DfID KaR Fuel Substitution Project: Short Questionnaire Survey Results

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Purpose of Surveys

The Survey’s aim was to give a short qualitative view of suppliers involved in the traditional fuel business, paying particular attention to poverty indicators, in order to:

- characterise the sector of carriers involved in the supply and distribution of traditional fuels (charcoal & fuel-wood) within urban areas, in terms of number, gender, and means of transport;
Purpose of Surveys Cont’d

• characterise the sector of vendors involved in the sale of traditional fuels;
• characterise the nature of the traditional fuels business;
• assess the poverty/livelihood impacts on traditional fuel suppliers of fuel substitution and improved stoves.
Questionnaires: 4 types administered

1. Vendors short questionnaire: - Targeting charcoal retailers and depot owners, etc.
2. Lorry questionnaire: - Targeting charcoal/wood motorized transporters
3. Non-vehicle questionnaire: - Targeting non-motorized transporters of charcoal/wood
4. Tally Questionnaire: Used to take count of vehicles bringing in charcoal/wood
Methodology

• City divided into 13 sections representing lower, middle and upper income classes.

• For lorry questionnaire, 6 entry points into the city were identified: Mombasa, Thika, Naivasha, Ngong and Ongata Rongai, Kiambu, Gigiri and Kangundo Road.

• Enumerators were familiarized with the questionnaires through a pre-test run and send out according to the parts of the city they were familiar with.
Methodology Cont’d

• Enumerators administering lorry questionnaire liaised with depot owners who introduced them to lorry/truck drivers
• Involved working early and late hours to catch elusive lorry drivers
• Vendor and non-motorized questionnaire was easier to administer
Results: Vendor Questionnaire

- 104 vendors were interviewed, 67% were male and 33% female.
- Majority of vendors, 87% were adults of between 15 and 55 years,
- Children (below 15 years) and people above 55 years made up about 10% of respondents.
- There are two basic categories of vendors – dedicated and general – graph below shows
Graph shows vendor category
Graph shows Source of Fuels

- Producer
- Middleman
- Self Collected
- Other
Reasons for Engaging in Trad. Fuel Business

- No alternative
- Earn a living
- Additional income
- Family problems
- Others
Ownership of Space/Facility where fuel is Sold

<table>
<thead>
<tr>
<th>%</th>
<th>Own</th>
<th>Rent</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>70</td>
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</table>

- % Rent: 70%
- % Own: 30%
Pressing Problems encountered

- Sack filled with un-burnt wood instead of charcoal
- low quality charcoal
- lack of capital to expand or stock
- shortage of charcoal during rainy season
- harassment by police and city council askaris
- bad economy
Problems encountered cont’d

• inadequate market
• no credit services
• suppliers are not reliable
• harassment by environmentalist and/or conservationist
• competition
• price fluctuation
• low consumption during dry season
Problems cont’d

• no official space
• inadequate storage facilities
• rent is high
• shortage of timber
• they are forced to bribe to stay in business
• No permits and licenses
• logging is against the law
• transport
• 49 lorry drivers were interviewed
• Their mean age was 35 years and they were all male.
• 47 of the lorries were transporting charcoal and 2 wood/logs
• 34% drivers said they owned the vehicles,
• Whilst 66% said that vehicles were hired from other charcoal dealers; belonged to friends or relatives or their employers and/or business partners.
Lorry questionnaire cont’d

• 69% of the lorry drivers said that transporting charcoal was their main activity, whilst 31% engaged in charcoal transportation when their other main activities had slowed down.

• 20% of the drivers owned the charcoal, whilst 80% had been hired to transport the charcoal.

• The charcoal either belonged to the employer, a charcoal dealer or a passenger within the vehicle.
Number of bags of charcoal carried per trip

- 5 to 10
- 11 to 20
- 21 to 50
- <50
Season most charcoal transported

<table>
<thead>
<tr>
<th>Season</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>rainy</td>
<td>31</td>
</tr>
<tr>
<td>dry</td>
<td>3</td>
</tr>
<tr>
<td>other</td>
<td>16</td>
</tr>
</tbody>
</table>
Source of fuel

- Producer
- Middleman
- Other
- More than one source
Delivery Points for Lorry drivers

Depot: 90%
Retailers: 60%
Others: 40%
Problems encountered by lorry drivers

• harassment by police, forest guards, local authorities-chiefs and NCC
• harassment by fellow suppliers
• shortage of charcoal during rainy season
• bad roads
• not transport permits
• permits are expensive, yet transporters are harassed even when they have them.
Problems Cont’d

• a lot of money is spent in transportation from one depot to the next, demand is not constant
• increased competition
• bribe police, forest guards and local authorities
• increased fuel costs lowers percentage of profit
• customers abuse the credit privilege when accorded
• it takes two to three days to be paid
• high operational costs & vehicle
Problems cont’d

• travel long distances to get charcoal
• travel at particular times in order to deliver charcoal (Mostly at night)
• Restriction in cutting trees
• no access roads in some places e.g. slum areas
Changes that have occurred in the business

- Decrease in amount of charcoal being produced - more difficult to get charcoal
- many new entrants into the business thus increased competition
- less consumption during school days
- selling firewood is slow
- more controls in charcoal production
- people opting for other alternative sources of fuel - kerosene
- The Economy is doing poorly, people are going back to using basic fuels meaning good business
Non-vehicle questionnaire

• 38 respondents interviewed
• 29 were male and 9 female
• 76% were adults 15-55; 4% children under 15 years and 5% adults above 55 years
• Male used either a bicycle or cart to transport the fuel whereas women mostly head carried the charcoal
• Graph below shows the carrier type
Carrier type used in transporting Charcoal

- Bicycle
- Cart
- Wheelbarrow
- Headcarrier
- Other
Reasons for engaging in the business

- Family business pays well: 10 respondents
- Pays well: 5 respondents
- Other: 20 respondents
Source of fuel transported

- GATHERED
- BOUGHT
- not indicated
PRESSING PROBLEMS

- uncredit worth customers
- harassment from police
- shortage in rainy season
- lack of capital
- transport
- questionable quality
- health hazard
Pressing Problems Cont’d

- time consuming
- unhygienic
- exorbitant prices
- cannot plan because they are no guidelines for fuel
- charcoal is bulky and heavy
- bribes
- bending of immature timber
- shortage of timber
- inconsistent customers
Pressing Problems

- security bills
- price fluctuation
- rent bills
- few tenders
- impatient customers
- low carrying capacity of wheel barrow
- fluctuating prices