

BRU

Bamboo & Rattan Update

Special Volume



国际竹藤组织成立25周年
INBAR 25th Anniversary



Global Bamboo and Rattan Congress
世界竹藤大会

Sharing the latest news and activities from the bamboo and rattan sector



BARC IN BEIJING: REFLECTIONS ON 25 YEARS

WORLD LEADERS SPEAK ON THE GREEN TRANSITION

Heads of state exhort the globe to harness the potential of bamboo and rattan.

4

BAMBOO TO REPLACE PLASTICS

Visionary initiative seeks to remediate plastic pollution and mitigate climate change.

7

INBAR CELEBRATES TURNING 25

New publication highlights INBAR's accomplishments over the years.

26

Bamboo and Rattan Update

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Cover Image

From left to right: Guan Zhi'ou, Administrator of the National Forestry and Grassland Administration of China; Cao Jianming, Vice-Chairperson of the Standing Committee of the National People's Congress of China; and Jiang Zehui, Co-Chair of INBAR Board of Trustees and academician of the International Academy of Wood Sciences launched the Bamboo as a Substitute for Plastic Initiative at BARC 2022.

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About BRU

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About INBAR

INBAR is an intergovernmental organization which promotes the use of bamboo and rattan for sustainable development.

www.inbar.int

INBAR Headquarters: Beijing, China

Regional Offices: Central Africa, East Africa, West Africa, Latin America and the Caribbean, South Asia.

BRU

EDITORIAL

2022 was a banner year for bamboo and rattan. On 7 November 2022, the 25th anniversary of INBAR and the Second Global Bamboo and Rattan Congress (BARC 2022) convened in Beijing, elevating bamboo and rattan to the global stage. This special issue of BRU commemorates the event, highlighting major moments from the Congress while summarizing the main outputs.

At the Opening Ceremony of BARC 2022, messages from heads of state were read and broadcast before a live audience. Chinese President Xi Jinping sent a Congratulatory Letter, which was read out by Cao Jianming, Vice-Chairperson of the Standing Committee of the National People's Congress of China. In addition, Congratulatory Video Messages were sent in from President Paul Biya of Cameroon, President Guillermo Lasso of Ecuador and President Sahle-Work Zewde of Ethiopia. In all of their messages, they spoke on their countries' positive experiences as INBAR Member States and the important role of bamboo and rattan as vital forest resources.

Messages from world leaders reaffirm the position of bamboo and rattan in sustainable development planning and are an unmistakable message of support for INBAR's endeavors over the years. Public statements from heads of state are also critical for rallying public support for the green transition of our world. They aim to mobilize stakeholders into action, pointing the way forward for different sectors. In this, they are visionaries whose words can nudge national economies, consumer habits, regulatory oversight practices, trade patterns, and more into a greener direction. Without support from the upper echelons of government, such efforts will founder – systemic transformation must flow from political will and leadership.

Other luminaries sent in video remarks at the Opening Ceremony. Li Junhua, UN Under-Secretary-General for Economic and Social Affairs (UN DESA) spoke on the socio-economic and environmental benefits of bamboo and rattan. Qu Dongyu, Director General of the Food and Agriculture Organization (FAO), praised the collaboration between INBAR and FAO to conduct national, regional and global assessments of forest resources. Gerd Müller, Director General of the UN Industrial Development Organization (UNIDO), noted the promising role of bamboo to replace emissions-intensive construction materials. Finally, Alvaro Lario, President of the International Fund for Agricultural Development (IFAD), touted the livelihood improvements to women and young people as a result of funding INBAR projects around the world.

These leaders in the intergovernmental space represent the adhesive glue connecting nations and actors around the world engaged in the global project of the green transition. Their words inspire citizen action, championing local communities, and connect networks and partnerships with on-the-ground practitioners who are most vulnerable to the effects of climate

change. INBAR works with these key allies on the frontlines of climate change and other challenges.

Later in the opening ceremony, the Bamboo as a Substitute for Plastic Initiative was officially co-launched by the Government of China and INBAR. This Initiative will act as a roadmap for radically scaling up the use of bamboo to replace plastics, with the aim of making a serious dent in climate change, reducing plastic waste and contributing to carbon neutrality. An Ambassadors' Dialogue followed next, in which representatives from Cameroon, Ecuador, Ethiopia, Panama and FAO took the stage for an enlightening conversation on how to best implement the Bamboo as a Substitute for Plastic Initiative as well as mainstream bamboo into development strategies and plans.

