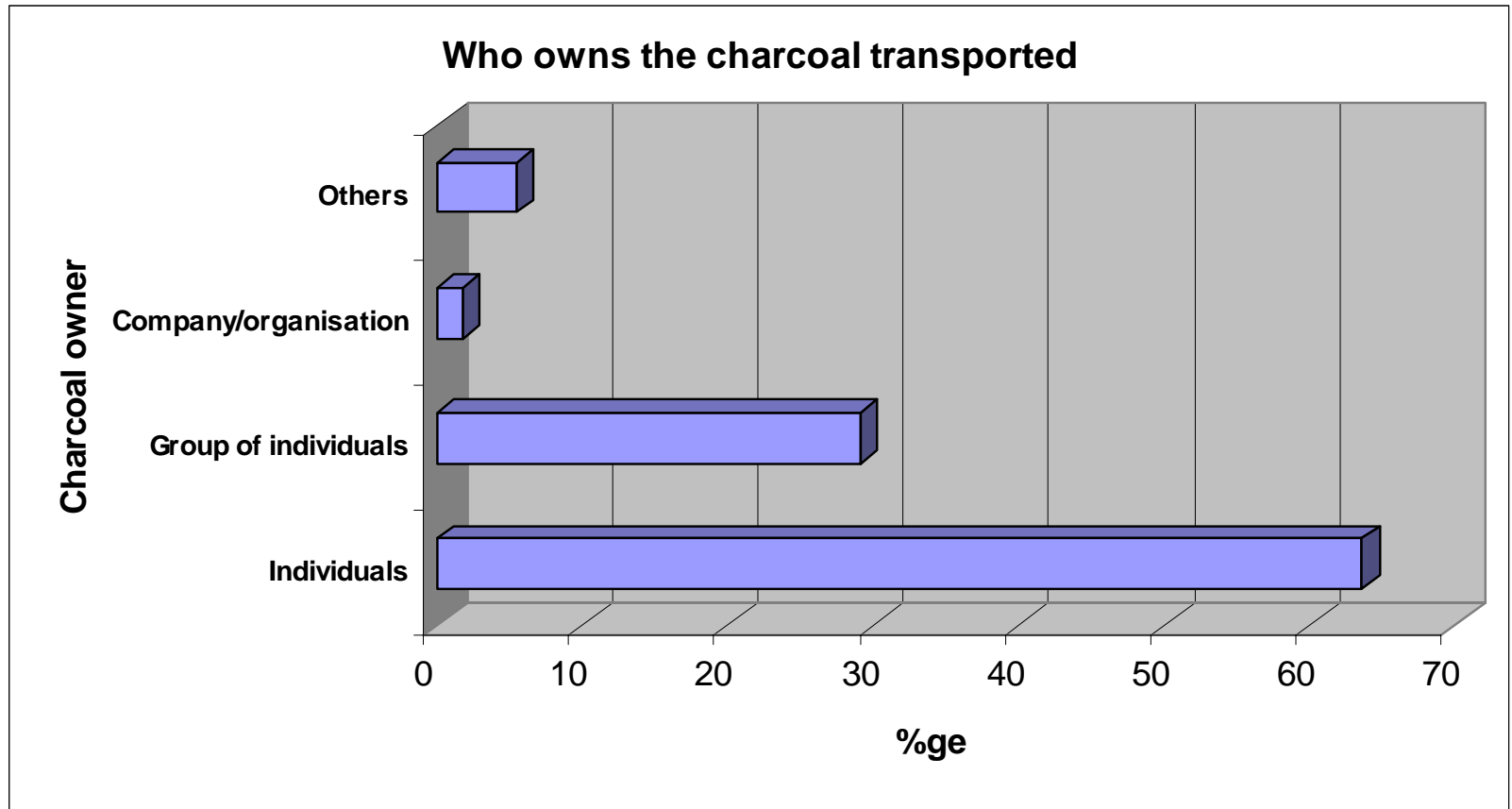
Others
11%



Dry Season
71%

Survey work - LORRY DRIVERS

Ownership of charcoal



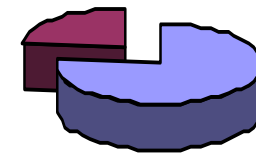
Survey work - LORRY DRIVERS

Main suppliers to transporters and location of sales

Distribution points	No	%
Depot	25	22.5
Kiosk	27	24.3
Market	22	19.8
Retailer	18	16.2
Private consumer	6	5.4
Others	13	11.7
Total responses	111	100

