Impacts of the charcoal ban on forests and livelihoods

C. Wekesa, D. Mutta, M. Larwanou and A. Roos

ICRISAT
INTERNATIONAL CROPS RESEARCH
INSTITUTE FOR THE SEMI-ARID TROPICS

African Forest Forum
AFF

KENYA FORESTRY RESEARCH INSTITUTE
KEFRI

SLU

Introduction

- About 47% of annual harvest is used for household energy; biomass accounts for 45% of the primary energy demand in Africa
- Demand is **expected to increase** due to population increase and trends in urbanization
- Piling pressure on forest resources – **Africa had the largest annual rate of net forest loss in 2010–2020, at 3.9 million ha**
- Countries are implementing policies to regulate charcoal industry; **halt forest degradation and deforestation**
- Kenya has imposed charcoal ban to reduce the pressure on forests and woodlands
- **To understand on the impacts of charcoal ban in Kenya, stakeholders views were captured through a study conducted between June 2018 and September 2019**

Methods

- Case study approach – **Kwale, Taita Taveta and Mombasa counties**

- Individual interviews, FGDs, Key informants and workshop – **Government officers**, **producers**, **transporters**, **vendors**, **restaurants/cafes** and **charcoal customers**

- Additional data – collected from official proclamations and legislative documents, a recent report on household energy in Kenya (Kenya, Ministry of Energy, 2019), and media (BBC, Nation and Standard Newspapers and Citizen TV among others)

RESULTS/FINDINGS

Charcoal ban – what are the effects?

Component	Definition
Resource effects	Adaptation/substitution, and livelihood impacts
Interpretive effects	Perceptions and attitudes among key actors
Institutional effects	Direct effects on institutional structure (CPAs/CPGs)
Socio-political feedback	Mobilization in support, against, or for adaptations of the policy (or local policy application)
Fiscal feedback	Budgetary consequences of the policy
Administrative feedback	Internal sentiments and dedication among relevant authorities in charge of implementing the policy, reputation effects

Resource effects

- The ban rendered transported charcoal illegal leading to **reduced volumes** throughout the value chain (producer - transport and retail stages)
- Traded volumes reduced by 30-50% compared to the quantities channeled through the CPAs before the ban – **attributed to increased risks of fines, confiscations**
- Production on private lands has also decreased
- Decreased consumption – vendors sell less due to increased prices, from **20** to **3** bags/day; **affecting the overall net income**

Resource effects……cont'd

- Buyers purchase the charcoal frequently in smaller quantities (0.5-2.0 Kg)
- **Irregular supply** after the ban, especially in the rainy season, with occasional stock outs – inconvenient for low income customers who buy in small quantities several times a week
- **Declining charcoal quality** – over burnt charcoal and powder or contaminations/adulteration with unburnt pieces of wood
- **Continued illegal production** and **trade –** at night using Motorbikes/Proboxes instead of lorries
- **External large scale charcoaling entrepreneurs**, not associated with the local community or CPAs, have increased their operations

Resource effects……cont'd

- **Imported quantities –** hard to quantify, but permits from Uganda being used to distribute charcoal in Mombasa
- **Increase in charcoal price** along the value chain; prices at the producer level increased from **600 to 1,000 Kshs** per 90kg sack, an increase of **67%**
- At consumption level, prices have **increased by 100%** from **800 Kshs per sack to 1600-1800 Kshs**
- Corresponding increase for 1 Kg; **from 50 to 100 Kshs**
- External large scale **charcoaling entrepreneurs**, not associated with the local communities or CPAs, have also increased their operations

Ban has **strained household budgets** for both value chain actors and end users/customers

Has made life "**harder**" particularly when the prices of other commodities have also gone up

Mombasa households**, energy accounted for 14-35% of the household budgets, and the charcoal share is about 10-25%**