Keynote speeches capped off the day's agenda, where the Co-Chair of INBAR Professor Jiang Zehui, FAO Senior Forestry Officer Christophe Besacier, former President of Beijing Forestry University Professor Yin Weilun, and Dr. Pablo van der Lugt of Delft University of Technology, gave comprehensive presentations on bamboo and rattan as overlooked but key forest resources for ushering in a shared future that is both cleaner and greener. The second day of BARC 2022 featured 35 parallel sessions held on topics like carbon neutrality, the green economy, innovative market development and partnerships. All of these moments and more are covered in the pages to come.

BARC 2022, coinciding with INBAR's 25th anniversary, was organized by the NFGA and INBAR under the theme "Bamboo and Rattan – Nature-based Solutions for Sustainable Development." Over 1000 participants from INBAR Member States, international organizations and non-governmental organizations as well as research institutes, universities and enterprises participated in the hybrid online-offline Congress.

Against the backdrop of climate change, an energy crisis and biodiversity extinction, the world needs to come together more than ever. Events like BARC 2022 represent ideal platforms for uniting humankind to rise and meet the matters of our time. And as we continue to unlock the potential of bamboo and rattan, these critical forest resources will be brought to bear in a variety of arenas, introducing countless knock-on benefits to communities around the world, and galvanizing countries in the fight for our planet.

INBAR's Regional Offices based in Cameroon, Ecuador, Ethiopia, Ghana and India also tuned in to BARC 2022. See how regional staff celebrated INBAR's 25th anniversary and Congress on the right.

THE EDITORS



Central Africa Regional Office.



East Africa Regional Office.



West Africa Regional Office.



Latin America & Caribbean Reg. Office.



South Asia Office.

LEADERS RE-AFFIRM THE VALUE OF BAMBOO AND RATTAN

The Second Global Bamboo and Rattan Congress featured an illustrious lineup of heads of state and agency leaders sending congratulatory well-wishes to INBAR on its 25th anniversary and reaffirmed the important role of bamboo and rattan for a greener and cleaner planet.

The following is a recap of their messages, presented as part of the Opening Ceremony of BARC 2022 on 7 November. These messages not only re-affirm INBAR's global mandate to help achieve the United Nations' Sustainable Development Goals using the nature-based solutions of bamboo and rattan, but also generate public and private support for fighting climate change, safeguarding the environment and championing the rural poor. Messages have been lightly edited for clarity and brevity.

President of the People's Republic of China

His Excellency Xi Jinping

On the 25th anniversary of the International Bamboo and Rattan Organization (INBAR) and the holding of the Second Global Bamboo and Rattan Congress (BARC 2022), I would like to extend my warm congratulations!

Bamboo and rattan are important renewable forest resources. Since its establishment, INBAR has been committed to the preservation, development and utilization of bamboo and rattan resources, thus playing a constructive role in promoting eco-environmental protection and sustainable development globally. The Chinese government and INBAR join hands to implement the Global Development Initiative and jointly launch the Bamboo as a Substitute for Plastic Initiative so as to reduce plastic pollution in all countries, address climate change, and accelerate the achievement of the United Nations' 2030 Agenda for Sustainable Development.

President of the Republic of Cameroon

His Excellency Paul Biya

A member of the organization since 2002, Cameroon has steadily strengthened its cooperation with INBAR. A Memorandum of Understanding on the sustainable development of bamboo and rattan in a modern, green economy was signed in 2013. Furthermore, my visit to INBAR's Headquarters in 2018 revealed the significant potential of bamboo and rattan that remains untapped in my country. Today, bamboo and rattan contribute to Cameroon's National Development Strategy (SDN30), notably through job creation and the fight against poverty.

Cameroon is proud to hold the Presidency of the INBAR Council for the period 2019-2022 and to host the organization's Regional Office for Central Africa since 2019. Our cooperation has enabled the establishment of the Common Production and Training Centre for the Central African Region in Yaoundé. Within this framework, nearly 12,000 young people have been trained in the processing of bamboo and rattan in close resonance with our import-substitution policy.

President of the Republic of Ecuador

His Excellency Guillermo Lasso

Ecuador has had the honor of being a member of INBAR since 1999 and of hosting its Latin America and the Caribbean Regional Office in Quito. This has allowed us to exercise active regional leadership and align ourselves with several of the 17 Sustainable Development Goals. Among them are the eradication of poverty, access to adequate housing and the restoration of terrestrial ecosystems.

