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“SHAPING CHARCOAL POLICIES: CONTEXT, PROCESS AND INSTRUMENTS AS EXEMPLIFIED BY COUNTRY CASES”

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ON BEHALF OF

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On behalf of

Federal Ministry
for Economic Cooperation
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Why shaping charcoal policies ?

- Wood-based fuels provide more than 70 % of the total energy consumption in Sub-Saharan Africa.
- The oil price boosted due to rising demand (India, China) and exceeded the symbolic 100\$/barrel threshold
- Agro-fuel policies are reconsidered after having been identified as one of the driving factors behind agricultural commodity prices and food shortages world-wide
- Climate change calls for environment friendly renewable energy resources



Forest energy will for several decades remain an important pillar in the energy mix of African countries struggling to meet an ever growing demand.

World Energy Outlook 2006

(Mtoe)	2004	2015	2030
Sub-Saharan Africa	575	627	720
Mozambique	4	5	5
India	740	777	782
China	480	453	394
Indonesia	156	171	180
Rest of Asia	489	521	561
Brazil	23	26	27
Rest of Latin America	60	60	58
Total	2 528	2 640	2 727

+25 %

Current barriers to sustainable charcoal supply

1. Governments ignore charcoal as main source of energy and leave it to the informal sector
2. Weak policy coherence
3. Lack of baseline information for policy formulation
4. Limited will/ governance capacity to reorganize the charcoal production sector
5. Charcoal an underpriced energy resource



Governments ignore charcoal as main source of energy and leave it to the informal sector

- So called “traditional energies” are deliberately shunned and left to the informal sector,
- National Energy Policies often call for replacing the “traditional fuels” with “modern fuels” in the near future (e.g. Chad, Uganda, Sierra Leone)

Uganda: Main foci of the National Energy Plan

1. Increase power generation
2. Diversify power generation sources to ensure security of supply
3. Increase access to modern energy in rural areas
4. Increase operational efficiency in the utility companies and connect more customers to the grid
5. Determine the petroleum potential of the country
6. Create a competitive petroleum supply market in the country
7. Promote the use of renewable energy and energy efficient technologies (geothermal, solar, wind, mini and micro hydro, etc)
8. Manage energy related environment impact
9. Improving energy governance and administration

This attitude should be thoroughly revised, and policy support provided for the development of advanced, decentralised/community-based, integrated rural energy industries.

The decade-long disregard for wood-based fuels is gradually openly recognised and encouraging framework conditions are created (Sudan, Kenya, Ghana, Mali)

Weak policy coherence

- In many countries the supply and demand side of energy is handled by different ministries (e.g. Angola, Senegal, Madagascar) hence authority and jurisdiction lack clarity.
- **For example:** Charcoal making was for a long time illegal/banned (Kenya, Ethiopia, Uganda, Chad and Niger) whereas charcoal selling remained a legitimate business and the dissemination of improved charcoal stoves was even favoured.

Fostering policy coherence requires a national energy policy and a strategy combining “upstream” and “downstream” in an integrated manner, with clearly assigned roles and responsibilities

The Government of Mali decided in 2003 to create a rural energy services agency (AMADER) with the mandate to promote household energy nation-wide. The main responsibilities comprise: (i) to expand rural markets for wood-based fuels; (ii) to improve the regulatory and fiscal framework as well as enforcement; (iii) to encourage the manufacture, promotion, and use of improved stoves; (iv) to encourage fuel substitution where appropriate; (v) to consolidate planning, monitoring, and evaluation tools in the sector.

Lack of baseline information for policy formulation

- 30 years ago simple demand-supply scenarios forecasted near-complete deforestation for many Sahelian countries within 20 years .
- In reality, natural woody vegetation in the Sahel proved to be much more resilient than expected.
- Wood-fuel problems are increasingly regarded as being rooted in more systemic, locally site-specific - deficits in land tenure, fiscal and incentive policies, urban energy markets, and misallocation of forests and crop-land

Shaping charcoal policies presupposes reliable baseline information as a precondition for rational decisions

- All problems arise along the charcoal production chain, therefore, precise data on the **charcoal value chain** provide an excellent entry-point for shaping sound policy frameworks
- Examples of study projects, geared towards a comprehensive assessment and analysis of the charcoal production chain, include:
 - (i) The supra-regional Chaposa project investigating the charcoal potential for Southern Africa;
 - (ii) the National Charcoal Survey in Kenya,
 - (iii) the WRI/CIRAD research project in Senegal ,
 - and (iv) the study initiated by the Forest Governance Learning Group (FGLG) for Malawi.

Limited will/ governance capacity to reorganize the charcoal production sector

- In most African countries the forest-sector's contribution to the national economy is marginal (2 to 4%),
- Woodfuels are predominantly informal and thus escape official statistics (e.g. Uganda: formal sector 11% against 89 % in the informal sector)
- Consequently, forest governance receives little attention and meagre budgetary allocations and thus local branches of the forest service display low human, technical, and enforcement capacities
- These institutional weaknesses lower the morale of local staff, and invite corruption.

Improve governance capacity to reorganize the charcoal production sector

Sudan in particular is praised for having created encouraging framework conditions:

- Charcoal is recognized as a key source of energy.
- There is a specific institution, a government para-statal, to implement wood energy policies.
- Resources are allocated on a yearly basis for plantation establishment.
- There is strong public and private sector participation.
- Charcoal is a formal and lucrative industry.
- There are clear marketing arrangements and rules.
- Traders are organized into a formal association recognized by the government.
- The government raises royalties and taxes, which are reinvested in establishing plantations.
- Production of charcoal from plantations and natural woodlands is well planned.

