

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

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Background

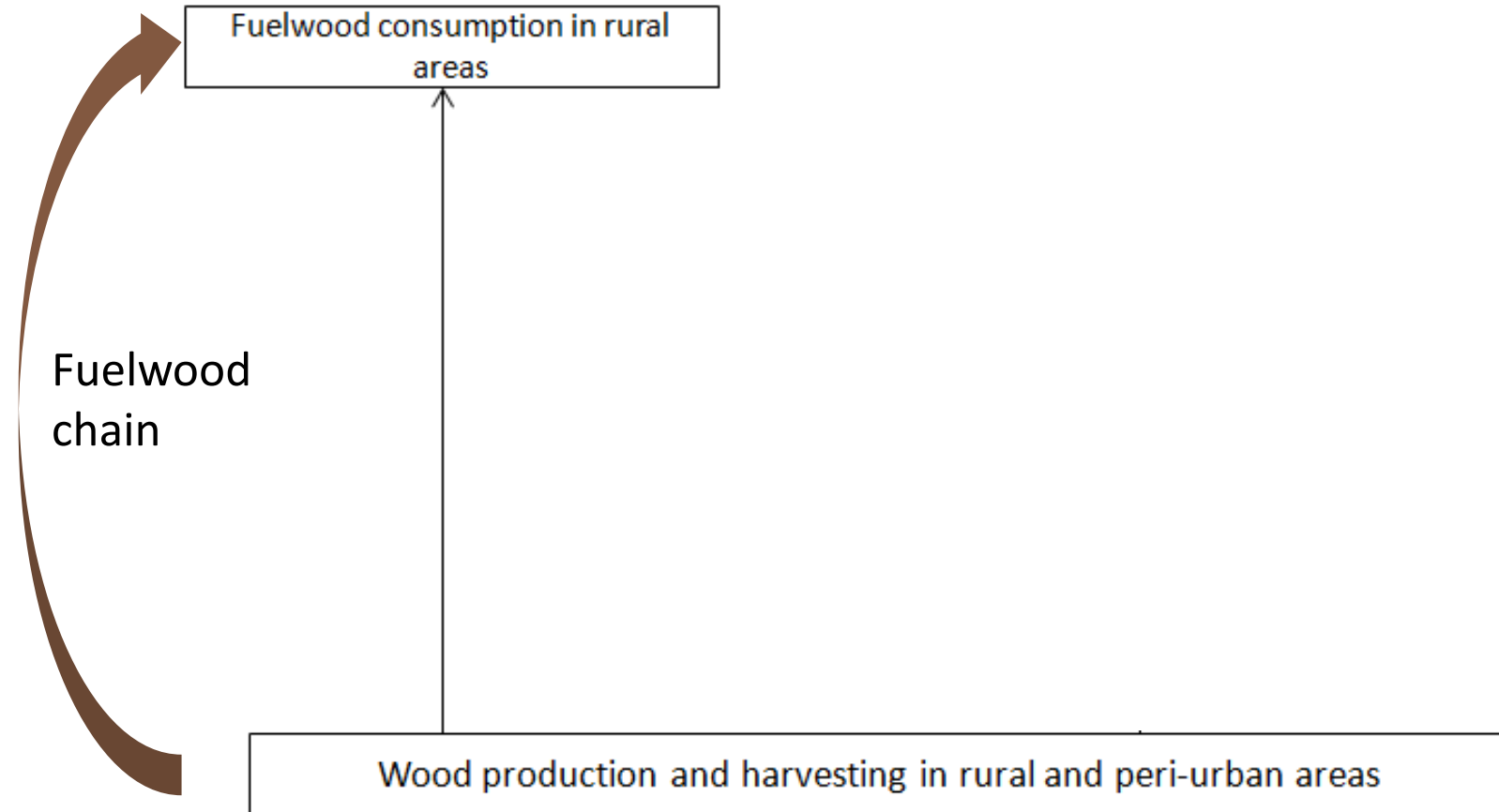
Woodfuel supply in SSA of substantial importance but provision/production highly unsustainable