In 2016, when our country was affected by an earthquake, we witnessed the amazing properties of bamboo as vegetable steel. On this basis, we have launched the Workshop School for Sustainable Construction with Bamboo, with



H.E. Sahle-Work Zewd, President of Ethiopia, spoke about the untapped potential of bamboo in her country.

support from INBAR and Spanish Cooperation. Similarly, together with the Government of China, one of our strategic allies, we seek to enhance cooperation across the bamboo chain, which we re-affirmed in Beijing a few months ago.

The Government of Ethiopia is grateful to the Government of the People’s Republic of China and its President for the opportunity given to Ethiopia to establish the China-Africa Bamboo Centre and remains committed to expedite the construction to make it functional as soon as possible.

President of the Federal Democratic Republic of Ethiopia

Her Excellency Sahle-Work Zewde

Ethiopia, with the largest bamboo resources in Africa, joined INBAR in 2002, with the aim of sharing experiences, best practices and capacity building in making use of its resources. Ethiopia has been fully participating in the activities of INBAR and will continue to play its part in strengthening and making the organization more efficient and effective. The fact that more and more countries are joining INBAR is a gratifying development.

Ethiopia has been the host country of INBAR’s East Africa Regional Office since 2009, and has worked with INBAR on a number of projects to stimulate the country’s bamboo sector since 2005. The country has large untapped bamboo resources and is also a hub for training and knowledge sharing about bamboo in the region.

Under-Secretary-General of the United Nations Department of Economic and Social Affairs (UN DESA)

Li Junhua

Bamboo and rattan offer many socio-economic and environmental benefits that can support poverty eradication and economic development, climate change mitigation and adaptation, and environmental protection.

Since its creation, INBAR has seen a steady increase in its membership and in its collaboration with UN entities, including with my department, UN DESA, as an observer to the work of the three Rio Conventions and the UN General Assembly, and an active contributor to the work of the United Nations Forum on Forests. We welcome INBAR’s efforts and collaboration to move forward the sustainable development agenda.

Director-General of the Food and Agriculture Organization of the United Nations (FAO)

Qu Dongyu

FAO has been a close partner of your organization since it was established, and our collaboration has grown consistently over the years. We have worked hand-in-hand on national, regional and global assessments of bamboo and rattan resources.

Together, we are working on joint programmes to address food security, livelihoods improvement, climate resilience, sustainable bioenergy, and ecosystem restoration. FAO is committed to continue supporting and promoting the sustainable management and use of bamboo and rattan. I wish you a successful Congress.

Director-General of the United Nations Industrial Development Organization (UNIDO)

Gerd Müller

We are facing tremendous global challenges. Using up our resources, too much greenhouse gas emissions, these are pushing the limits of our planet. One third of the global agricultural land is degraded; forest cover is shrinking. We need forests to stabilize soil and water. Without water, there is no food. We must act on this. Technology and innovation also includes nature-based solutions!

All who know can see that bamboo and rattan are fast growing and resilient. They provide forest cover, and they provide livelihoods. Products from bamboo reduce timber demand. They provide fiber and fuel. We can even replace emission intensive construction materials like steel and concrete with bamboo products.

UNIDO has supported INBAR since 1997 and after our new Relationship Agreement last year we are looking at more cooperation: Working together in circular economies, regenerative agriculture and industry clusters, South-South technology and knowledge transfer, and using our global networks to share best practices among industry, policy makers and investors.

UNIDO will continue supporting INBAR on using bamboo as a nature-based solution for sustainable development.

President of the International Fund for Agricultural Development (IFAD)

Alvaro Lario

Since the official launch of INBAR in 1997, IFAD has provided grants to support its activities. These have led to the creation of new enterprises and local cooperatives that generate income from bamboo. We have improved the livelihoods of millions of people – generating employment opportunities for women and young people, improving food security, and restoring degraded lands in countries such as India, Ethiopia and Ecuador.

 ***IFAD grants have led to the creation of new enterprises and local cooperatives that generate income from bamboo.***



Therefore, my commitment as President of IFAD is to continue to champion the cause of the marginalized through the creation of decent and rewarding jobs, place climate issues at the forefront of our work, strengthen private sector partnerships and remain laser-focused on our mission to transform rural economies. We look forward to further strengthening the partnership for rural transformation with INBAR using various means, including SSTC, to facilitate sharing and exchanging knowledge in Asia, Africa, and Latin America.