Main suppliers to Transporters

Middle
man
23%



Charcoal
burner
77%

Survey work - LORRY DRIVERS

Problems encountered by the transporters

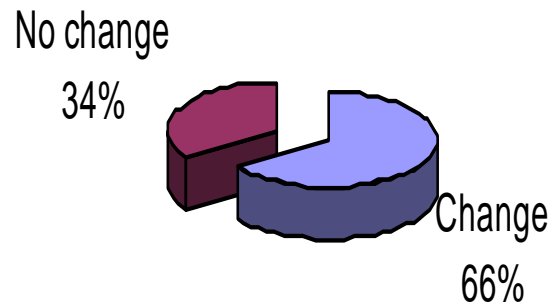
Problems faced	Nb	%
Poor roads	13	13.4
Traffic police	30	30.9
Not respected by people	1	1
Falls in demand	2	2.1
Long distance to supply points	1	1
Fatigue due to driving at night	1	1
Rainy seasons not good	2	2.1
Taxes are high	26	26.8
Forestry officers	5	5.2
Fluctuation in supply	2	2.1
Special Revenue Protection Services people	3	3.1
Delayed payments	1	1
Mechanical problems of old trucks	4	4.1
Insecurity	5	5.2
Poor quality charcoal	1	1
Total responses	97	100

- The main problems reported by the charcoal transporters were high taxes demanded from them, and the traffic police on the road who constantly stops them and some times charge them or demand some bribes. Problems are also caused by the poor conditions of roads

Survey work - LORRY DRIVERS

Changes in the business

Seen changes in Business

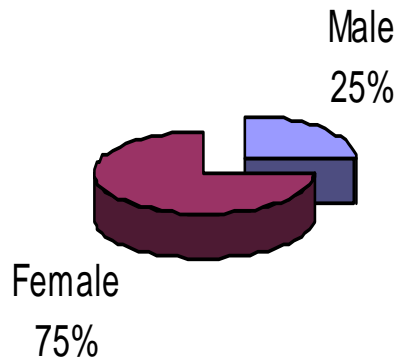


- The price fluctuations of charcoal were high of late, and others said the business was improving in terms of profits they were getting. Others were seeing the charcoal consumption rates increasing (this could be attributed to the increased electricity tariffs that make the rich also go for charcoal), as a result the prices of charcoal had gone up.

Survey work - VENDORS

Gender of vendors

Gender distribution of Vendors

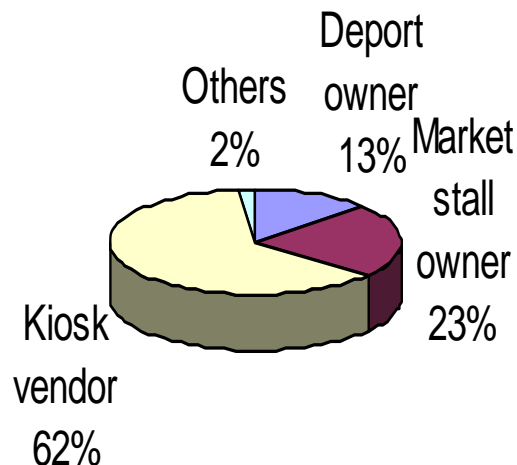


- Most of the charcoal vendors are females (74.8%) compared to males (25.2%) This is an activity normally despised by men, but women find it easy to do.

Survey work - VENDORS

Categories of charcoal vendors

Categories of Charcoal Vendors

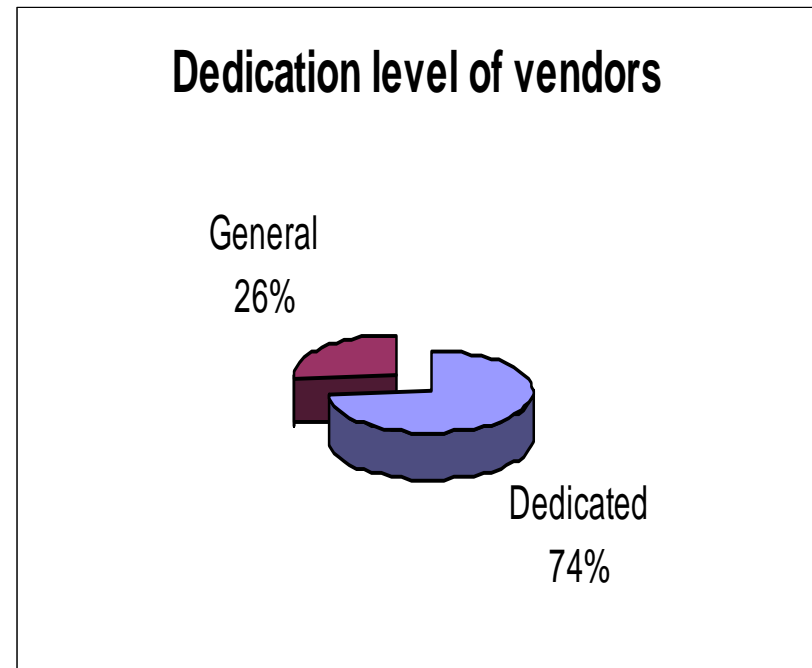


- The majority of the customers to the charcoal transporters visited were kiosk vendors 273 (62.5%) and Market stall vendors (22.7%). Though the deport owners were not very many 13%, it should be noted that they buy in whole sale (sometimes the whole truck), compared to kiosk and market stall owners who are retailers and buy sometimes 1 sac of charcoal. They make transporters move a long journey through very bad roads to supply few sacs of charcoal, though they pay a higher price.