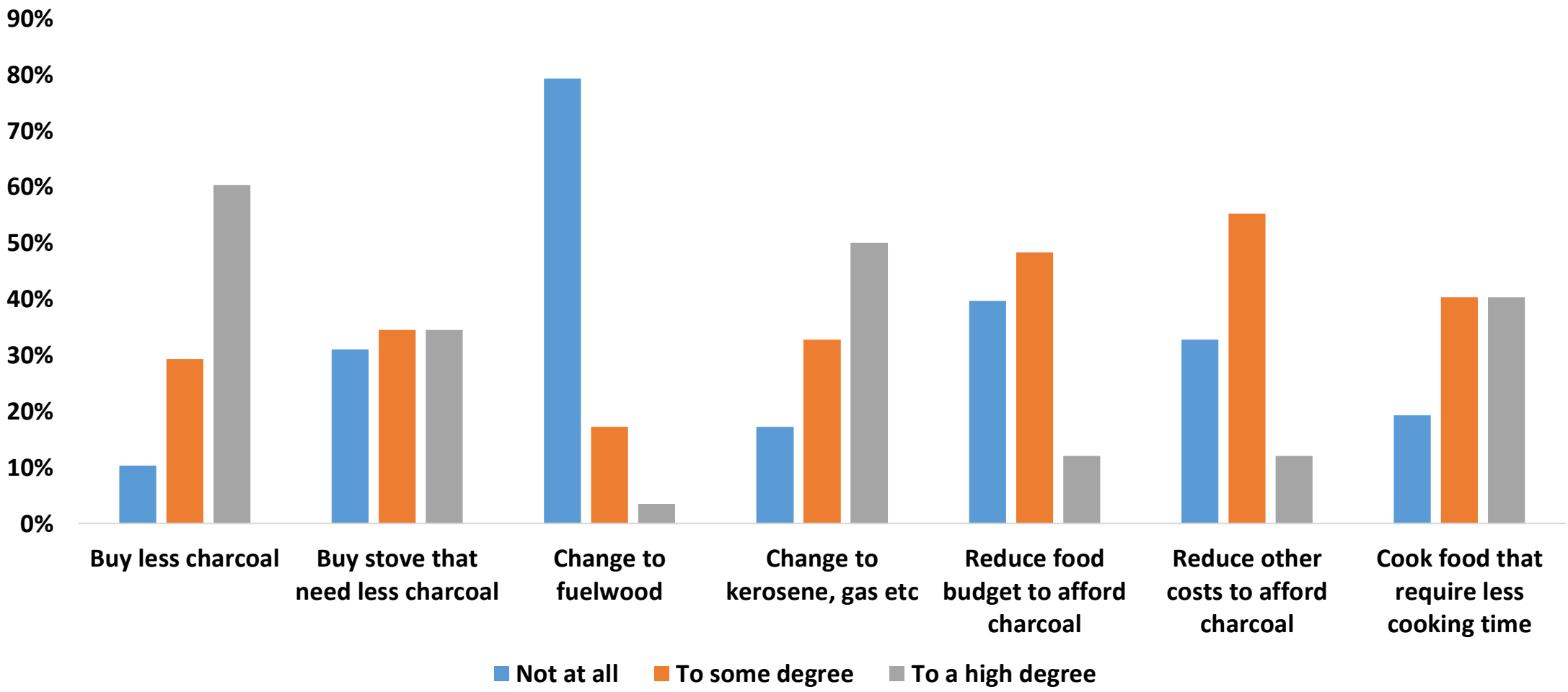
Impacts on producers, vendors and transporters

- **Ban has strained household budgets** for both value chain actors – reduced volumes produced within the CPAs have reduced the income generating opportunities
- **Profit margins** are slimmer – no longer are able to save; look for alternative income
- **Social consequences** - children have dropped out of school due to lack of school fees
- **Breaking of marriages**/families due to reduced income that is needed to meet basic needs

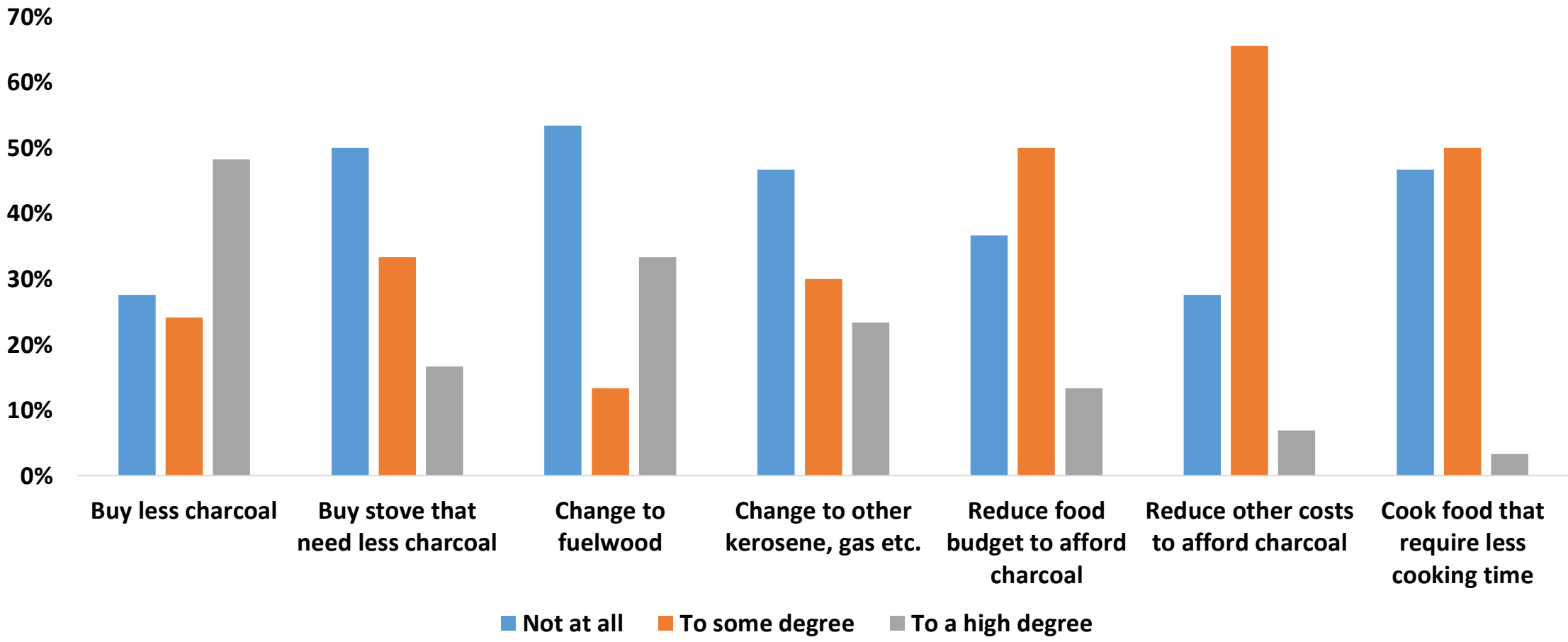
Alternative income sources – adaptations