Ultimately, the fact that so many prominent leaders expressed well-wishes for BARC 2022 bodes well for humankind's green transition. Countries and organizations around the world are including sustainable planning into their corporate and governmental strategies with increasing frequency, whereas in the past this was seldom done. With high-level support like this, the future is truly green.

FEATURED ARTICLE

BAMBOO TO REPLACE PLASTICS

China and INBAR co-launch the Bamboo as a Substitute for Plastic Initiative.

Our time is no stranger to plastics. Ubiquitous in our lives with applications in packaging, construction, textiles and other consumer products, they deliver the goods and services that make our modern world tick.

However, by now, everyone is well aware of their drawbacks. Over the last fifty years, billions of tons of plastics have ended up in landfills or discarded in natural environments, wreaking havoc on terrestrial ecosystems and leaching chemicals into the soils on which we grow our crops. Plastic waste has also choked out ocean life, leading to sharp declines in marine biodiversity and severely damaging aquatic habitats. And produced mainly by fossil fuels, they have been catastrophic for accelerating climate change.

That's not all. As plastics break down, they form microplastics that contaminate the food we eat every day. Many researchers believe that microplastics irritate and disrupt normally functioning systems in our body. Moreover, plastics are often used alongside hazardous chemicals, like plasticizers, stabilizers and pigments. It is clear that urgent global action is needed, particularly given the transboundary nature of the problem across food chains, biodiversity protection and human health.

In 2022, INBAR made major strides to combat the scourge of plastic pollution. In June, China announced the Bamboo as a Substitute for Plastic Initiative set to co-launch with INBAR, seeking to radically scale up the use of bamboo to reduce plastic pollution and address climate change. In September, China launched the Global Action Plan as a clarion call to mobilize INBAR Member States and the international community. This momentum reached a crescendo at BARC 2022 in November, when China and INBAR formally launched the official Initiative.

In the Opening Ceremony, Jiang Zehui, Co-Chair of INBAR Board of Trustees, used her keynote address to introduce the details of the Initiative,

speaking on the immense potential of bamboo-based materials for replacing plastics. (Her keynote is covered on page 12.) On the second day, INBAR and the United Nations Environment Programme (UNEP) co-hosted a parallel session on Replacing Plastics with Bamboo: Policy, Roadmap and Actions. Dr. Jyoti Mathur-Filipp, Executive Secretary of the Intergovernmental Negotiating Committee (INC) on Plastic Pollution of UNEP and Dr. Han Meng, UNEP-WCMC China Officer, gave the joint keynote. Their presentation highlighted the upcoming international treaty to address plastic pollution and promote the circular economy, with strong emphasis on developing a solution package that considers the interconnection between plastics and other issues.

Major follow-ups have occurred since BARC 2022. At the 27th Conference to the Parties of the United Nations Framework Convention on Climate Change (UNFCCC COP 27) in November, bamboo was recognized as a key nature-based solution for sustainable construction and circular economic development at the Global Innovation Hub. At another side event at COP 27 focusing on the Bamboo as a Substitute for Plastic Initiative, Shen Genlian, the founder of BABO, a popular Chinese company known for manufacturing bamboo tissue products, presented on the overlooked potential of bamboo to replace a range of plastic materials, grow new industries, and sequester more carbon. Later in the same month, INBAR participated in the first session of INC to develop an internationally legally binding instrument on plastic, including in the marine environment. INBAR will work within the INC to promote bamboo as a green alternative material to curb plastic pollution across its 49 Member States.

The current historic moment presents a clear choice to humankind: More plastics, more pollution, and more greenhouse gas emissions, or cleaner lands, cleaner seas, and cleaner air. With the launch of the Bamboo as a Substitute for Plastic Initiative, INBAR has made its choice, at the vanguard of global progress to create a better world for current and future generations.

The following is the full text of the official Bamboo as a Substitute for Plastic Initiative document.

Now, with the intensification of climate change, frequent occurrences of natural disasters and increasing environmental problems, more and more countries and international organizations are integrating green development, principles from the circular economy and low-carbon lifestyles into their national strategies and global vision. China has set a dual carbon goal of striving to achieve peak carbon dioxide emissions by 2030 and reach carbon neutrality by 2060, aimed at making positive contributions to address climate change and create harmony between humankind and nature. During the General Debate of the 76th session of the United Nations General Assembly, Chinese President Xi Jinping proposed the Global Development Initiative, an international plan that adheres to the concept of harmonious co-existence between humankind and nature, targeting climate change and green economic development as key areas for cooperation. The initiative has received positive responses from the international community.

