

3rd International conference on neglected and underutilized species (NUS): for a food-secure Africa



Bamboo Based Sustainable Livelihood and Economic Development in Sub-Sahara Africa: A Policy Perspective on Research and Development

Accra-Ghana, 25th September 2013

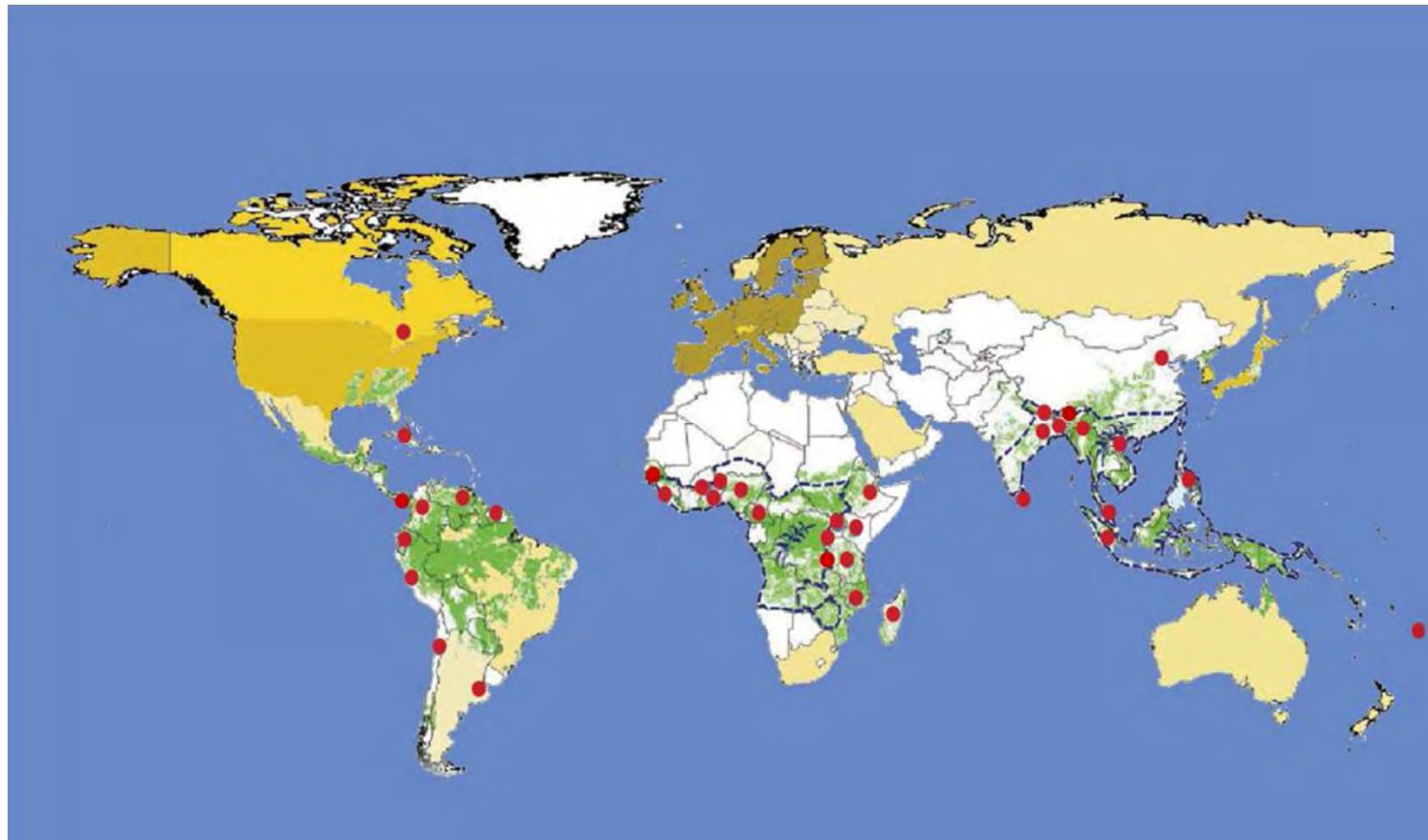


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The International Network for Bamboo and Rattan



Bamboo in the world & INBAR member countries



International Network for Bamboo and Rattan

- Global inter-governmental organization
- HQ in China, Regional offices in IN, GH, ET, EC
- Mission: Mobilize B&R for sustainable development
- Modus operandi:
 - networking
 - action research
 - south-south & triangular cooperation
- Member AIRCA (www.airca.org)
=> *In Partnership for Inclusive and Green Development*





- Association of International Research and Development Centers for Agriculture (AIRCA)