Alternative income source	Producers (%)	Transporters (%)	Vendors (%)
Shop	30	25	63
Farm	40	28	5
Food relief	4	0	0
Labourer (e.g. construction)	15	19	21
Hotel	4	0	5
Transport	4	28	3
Various	4	0	3

Coping strategies – households



Coping strategies – restaurants and cafes




Saw dust


Weighing scale - selling in small quantities

Interpretative effects

- The ban would lead to a **reduced forest loss, enhance wildlife and conservation and tourism industry – small percentage**

- **Others: no impact on the forests conditions**, or is too early to tell how the forests have been affected; reduced CPAs activities increased illegal activities; and **tree planting organized by CPAs** prior to the ban had stopped

- Livelihood impacts have created a **disgruntlement** among actors – **lack of community participation, and** arrests and confiscation and destruction of charcoal loads

- **Poor relationship with the authorities** (KFS/KWS/Police) – fear, of being caught, losing the charcoal or having to pay bribe

Institutional effects

- **Weakening of the CPAs –** unsustainable production methods, no reforestation, tree nurseries collapsed; CPAs no longer perform these functions

- The protection branch of the KFS allocated more funds to conduct more frequent surveillance

- The authorities, police and KFS, on the other hand, have **increased recruitment** to supervise the law

- Number of **road block patrols have increased**

Socio-political feedback

- **Whether the policy should be continued, lifted or changed?**
- Value chain actors indicated the charcoal ban should be **lifted or amended according to each county's uniqueness**
- The actors would have preferred **a regulated charcoal sector, involving licenses, obligations to replant harvested areas, and that more control and power should be handed over to the local CPAs**
- **Desired actions: capacity building** in silviculture, harvesting, tree generation, improved methods of charcoaling to enhance efficiency in production

Administrative feedback

- Authorities were **not entirely committed** to seize and confront all types of charcoal trade that was in open display, e.g. along the roads

- Limited personnel or the fact that a strict application would lead to **reputation effects** in the local community hindered effective enforcement

"***Some producers are relatives of staff and see how hard life is now experienced***" - *Customer, Mombasa*

Fiscal feedback

- Licenses for charcoal movement no longer being paid – **30 Kshs/0.3 USD** per bag to KFS and **10 Kshs/0.1 USD** per bag to County government

- Business permit to county government also not paid – **Kshs 200/2.0 USD**

- **Charcoal traded illegally**; unrecorded and can therefore not constitute a tax base – **this puts a double burden on the public finances**

"*80% of the revenue has been lost*" – *officer*

Is the charcoal ban effective? Why?

- **The answer is No!**

- The many negative environmental, economic and social impacts attributed to the ban

- Charcoal is still **being produced**, and being used as the common source of energy

- Only operation tactics have changed – charcoal mostly transported at night and **vendors only put a small quantity on display then the rest is hidden**

Conclusion……

- **Negative impacts coupled with non-committed staff, and no respect for the authorities will lead to negative feedback, weakening the support for the policy – eroding the objectives of the policy**

- **Policy mixes that can foster sustainability need to be designed to create incentives for the people – the policies should address SFM, clean cooking technologies and offer alternative income/energy – NOT A SINGLE POLICY INSTRUMENT**

- **Hence long term effective policy for sustainability**

THANK YOU