Bamboo is a precious treasure bestowed upon humankind by nature and has significant ecological, economic, and social benefits. As a green, low-carbon, fast-growing, renewable and

degradable biomass material, bamboo can play a unique role in addressing a number of global challenges such as climate change, poverty alleviation and ecological restoration. China and the International Bamboo and Rattan Organization are jointly launching the Bamboo as a Substitute for Plastic Initiative, aimed at deepening cooperation of the Global Development Initiative by realizing the outstanding advantages and potential of bamboo in reducing plastic pollution, replacing plastic products and providing a nature-based solution for energy-intensive and difficult-to-degrade plastic products, while making a positive contribution to the implementation of the 2030 Agenda for Sustainable Development.

1. Formulate supportive policies

Incorporate the Bamboo as a Substitute for Plastic Initiative into policy frameworks at different levels, including international, regional and national levels; cooperate with relevant international organizations to facilitate formulation of international trade rules for inclusion of bamboo plastic substitute products into plastics replacements; support and help countries around the world formulate and popularize policies regarding the initiative; identify important industries and bamboo products to replace plastics; and provide policy guarantees for global development.



Bamboo kitchenware and tableware are among some of the most easily replaceable household items, with rapidly growing consumer interest.



Bamboo can be used to replace many everyday items, such as toothbrushes. Credit: Oul'Fath Bouraïma.

2. Promote technological innovation

Converge scientific and technological forces in the bamboo sector to deepen cooperation and foster innovation in the uses, efficiency and standardized development of bamboo products to replace plastics as well as generate the conditions for the adoption of new technologies and development of new products that can use bamboo as a substitute for plastics.

3. Encourage scientific research

Encourage global research institutes to strengthen basic research into using bamboo as a substitute for plastics to promote scientific innovation in global bamboo utilization as well as build a scientific knowledge system such as material data and full life cycle databases that will establish the scientific theory and foundation of data for mitigating global plastic pollution and devising a global development policy framework.

4. Promote market expansion

Facilitate the entry of bamboo products into the market and promote consumption through expert forums, exhibitions, demonstrations and public events at international, regional and national

levels. Widely publicize the diverse applications of bamboo in construction, decoration, furniture, papermaking, packaging, transportation, food, textiles, chemicals, handicrafts and disposable products. The promotion of bamboo products capable of replacing plastics with great market potential and good economic benefits will be prioritized.

5. Enhance publicity

Comprehensively promote the significant potential and value of bamboo as a nature-based solution and raise public awareness through participating in international fora such as the United Nations General Assembly, the Conference of the Parties to the United Nations Framework Convention on Climate Change, the Conference of the Parties to the Convention on Biological Diversity, the World Forestry Congress, celebrating important international and national themed days and anniversaries such as World Earth Day, World Environment Day, and promoting activities on media platforms.

*7 November 2022
Beijing, China*

AMBASSADORS' DIALOGUE



From left to right: Ali Mchumo, INBAR Director General; Martin Mpana, Ambassador of Cameroon to China; Carlos Larrea, Ambassador of Ecuador to China; Leonardo Kam, Ambassador of Panama to China; Teshome Toga Chanaka, Ambassador of Ethiopia to China; and Carlos Watson, FAO Representative to China.

The event featured country and FAO representatives having a productive exchange of ideas on substituting plastics for bamboo-based materials.

BARC 2022 gathered four ambassadors and special representative of the UN's Food and Agriculture Organization (FAO) to the stage to hold a dialogue on the Bamboo as a Substitute for Plastic Initiative. The conversation explored the feasibility of using bamboo products over plastics, with each speaker sharing lessons learned and experiences from their respective countries and organization, including relevant policies, regulations, norms and laws regarding plastic bans or restrictions. There was broad agreement on the importance of establishing effective incentive structures to help guide the public transition from plastic materials to other ecological alternatives while navigating potential emergent obstacles. There was also discussion around keystone areas like policy, technology, investment, the deployment of financial mechanisms and erecting a supportive

framework for market development to help mainstream the Initiative.