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

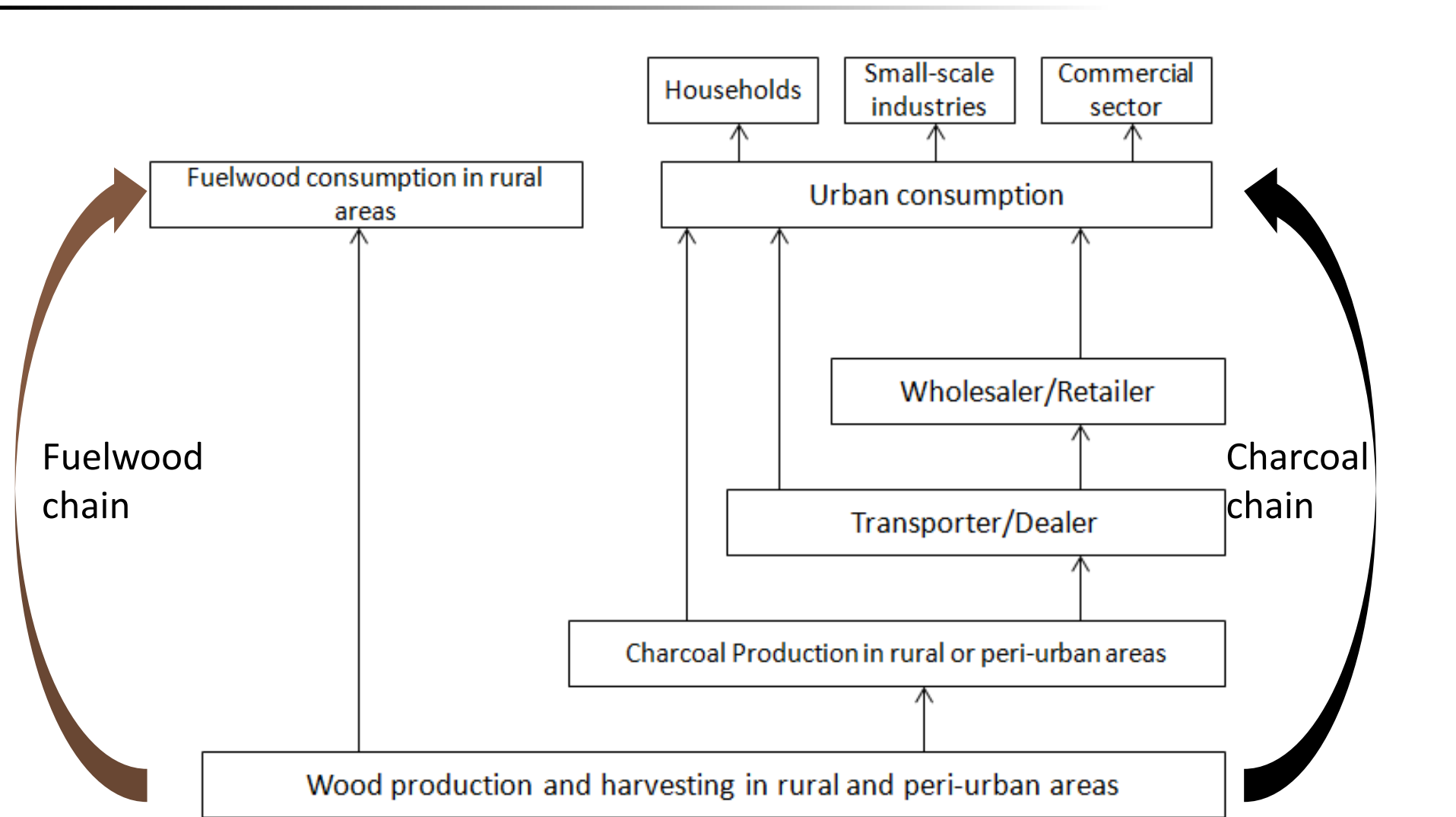
Political reactions in the past:

