

# Wood energy in Sub-Saharan Africa: How to evolve a shadow business into sustainability

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# Background

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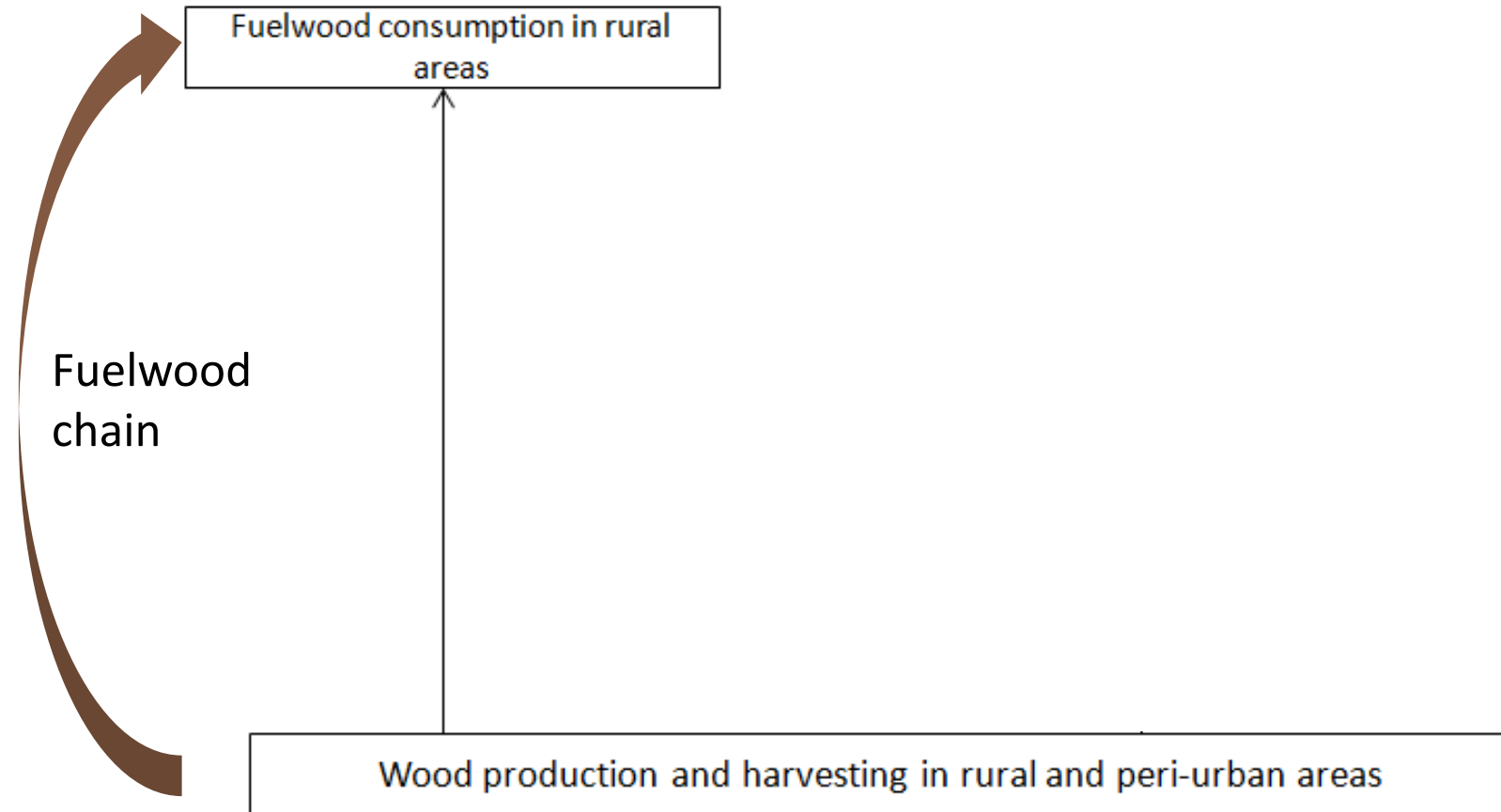
Woodfuel supply in SSA of substantial importance but provision/production highly unsustainable

Demand will pot. even increase in the future (population growth & urbanization)