Martin Mpana, Ambassador of Cameroon to China

Sharing bamboo and rattan knowledge and technology

Cameroon's cooperation with China is critical. Since the Chinese government and INBAR co-launched the Bamboo as a Substitute for Plastic Initiative, we have been looking forward to jointly implementing this Initiative. Bamboo is now increasingly being used across the nations of Africa as a green alternative material. Stakeholders are carrying out technological innovation and devising new applications in bamboo planting, processing and agricultural production. We need to deepen cooperation and maximize innovation, sharing bamboo and rattan knowledge and technologies, to support the development ambitions of African countries. This will also promote the creation of novel bamboo products and plans.

Leonardo Kam, Ambassador of Panama to China

Making bamboo an attractive alternative to plastics with co-innovation

Environmental pollution, harmful greenhouse gas emissions and plastic waste are the main environmental challenges facing not only Panama but the whole world. Panama was the first country to pass legislation to restrict the use of plastic bags, particularly targeting single-use plastic bags, in Central America. Our law was implemented in January 2018. Our national goal is to reduce the use of plastics while increasing the use of environmentally friendly materials like bamboo. For us to meet this goal, we must cooperate with countries with rich experiences in bamboo processing and applications. Through co-innovation, bamboo can become an attractive alternative to plastics in Panama and abroad.

Carlos Larrea, Ambassador of Ecuador to China

Replacing plastics with bamboo to reduce pollution and protect the environment

Ecuador passed a law in November 2020 that prohibits the manufacture, import, distribution and sale of disposable plastics. We want to reduce the use of disposable plastics through plastic reduction and responsible consumption, so as to better protect human health and the environment. Replacing plastics with bamboo can play a key role in this fight by reducing pollution, especially microplastics. At the same time, we are also promoting marine protection in the region. We were the first country in Latin America to propose binding legal instruments to combat plastic pollution, and now we are exploring new ways to promote similar initiatives with China such as the Bamboo as a Substitute for Plastic Initiative.

Teshome Toga Chanaka, Ambassador of Ethiopia to China

Working with other countries to promote the development of the bamboo industry

Ethiopia has the largest bamboo forest in Africa. Our government has developed strategies and launched programs to achieve the goal of making Ethiopia an important area in Africa for bamboo product manufacturing and processing by 2030. In the future, bamboo forest area will

increase from 1 million hectares to 1.6 million hectares. This industry can provide 1.5 million job opportunities. We recognize that this is a very big goal, so we need to cooperate with other countries to achieve this. The Ethiopian government also recognizes that plastics seriously pollute the environment, and believes this moment represents the ideal opportunity to replace plastics with bamboo as a green alternative material. As the industry continues to develop, we look forward to facilitating the phasing out of plastics and substitution of bamboo in their place.

Carlos Watson, FAO Representative to China

Transforming food and agriculture by using natural materials

The common goal shared by INBAR and FAO is to transform food and agricultural systems and bolster their resilience. Bamboo and rattan as key agricultural products are located at the core of our joint mission. Plastics pose a great threat to this joint mission, as non-degradable and polluting objects that infiltrate our terrestrial and marine ecosystems, leaching toxic chemicals and harming wildlife. The global agricultural value chain uses approximately 50 million tons of plastic. If the Bamboo as a Substitute for Plastic Initiative leads to incorporating more natural materials into our food and agriculture systems, it will be a substantial boost for achieving our goal. The Initiative provides a timely solution for helping to remediate the degraded health of our planet's natural resources.

Global Action Plan

A Global Action Plan is currently under development to support the launch of the plastic-substitution project, which will incorporate feedback from the high-level representatives mentioned above. This Global Action Plan will bring together INBAR Member States and partners to contribute to the UN Sustainable Development Goals. The strategy will also be shared with the international community through INBAR's Observer status at the UN General Assembly as well as three Rio Conventions, thereby facilitating the integration of this plan into national legislation and policies around the world, helping to bring about a greener and cleaner planet.

KEYNOTE SPEECHES

Speakers at BARC 2022 gave enlightening presentations on the global state of bamboo and rattan.

At this year's BARC, we were honored by the presence of several luminaries. Professor Jiang Zehui, Co-Chair of the INBAR Board of Trustees, Chief Scientist of the International Center for Bamboo and Rattan, and Academician of the International Academy of Wood Sciences, gave a keynote speech, along with Christophe Besacier, Senior Forestry Officer of the FAO and Coordinator of the Forest and Landscape Restoration Mechanism; Professor Yin Weilun, Academician of the Chinese Academy of Engineering; and former President of Beijing Forestry University; and Dr. Pablo van der Lugt of Delft University of Technology, the Netherlands.