Membership		Objectives
AVRDC	The world Vegetable Center	<ul style="list-style-type: none">• Promote bamboo climate- smart landscape, change adaptation and sustainable development using Bamboo• Preserving ecosystem services (planting bamboo on degraded lands to prevent erosion, restore fertility and raise water tables)
CABI	CAB International	
CATIE	Tropical Agricultural Research and Higher Education Center	
CFF	Crop for the Future	
ICBA	International Center for Biosaline Agriculture	
ICIMOD	International Centre for Integrated Mountain Development	
ICIPE	Africa Insect Science for Food and Health	
IFDC	International Fertilizer Development Centre	
INBAR	International Network for Bamboo and Rattan	

Deforestation and food security

- Firewood & charcoal are the base of household energy for 70% of Africa
- A Wood fuel consumption and agricultural land conversion are the primary and main causes of deforestation



[FAO 2003]	% forest	% loss/y
Ethiopia	4	0.8
Ghana	28	1.7
Mozambique	39	0.2
Tanzania	44	0.2

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A MAD Challenge and Food –Secure Africa



- Coping with Climate

Change:

- **Mitigation**
 - **Adaptation**
 - **Development**
-
- aka a pro-poor, green economy





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Bamboo is common in Africa



Key Benefits of Bamboo

- Bamboo possibly accounts for one-quarter of the biomass in tropical regions and one-fifth in sub-tropical regions.
- Bamboo is known to play a major role in controlling soil erosion, watershed protection and water capture, rehabilitation of degraded lands, protection of river banks, and carbon sequestration
- It is important to understand that the very use of bamboo almost automatically results in poverty alleviation
- Bamboo agro-forestry

Bamboo biomass energy and food security



- Help ensure food security in a changing climate
- Help reduce destruction of the forest for wood charcoal
- Provides opportunity for a green development
- Protecting soil against erosion, watersheds and natural disaster



Research and Development

Project	Objectives
<p>Bamboo as sustainable biomass Energy: A suitable alternative for firewood and Charcoal Production in Africa (EU/INBAR funded Project)</p>	<ul style="list-style-type: none">•to develop the bamboo resource base in Ethiopia and Ghana so that an appropriate varieties are available for long-term firewood and charcoal use
	<ul style="list-style-type: none">• to develop a small-scale private bamboo firewood and charcoal sector to ensure appropriate supply for target populations
	<ul style="list-style-type: none">•to put into place the institutional support needed for bamboo to be widely adopted as each country's primary source of energy for the poor, through development of appropriate policies, capacity building and awareness raising



Project outcome

- 600 hectares of new bamboo planted in Ghana and Ethiopia to diversified her bamboo resource base as sustainable raw material for charcoal production
- 4000 Individuals trained and introduced to improved carbonization kilns leading to a reduced bad traditional wood charcoal production practices
- Recommended policy to support the use of bamboo as suitable raw material for charcoal production



Key issues



- Bamboo charcoal help take pressure off other forest resources, deforestation and ensure food security
- Health of women and children
- Bamboo cultivation to help restore degraded ecosystem

Gov't/Institutional roles

Institution	Responsibilities
Ministry of Finance and Economic Planning	<ul style="list-style-type: none"> • Providing financial support for the development of the bamboo sector as a means of increasing and diversify national revenue
Ministry of Land and Natural Resources/BARADEP	<ul style="list-style-type: none"> • Initiating policy formulation and reforms for bamboo • Propagation of high planting materials (nurseries) • Establishment of bamboo demonstration stands • Allocation of degraded land to individuals and corporate for bamboo cultivation/plantation establishments
Ministry of Environment , Science Technology and Innovation	<ul style="list-style-type: none"> • Promotion and development of bamboo trade • Facilitating Technology transfer and ensuring maintenance of quality control • Facilitating access to credit by groups/individuals engaged in processing bamboo /rattan and exports of bamboo products
Ministry of food and Agriculture	<ul style="list-style-type: none"> • Promotion of bamboo as cash crops • Promotion of bamboo shoots as vegetables • Promotion of bamboo in Agro-forestry systems

Policy Intervention

Government

Policy recommendation

- Governments mainstream the bamboo biomass into the relevant policy framework, without which it cannot be adopted on a countrywide scale within the existing energy, forestry and environmental programmes
- Review the inclusion of bamboo forest in forest policies and re-categorise where necessary to maximum the use of bamboo instead of wood.
- Formulate programmes specifically for bamboo research and development as food security
- Establish bamboo National Development Strategy task to identify short to long term objective and related policies for bamboo development

Thank you for your attention