- 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)

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*“[#] 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

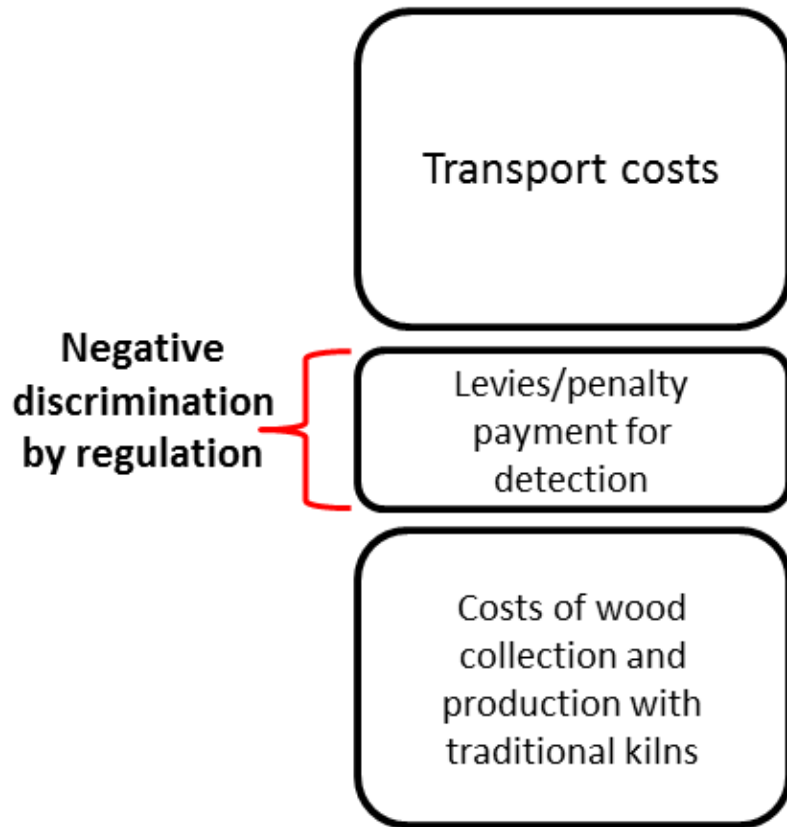
Charcoal → traditional charcoal stoves / improved charcoal stoves

[#] *van der Plas R.J. & Abdel-Hamid, MA (2005)*

^{*} *Sander et al. (2013)*

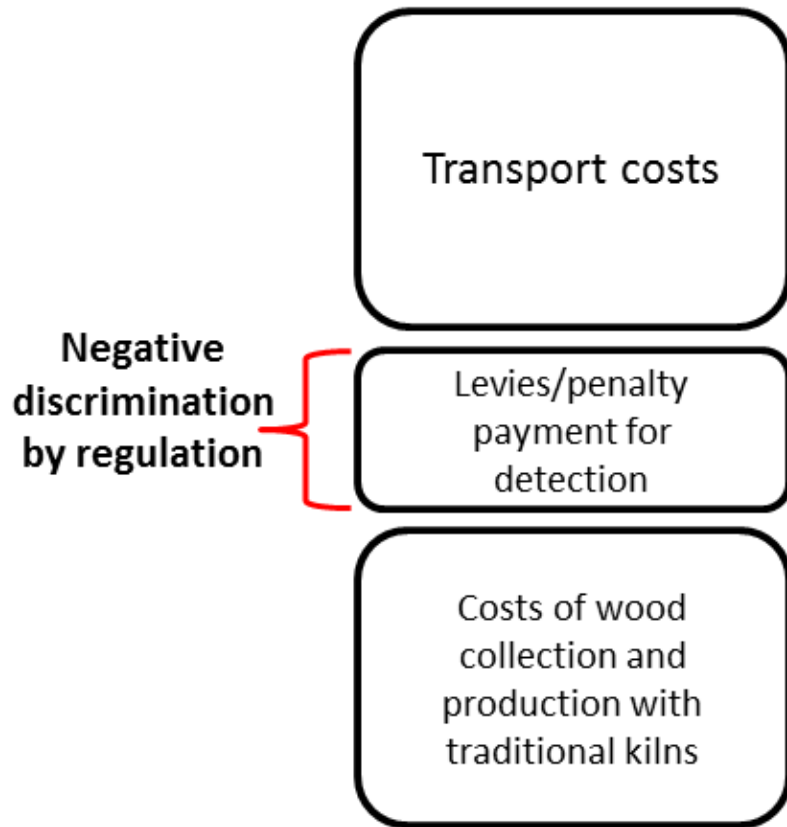
Sustainable and unsustainable VC: Entry points for public management

