



**Expert Exchange Workshop on the Promotion of Sustainable Wood
Energy Value Chains in Development Cooperation**

1-2 March 2016 – KfW, Frankfurt

**MESSAGES FROM THE INTERNATIONAL WORKSHOP ON
SUSTAINABLE TREE-BASED BIOENERGY IN SSA IN NAIROBI
AND THE IASS-ICRAF CONFERENCE ON BIOENERGY AND
DEVELOPMENT IN BERLIN**

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Sustainable Tree-based Bioenergy in Sub-Saharan Africa Workshop

26-28 May 2015, ICRAF, Nairobi



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Policy brief

Developing sustainable tree-based bioenergy systems in sub-Saharan Africa



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A major recommendation of the workshop is to *recognize that improving the cooking of food using wood-based fuels in Africa requires an in-depth understanding of the full cooking system (from production to end-use), and investments in improvement should be based on that principle.*



Developing sustainable
tree-based bioenergy systems
in sub-Saharan Africa



From transition fuel to viable energy source:
improving sustainability in the sub-Saharan charcoal sector

Henry Neufeldt, Kate Langford, Jessica Fuller, Miyuki Iiyama, Philip Dobie

Overall Workshop Conclusions

Tree-based bioenergy systems, ranging from firewood and charcoal to liquid biofuels and power generation:

- offer great opportunities for sustainable green growth pathways in sub-Saharan Africa,
- with sustainable forest management and forest and landscape restoration.
- What is needed to effectively promote them is a shift in perception to rehabilitate their negative image,
- a holistic approach that considers the full production to end-user cycle,
- collaboration of relevant stakeholders to overcome investment barriers and
- political coordination at subnational, national and regional levels.

Workshop recommendations

A fundamental challenge for biomass cooking systems is to **rehabilitate the reputation of firewood and charcoal** as appropriate fuels for Africa at this time. This should be done by:

- Developing **advocacy tools and publicity materials** that accurately portray the role of firewood and charcoal in Africa today
- Presenting available knowledge evidence to **show that poor people should not be blamed for deforestation** when they collect firewood,
- and that **charcoal can be produced, sold and used sustainably**
- Providing **objective comparisons of advantages and disadvantages of different energy systems** in national and regional contexts

Workshop recommendations

Much of the existing evidence has not been collated and there has been a **lack of evidence-based decision-making relating to tree-based bioenergy**. Further research is needed along with the **development of better decision tools**. This should be done in specific countries by:

- Reviewing the knowledge of fuel wood production chains and charcoal value chains and assessing the current status of availability of firewood
- Developing plans to increase supply where it is lacking
- Carrying out research to better understand the dynamics of wood extraction, processing, trade and use
- Providing improved data to advise policy and business decision-making

Workshop recommendations

There is a **challenge to include firewood and charcoal into national energy policy** processes. This should be addressed by:

- Carrying out policy research and prepare knowledge-based materials to ensure that policies can be improved and harmonized
- Integrating firewood and charcoal into national energy policy processes and land-use planning processes to develop appropriate policies and legislation at national and local (landscape) levels
- Promoting charcoal to policy-makers as a multi-million dollar business that countries and districts can derive income from

Workshop recommendations

There is a need to **improve technology throughout the cooking system**. This should be done in a manner that **fully respects social issues** by:

- Developing participatory national and local plans to ensure a sustainable supply of wood through agroforestry, woodlots or natural regeneration
- Ensuring that the most suitable tree species are made available based on knowledge of their physical properties, lack of toxicity and local preferences
- Establishing systems to grow and disseminate excellent planting materials
- Improving charcoal production methods and ensuring the improvements are equitable
- Introducing enhanced cooking techniques, including clean cook stoves, in a manner that integrates their use into a full cooking system including fuel quality, kitchen management and cooking space ventilation

Workshop recommendations

There is a need for **incentives to reform the use of firewood and charcoal**. This should include:

- Applying participatory processes throughout the cooking systems development process to identify challenges and solutions
- Reviewing energy taxation policies to ensure that woody biomass is not unfairly treated
- Encouraging the involvement of the private sector by removing obstacles to their participation (e.g. the distortions of current charcoal value chains)



Statement of the Co-Chairs

Conference on Bioenergy and Development The Investment Case for Sustainable Production Systems

19 – 20 October 2015, Berlin, Germany

Supported by:



Strategic Partners:



Conference on bioenergy and development

- Conference took place just after endorsement of SDGs and just ahead of COP21
- Brought together a high-level group of experts, including representatives from governments, research, civil society and the private sector
- Discussed the role of bioenergy in the energy mix to satisfy energy demand, contribute to decarbonizing the global economy and contributing to sustainable development
- Under the right conditions various forms of bioenergy have the potential to contribute to the energy mix required to achieving sustainable development and overcoming poverty, especially in rural areas.
- Experience has shown that there are critical factors for the sustainable development of bioenergy, which need to be considered.

Critical Success Factors for Sustainable Bioenergy

- SDGs provide direction for the global development agenda until 2030
- Sustainable energy, including bioenergy, can contribute to the achievement of SDG 7 (affordable and clean energy) and several other SDGs
- Governments need to ensure that sustainable energy policies are aligned with the SDGs for bioenergy to unfold its full potential
- Inclusive and effective participatory approaches are key to achieving the goal
- There are promising pathways and technologies to develop bioenergy, which depend on national and local contexts that need to be taken into account to identify optimal bioenergy solutions

Critical Success Factors for Sustainable Bioenergy

- It is important to manage the trade-offs that may occur when developing bioenergy. The following essential requirements for good governance need to be met:
 - Right to adequate food
 - Responsible land governance as described by the ‘Voluntary Guidelines on the Responsible Governance of Tenure of Land, Forest, Fisheries’ in the context of national food security
 - Explicit considerations of the impact on all SDGs and on ecosystems and their functions
- Bioenergy policies must be integrated into national sustainable development policies while considering their cumulative impacts on all sectors

Critical Success Factors for Sustainable Bioenergy

- Opportunities for scaling up sustainable bioenergy should be taken to contribute to the global fight against climate change
- Effective monitoring, research and information sharing are needed to support sustainable bioenergy policies
- Bioenergy use should contribute to improved livelihoods and increased incomes and support the eradication of poverty, especially for vulnerable groups facing the twin challenges of energy insecurity and poverty
- Bioenergy use should contribute to national energy security and development



Thanks for a future