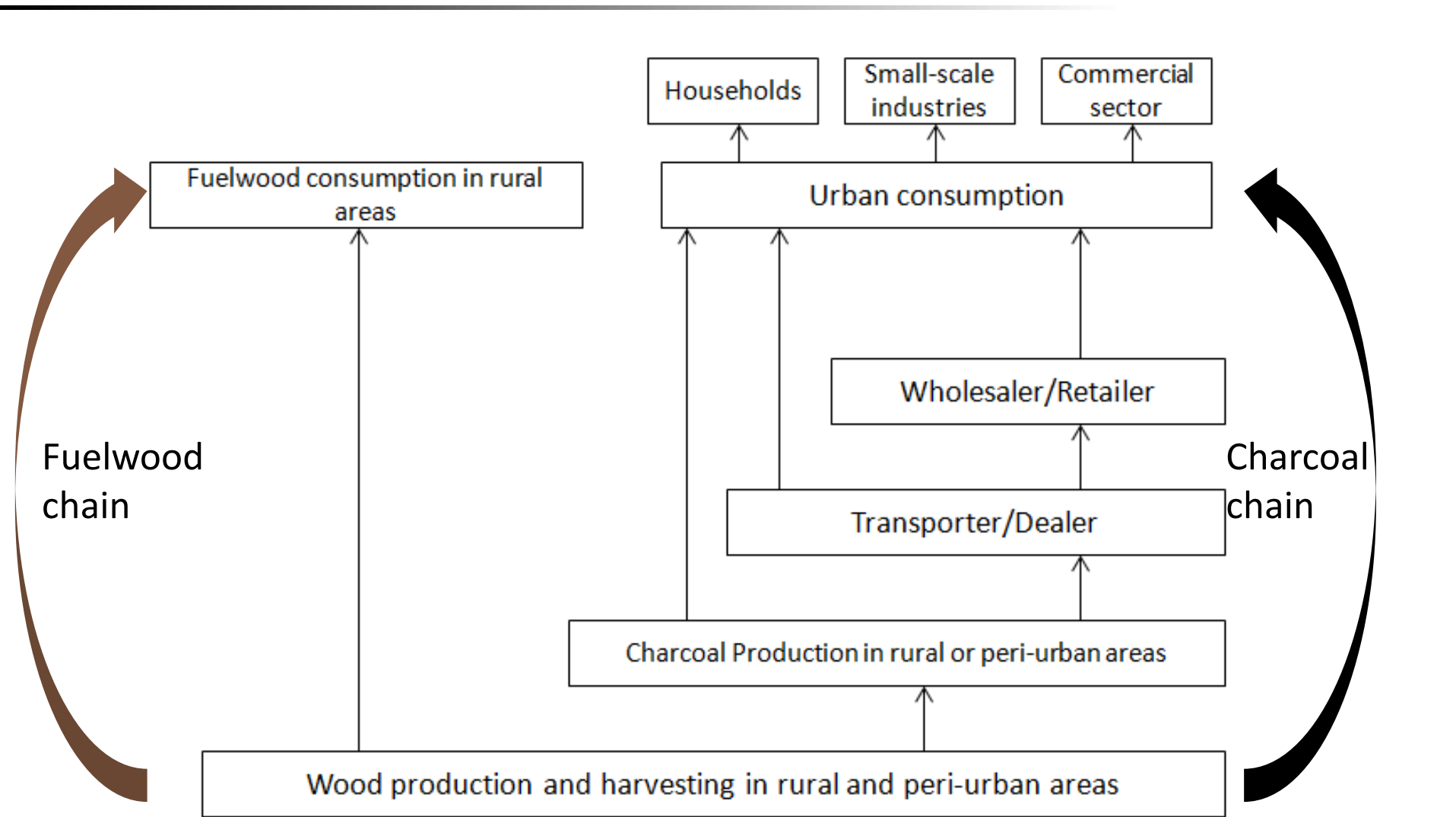
Political reactions in the past:

- Often focus on centralized modern energy development – wood energy is largely neglected („*shabby sister of renewables*“)
- Generally one-dimensional (e.g. ban of charcoal), focus: regulatory options from (central) government
- Hardly inclusion of local and regional level – strongly restricted benefit sharing

