

Briefing to INBAR Member States - December 16, 2015  
Summary of results of Paris Agreement on climate change related to bamboo and rattan

## Bamboo and Rattan for Climate Change

What does the Paris Agreement mean for bamboo and Rattan producing countries?

### Opportunities in the Paris Agreement for investments in bamboo and rattan

The governments of 196 countries have signed the [Paris Climate Change Agreement](#) last week. This is a commitment between all signatory countries to progress on the path to sustainable development, to reduce greenhouse gases, limit temperature rises to 2.C (1.5C if possible) of pre-industrial levels, aiming for a zero-carbon future. The Paris Agreement is the first intergovernmental climate accord, where developed and developing countries agree on a common agenda to address the planet's climate change challenges.

While the Agreement does not refer to specific resources, types of interventions and actions, it indicates where bamboo and rattan can support countries' climate change action plans. These areas are: sustainable forest management, protecting and increasing forest resources as carbon sinks; and access to renewable energy – especially in Africa. And, as country climate change plans are refined, investments for bamboo and rattan development can be targeted for: zero-carbon construction materials; rapid landscape restoration with bamboo; livelihoods improvement, including job and enterprise creation, and the use of bamboo and rattan materials to replace wood, plastics and metals.

### Next steps for countries – including bamboo and rattan in national climate change plans

Nationally Determined Contributions (country action plans, or NDCs) are the basis of countries' investments in climate change action. Officials and professionals responsible for bamboo and rattan development can be involved in their national processes to identify opportunities to include these plants as solutions to climate change mitigation, adaptation, technology transfer or capacity building.

#### Timeline for national climate change plans – 2016-2020.

- **Ratification.** Countries need to ratify the Paris Agreement in their national parliaments.
- **Country plans.** NDCs need to be communicated before ratification. The plans need to be communicated 9-12 months before each COP meeting (COP22 is next, in November, 2016).
- **2018 Dialogue.** A dialogue in 2018 is an overview of country progress to reduce greenhouse gas emissions. This will inform the preparation of country action plans.
- **2020 Deadline for country plans.** NDCs need to be communicated by 2020 – and every five years after. The first NDC needs to have a timeframe up to 2025.

## Paris Agreement: entry points for bamboo and rattan investment

The Paris Agreement sets out 29 Articles that cover: climate change mitigation, adaptation, finance, loss and damage, technology development and transfer, capacity building, transparency of action and support, stock-taking, and facilitating implementation and compliance. Insight on potential entry points for investment in developing bamboo and rattan<sup>1</sup> are summarised below:

### Climate change mitigation – Article 5 (specific reference to forests)

*“Parties should take action to conserve and enhance....sinks and reservoirs of greenhouse gases....as referred to in Article 4, paragraph 1(d), of the Convention, including forests.”*

Efforts are needed to reduce or prevent emission of greenhouse gases, including new technologies, renewable energies, making older equipment energy efficient, and changing management practices or consumer behavior. **Examples:** Societies can respond to climate change by reducing greenhouse gas emissions and enhancing sinks and reservoirs, sustainable forest management; enhancing forest carbon stocks; and increasing renewable energy.

<sup>1</sup> **NOTE:** For detailed examples and cases where bamboo and rattan benefits can make a positive contributions to climate change action, please see detailed comments in INBAR Position Papers [1](#) and [2](#).

#### Entry points for bamboo and rattan:

- Bamboo & rattan as sustainable replacements for higher carbon emission materials
- Bamboo as carbon sinks
- Bamboo-based renewable energy
- Bamboo & Rattan for forest expansion, management and land restoration

### Climate change adaptation – Article 7

*“Parties ....establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal....”*

Adaptation requires adjustments in ecological, social, or economic systems to respond to actual or expected climatic situations and their effects. This includes changes in processes, practices, and structures to moderate potential damages or benefit from opportunities linked to climate change.

**Examples:** Rural communities across the Global South can face changing and unpredictable weather patterns using ‘climate-smart’ strategies to preserve ecosystems, build resilience and share expertise on new approaches.

#### Entry points for bamboo and rattan:

- Climate-smart agriculture – innovative uses of bamboo & rattan
- Disaster Resilience – bamboo housing and structures
- Sustainable livelihoods – bamboo has 10,000 documented uses for products that create jobs (from community enterprises to industrial production) and can replace wood, plastics and metals.
- Bamboo-based renewable energy

### Technology Development and Transfer – Article 10

*“Parties share a long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce greenhouse gas emissions.”*

Developing and transferring environmentally sound technologies is critical for developing countries to achieve sustainable development. The Agreement encourages countries to promote, facilitate, finance, transfer and provide access to environment-friendly technologies and know-how, particularly to developing countries.

**Examples:** Green power and transport; adaptation by farmers, such as new crop varieties, use of models and planning tools, and site, land or resource management techniques; low-carbon/water-saving production systems.

#### Entry points for bamboo and rattan:

- Several countries, such as China, have a wealth of expertise in bamboo environmental, market and technology development. Indonesia is a leader in rattan development.
- [A new south-south-north partnership](#) transfers bamboo development and business know-how to Ethiopia, Kenya and Uganda from China and The Netherlands. This model is an effective approach to transfer know-how on bamboo and rattan development for climate change many countries can apply.
- [GABAR-The Global Assessment of Bamboo and Rattan](#), facilitated by INBAR, provides access to global know-how and information on bamboo and rattan development. Technologies and approaches in the future GABAR knowledge base will support climate change action. All countries are encouraged to participate.

### Capacity building; education training, public awareness – Article 11, Article 12.

*“....enhance the capacity and ability of developing country Parties.... such as the least developed countries, and those that are particularly vulnerable to the adverse effects of climate change....to take effective climate change action, including....to implement adaptation and mitigation actions, ...facilitate technology development, dissemination ...access to climate finance..... education, training and public awareness....”(Art.11)*

*“Parties shall cooperate .....to enhance climate change education, training, public awareness, public participation and public access to information....”(Art.12)*

#### Entry points for bamboo and rattan:

- The increased urgency and investment in the global climate change agenda open many opportunities to bamboo and rattan resource countries for partnership and financing, national capacity building and know-how transfer programmes.
- INBAR and its Chinese partner, the International Center for Bamboo and Rattan, lead capacity building on bamboo and rattan development and the sharing of expertise, on forest management, technology development and business approaches, to partner countries across Asia and South Asia, Africa and in Latin America.