Charcoal -an underpriced energy resource-

- Despite growing scarcity of wood, charcoal generally remains underpriced by more than 20 to 50%, relative to its economic cost (no production costs reflected in the market price).
- Undervaluation translates into wasteful and inefficient production and consumption and creates a formidable disincentive for forest management and tree growing.

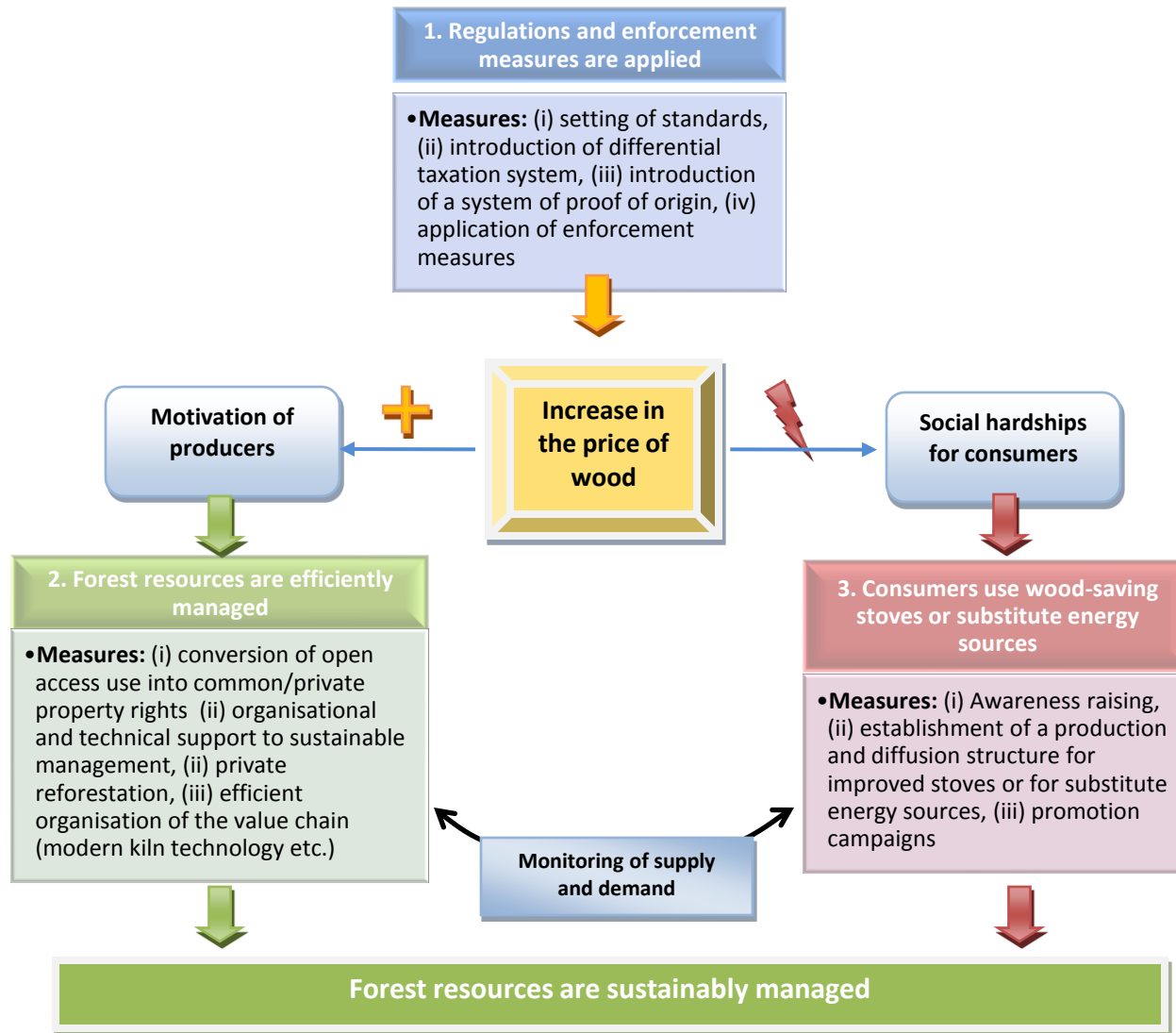
Examples:

- Investment costs for improved kilns (metal chimneys etc.) do not pay off as long as wood remains a free resource
- Significant subsidies (e.g. Madagascar: 200 to 300 €/ha) are necessary to provide enough incentive for reforestation schemes
- Substitute fuels such as kerosene must be highly subsidized to be competitive, (e.g. Senegal, Chad).

Cutting the Gordian knot of underpriced wood-fuel resources calls for a mutually synergetic three pronged policy approach:

1. Adequate use regulation & enforcement
2. Strategic shift from open-access forests towards secure tenure & sustainable forest management
3. Introduction of improved combustion technology

Charcoal -an underpriced energy resource- (2)



Conclusions

- Charcoal problems and related response strategies are, highly specific to framework conditions on national, regional and local levels.
- This precludes “blueprints” and panacea, and calls for careful adaptation to the prevailing circumstances on the ground.
- “Shaping charcoal policies” should advocate a combination of clear rules, transparent enforcement, strong incentives and awareness-creation/capacity development
- Woodfuel should be recognised as a “modern energy” source with a high development potential
- Comparative advantages of locally produced/managed energy sources must be fully exploited, so as to assign wood-fuel production a pace-maker role for **regional economic growth and ecological sustainability**.

Thank you for your attention



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HERA – Household
Energy Programme

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