# Framework: Generalised woodfuel value chains



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# Characteristics of wood energy value chain components (VCC)

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## Production:

Raw material often extracted from woodlands – hardly official license system operating

Charcoal: Small-scale producers often operating with limited technology and/or experience  
→ nevertheless: Potential „*engine for economic growth*“<sup>#</sup> in rural areas

## Transport & trade:

Fuelwood → headloads - mainly local consumption

Charcoal → dealers/transporters/wholesalers (key players in VC\*); transport from rural to urban areas

## Consumption:

Fuelwood → Three-stone fires / improved cooking stoves

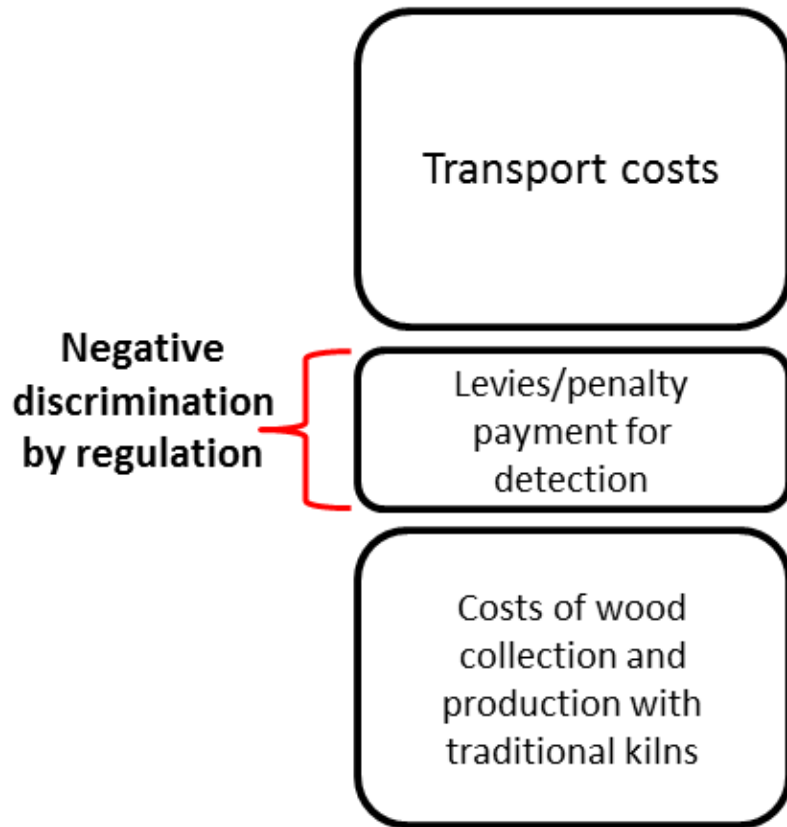
Charcoal → traditional charcoal stoves / improved charcoal stoves

<sup>#</sup> *van der Plas R.J. & Abdel-Hamid, MA (2005)*

<sup>\*</sup> *Sander et al. (2013)*

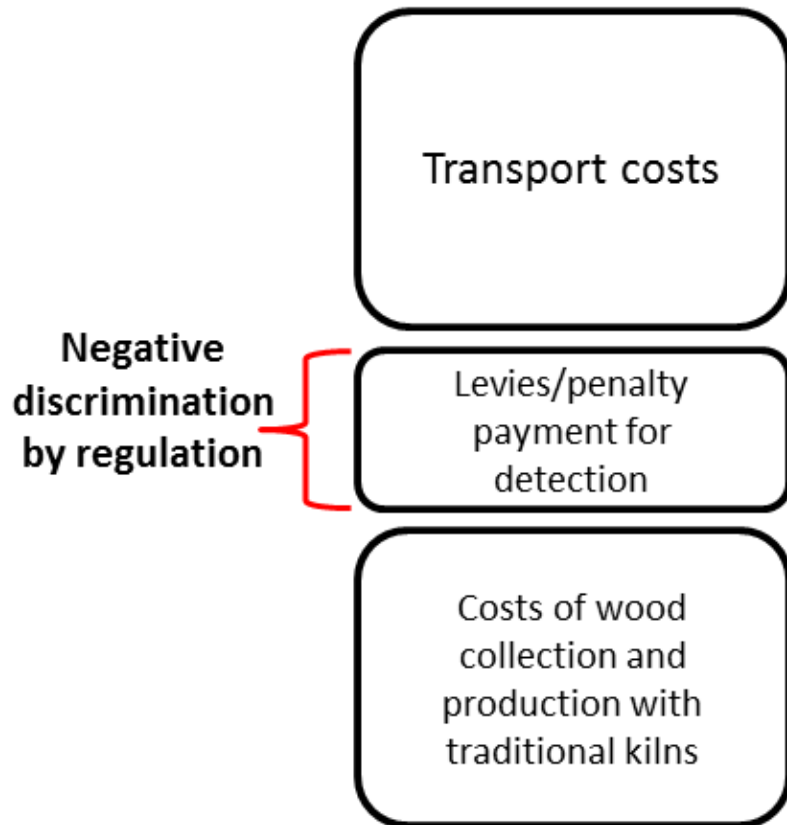
# Sustainable and unsustainable VC: Entry points for public management