In her presentation "Implement the Global Development Initiative and Promote the Bamboo as a Substitute for Plastic Initiative," Jiang Zehui began by introducing the serious threat of plastic pollution not only to humankind but the planetary ecosystem. She outlined that at present, over 140 countries have issued plastic bans or restrictions, with support for this trend in the future as a promising means of curbing white pollution.

She next proceeded to outline the Bamboo as a Substitute for Plastic Initiative, which was officially announced at BARC 2022, and the key role INBAR played in drafting the document. The Initiative is a major global plan to address the twin goals of reducing plastic pollution and mitigating climate

change. It is intended to spur a "Green Revolution" around the world. Its vision and scope has led to its full recognition by the Government of China, with the Initiative being included as a deliverable the High-level Dialogue on Global Development in June 2022. Follow-up by other high-level Chinese officials has only strengthened cooperation between INBAR and China for developing and implementing a Global Action Plan that is meaningful and meets the world's needs.

Her presentation made clear the feasibility of the Initiative by outlining four target areas: Strengthening scientific and technical innovation; improving policy design at the national level; enhancing public communication and guidance; and deepening international exchange and cooperation. INBAR will continue to adhere to multilateral agreements, encourage multistakeholder dialogues, and advocate for global scientific cooperation and research to undertake the Initiative through formulating, revising and implementing standards, developing a global trading mechanism, and promoting green alternative bamboo products.

Christophe Besacier next gave a compelling overview of global efforts for ecosystem restoration, particularly in the context of the United Nation's Decade on Ecosystem Restoration. He introduced and explained results that emerged from a recent working group led by FAO, which provided a critical global perspective regarding the role bamboo can play in many different fields, not just ecosystem restoration. His presentation



Jiang Zehui, INBAR Co-Chair, Board of Trustees (left) and Christophe Basacier, FAO Senior Forestry Officer (right).

noted that current estimates project 1 billion hectares of forest land being restored by 2030 and highlighted the associated benefits both to planet and people that flow from these restoration efforts.

He spoke highly on the role INBAR plays in integrating bamboo into landscape restoration planning. Countries like Cameroon and others can use related initiatives to address issues of land degradation, especially when done in concert with capacity building, knowledge sharing and measurable goal implementation. At UNCBD COP 15 in December 2022, FAO issued best practices and a framework documenting restoration efforts around the world, with bamboo and rattan highlighted for restorative and systematic land management.

Yin Weilun introduced the twin focus of the Chinese government on carbon neutrality and high-quality sustainable development, also explicating on their importance for global development. In particular, he mentioned that from 2000 to 2017, one-quarter of the world's new forest land can be found in China, showing the promise of the country's afforestation efforts. He said that responsible forestry, especially that related to bamboo, is intertwined with meeting carbon neutrality roles, and can also stimulate comprehensive green development in the social economy. He advocates for forest management as an accelerator to transitioning to a more responsible economy.

Given the abundance of bamboo resources in China, it can play a unique role in carbon sequestration. This is because it can even lock in and store more carbon than some tree species.

As was revealed in the presentation, despite bamboo forests accounting for less than 3% of forestland in China, they contribute to 7.1% of the country's carbon sequestration, demonstrating their noteworthy impact. Given the support of the Bamboo as a Substitute for Plastic Initiative offered by China, there is reservoir of bamboo products yet to be tapped by stakeholders to replace high-energy-consuming materials like steel, concrete, bricks and plastics, helping to reduce carbon emissions while generating green products for a global market clamoring for sustainable alternatives.

In the final speech, Pablo van der Lugt provided a unique window of insight into the ways in which engineered bamboo can factor into sustainability and recycling schemes, especially when integrated with timber. He noted that studies have pointed out 40% of solid waste pollution stems from the construction industry, leading to severe resource depletion and exacerbating the effects of climate change. Renewable materials, he argued, must be mainstreamed into this sector, as they are generated from sustainably managed forests with countless interrelated beneficial effects.

He then promoted the responsible use of bamboo in order to reach carbon peaking and carbon neutrality objectives while also laying out a roadmap for developing bamboo products for green-conscious consumers in the 21st century. Given the low carbon emissions resulting from bamboo biomasses, it is a natural choice for renewable resource development. If we actively cultivate and upscale bamboo forests and utilize bamboo forests to a greater degree to manufacture durable products, the world will see significant reductions in carbon emissions.



Yin Weilun, Academician of CAE (left) and Pablo van der Lugt, Research Fellow of Delft University of Technology (right).