Unsustainable production
in (remote) areas with
sufficient wood reserves

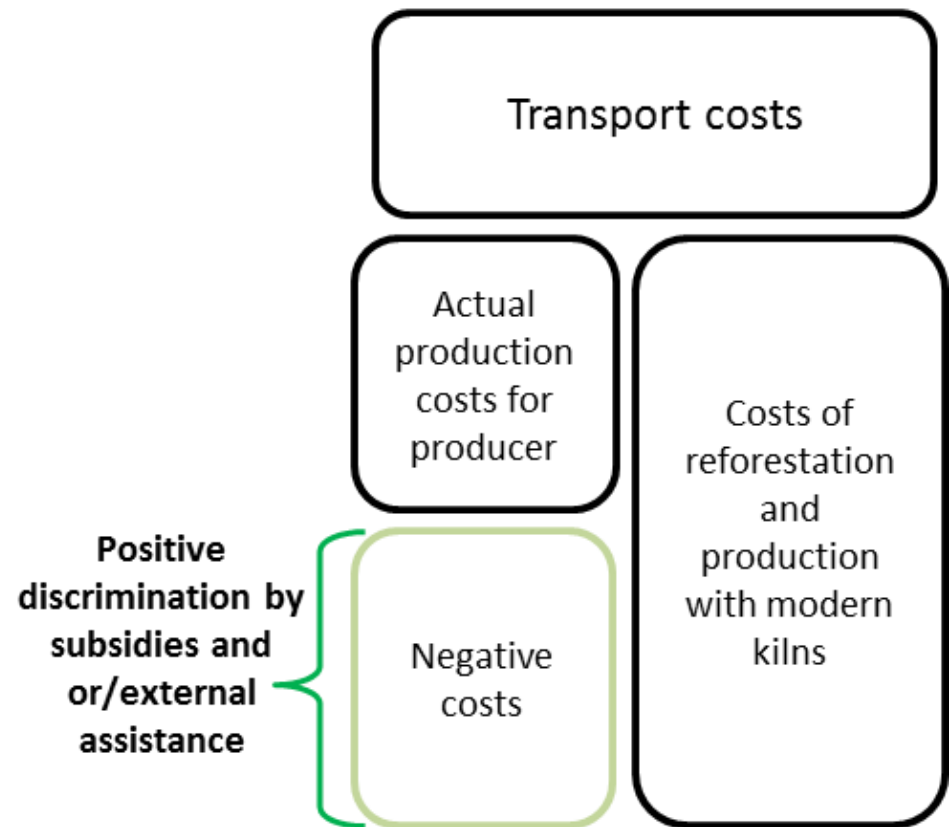


Sustainable and unsustainable VC: Entry points for public management

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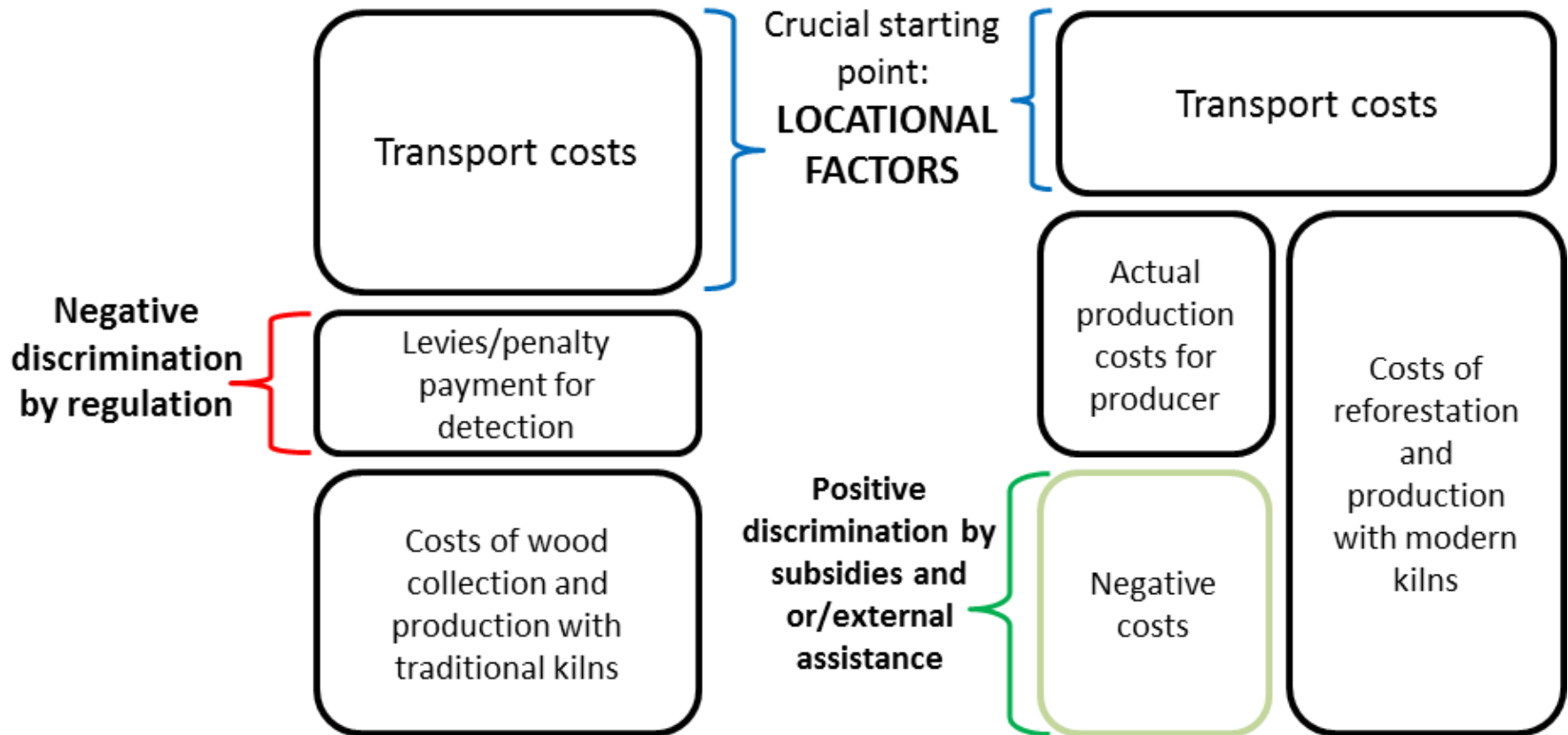
**Sustainable production in
(peri-urban) areas with
degraded forests**



Sustainable and unsustainable VC: Entry points for public management

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

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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