Unsustainable production  
in (remote) areas with  
sufficient wood reserves

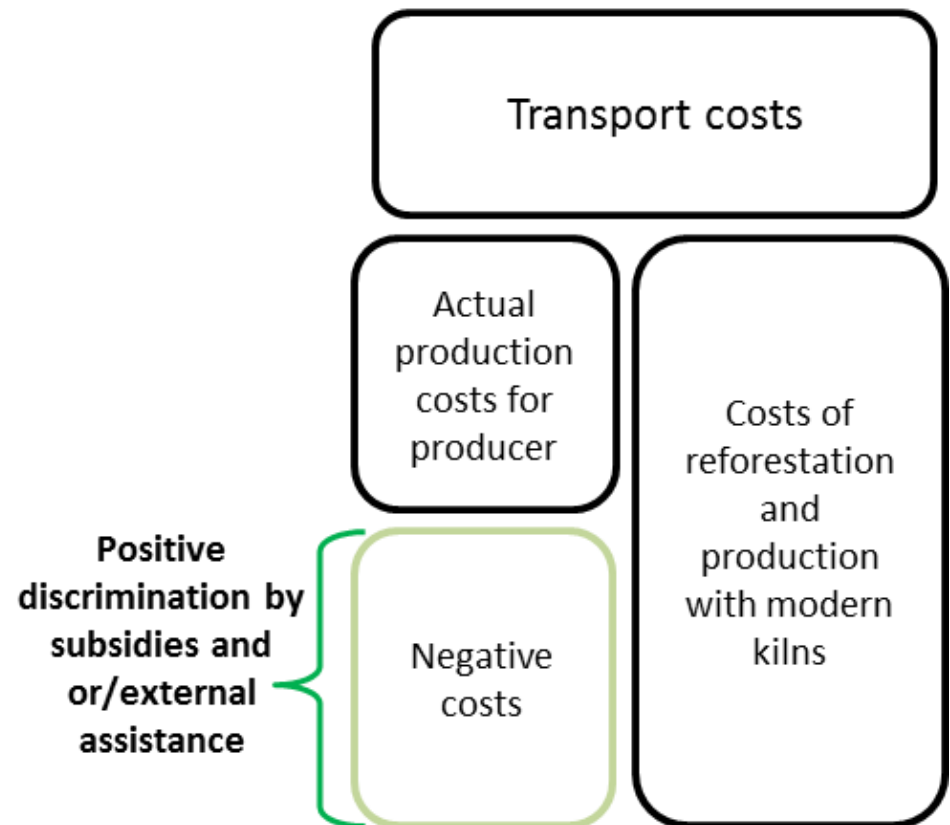


# Sustainable and unsustainable VC: Entry points for public management

**Unsustainable production  
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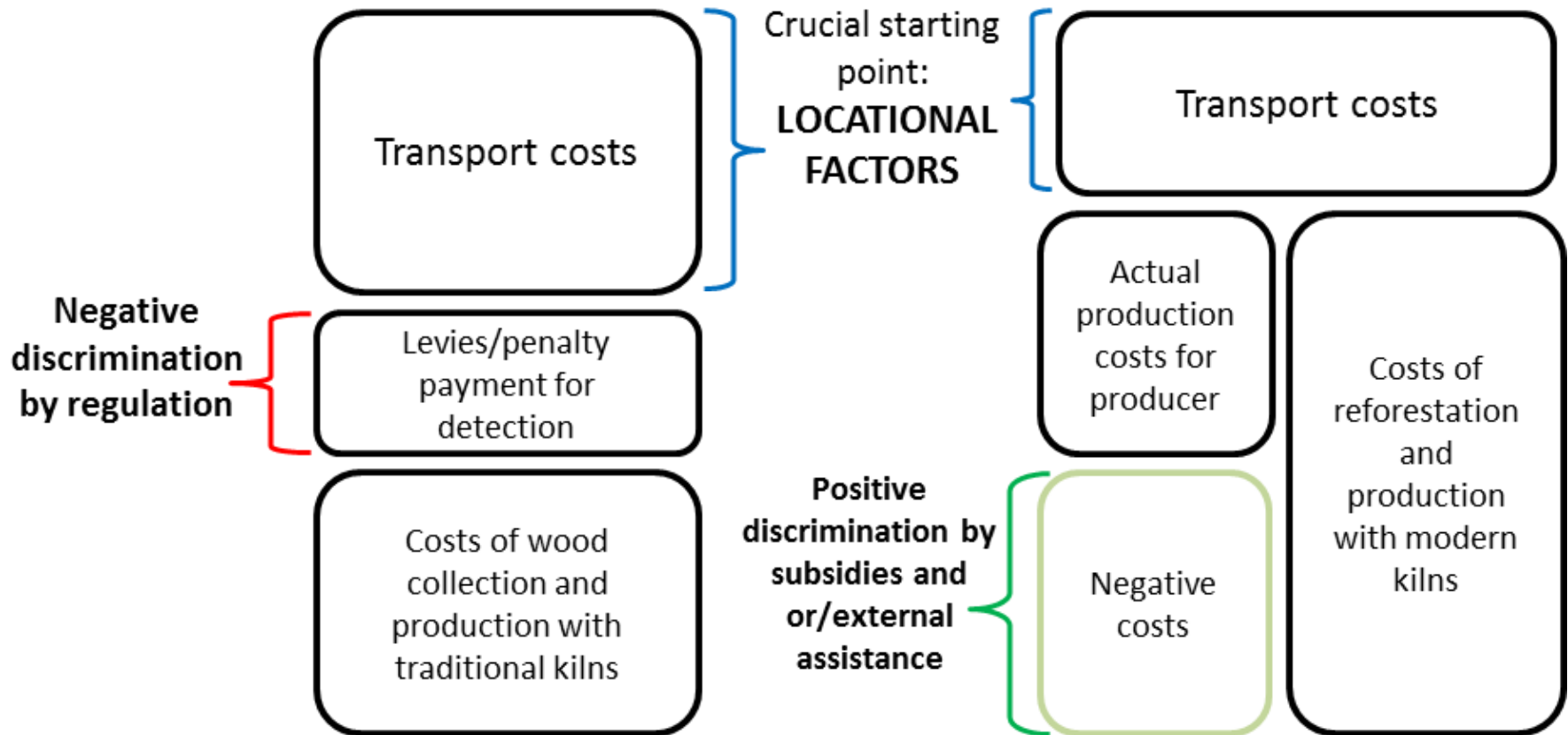
**Sustainable production in  
(peri-urban) areas with  
degraded forests**



# Sustainable and unsustainable VC: Entry points for public management

**Unsustainable production  
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**Sustainable production in  
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## Findings & recommendations

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**Wood energy** is and will remain essential for SSA energy needs and **should not be politically neglected**

**Previous attempts** to regulate the sector **focussed too closely on individual mechanisms** such as (1) regulation and prohibition, (2) technological fixes, or (3) attempts to leapfrog wood energy

**Future approaches need to combine national policies and regulatory rules** in the areas of forestry, energy, agriculture and land-use planning **with location-specific incentives**

Technological fixes are important but **governance and economic dis/incentives are key**

**Future approaches need to target the multi-level nature of the wood energy sector** (e.g. combined efficient stoves, efficient kilns & tree planting campaigns)

Questions ?

Remarks ?

Additional information ?

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