Survey work - VENDORS

Level of dedication of vendors

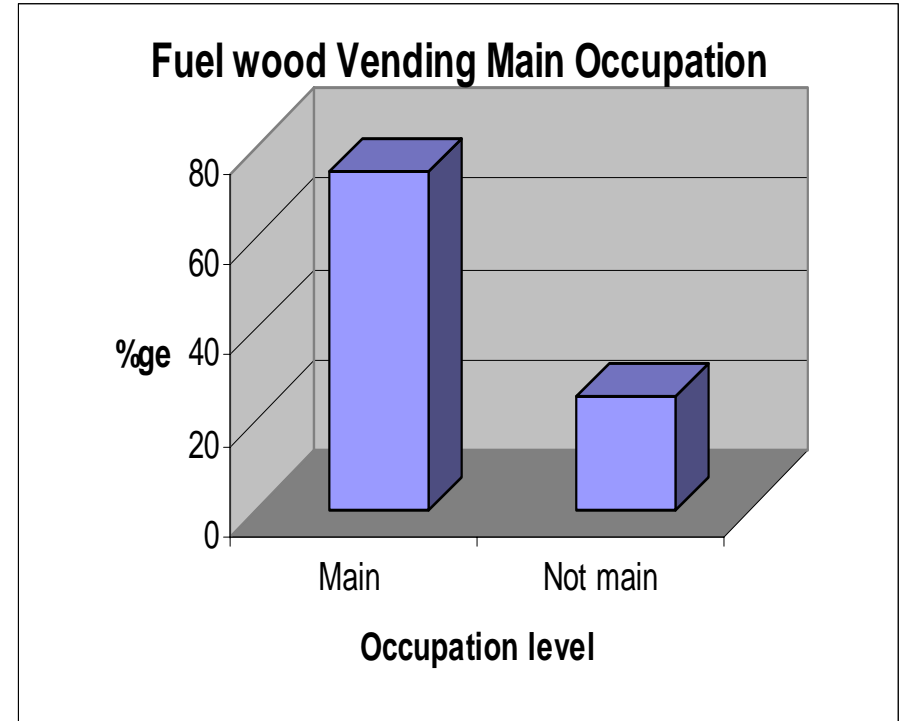
- Most of the respondents said they were dedicated (74.4%) to selling charcoal while a few 26% said they were general as shown above.
- The type of wood fuel the vendors were dealing in was mainly charcoal 430 (98.4%), while those with firewood were very few. This is generally acceptable since 99% of Kampala households that use fuel wood actually use charcoal not firewood.



Survey work - VENDORS

Dedication to vending biomass fuels

- Most of the vendors said the sell of biomass is their main occupation 327 (74.8%), as compared to those who said, they vendor in biomass fuel as a bye the way 110 (25.2%).



Survey work - VENDORS

Main customers of charcoal

Main customers	Nb	%
Households	342	82.8
Institutions	6	1.5
Market vendors	33	8
Kiosk vendors	5	1.2
Others	27	6.5
Total	437	100

- The main customers to the charcoal vendors are households (82.8%). This fact is explained by the fact that majority of the vendors are kiosk vendors who shop either daily, or more than once daily. They have small capital, stock little charcoal; sell in small quantities even oil tins, which are sold to households.
- The Institutions, market vendors, and kiosk vendors are customers to deport owners.

Survey work - VENDORS

Other activities engaged by vendors

Occupation	No	%
Grocer/food stuffs	72	66.0
Retail shop	9	8.3
Restaurant/eating house	12	11.0
Dependant	2	1.8
Farmer	4	3.7
Boda-boda cyclist	1	0.9
Motorcar dealer	1	0.9
Construction	2	1.8
Wife	2	1.8
Clothes trader	3	2.8
Crafts	1	0.9
Total	328	100.0

- The main among the other employment forms is having grocery/selling food stuffs, having an eating house/restaurant, and having a retail shop. This would imply that the charcoal/firewood would just be put there as a second thought.

Survey work - VENDORS

Problems encountered by the vendors

- Poor sales and hence less profits. This is so because there are few customers that buy a full sac at a time, the majority buy tin full charcoal. Since the profit from a sac is just minimal, it makes the whole business less profitable.
- At time, charcoal supplied to the vendors is so poor, as it comes from certain types of trees that offer poor charcoal. This so because it is not very easy to distinguish good charcoal from bad one. This problem makes customers run away to other vendors.
- The users normally regard charcoal as dirty. This makes it hard to have the youth and men involved in vending it. It is perceived as more dirty when the expected profits are so low.