Collating the latest international news and activities around bamboo and rattan sector development.



Shakira Deyanira Andy Shiguango was named “Food Hero” by the FAO for her sustainable leadership in Ecuador. Credit: FAO

Kichwa leader in the Ecuadorian Amazon named ‘Food Hero’

To commemorate World Food Day 2022, FAO honored a select few “Food Heroes” from around the world. Shakira Deyanira Andy Shiguango is one of these heroes.

As a team member at the heart of INBAR-FAO cooperation in Ecuador who belongs to the Kichwa ethnic group of the Ecuadorian Amazon, her work is an essential part of the Indigenous Peoples Biocentric Restoration Project in Ecuador. The project aims to use local intergenerational knowledge to restore degraded land, maintain the centrality of the environment and deepen understanding of ecosystem linkages.

At 26, she has already risen as a leader in her community, identifying environmental problems in the region and generating nature-based solutions. “Our territories have been degraded mainly by

monocultures,” she explains. Her solution? The *chakra* system, an ancient agroforestry system developed in Ecuador. Bamboo plays a key role in this newly revitalized system, creating new sources of income and furnishing the materials for handicrafts, houses and cooking.

“For me and our communities, good living and wealth is biodiversity,” she explains proudly. “The Indigenous Peoples of the Amazon are not poor – we are rich.”

Source: FAO

Bamboo highlighted as a climate solution at COP 27

The Washington Post has highlighted bamboo as a climate solution at COP 27 alongside green hydrogen, nuclear power, small modular reactors and blue carbon.

More than 1640 different bamboo species populate the world, UN data shows, and it naturally grows in places such as Africa, Asia and Latin America.

The plant is better at capturing and storing carbon from the atmosphere compared with timber, according to research. Since it's the fastest growing woody plant in the world, scientists believe planting more can quickly remove carbon from the air, while replenishing it with oxygen.

In China, where bamboo is abundant, forests are projected to store 1 billion tons of carbon from the environment, an increase from 727 million tons in 2010, according to UN data.

Replacing traditional housing materials such as concrete and steel with bamboo will help reduce carbon emissions caused by the global housing sector, which represents one-third of global greenhouse gas emissions. Bamboo can help lower emissions from the construction sector while playing an important role in healing degraded landscapes.

Source: The Washington Post

Bamboo stands tall at the G20 Summit

The G20 Summit in Bali, Indonesia convened from 15–16 November 2022. Bamboo had a prominent position at the event.

Leaders from over the world gathered at the G20 Summit Bamboo Dome. Designed by Indonesian architect Rubi Roesli and built using local bamboo and craftsmanship, the dome is a non-permanent structure that can be easily disassembled.

Indonesia's green economic leadership was showcased in the "Bamboo Forest," the exhibition space of the Summit. The Bambu Lestari Foundation, the Ministry of Cooperatives and Small and Medium Enterprises, and several other environmental organizations collaborated to create the exhibition, creating the perfect space to host lively dialogue on environmental issues, sustainability and green investment.

The space also showcased sustainable products from villages across Indonesia.

Source: Kemenko Marves and Antara News

Montoliya Aggregation Centre: 'Sinking' back into the ecosystem

A new community center, built by the UN's World Food Programme (WFP) under an initiative to bring together smallholder farmers and potential buyers has been inaugurated in Bangladesh. The center was designed by the Bangladeshi architect Marina Tabassum.

The two-story bamboo structure was built by the community: "We prioritized process-driven design. We included the beneficiaries, in this case women farmers, in the process, from the very beginning. The program of the center was developed through engagement with the farmer community and the local craftsmen," said the architect. The center will host markets, bazaars and serve as a workshop space to develop local community skills.

Source: The Business Standard

Global Development Initiative for Sustainable Development Goals Acceleration

On 5 November 2022, the UN Global Compact launched a new pilot project entitled "Global Development Initiative for Sustainable Development Goals Accelerations" ("GDI for SDG") at the parallel session "Acting on the Global Development Initiative to Build World-class Enterprises" of the 5th Hongqiao International Economic Forum.

"GDI for SDG" is a pilot project to combat the problem of plastic waste in ocean waters and accelerate the net-zero transition through SDG-driven business solutions and innovative partnership.

As of 5 November 2022, the following 13 companies and organizations had joined the "GDI for SDG" pilot project: 3M; Alibaba Group; China Energy Conservation and Environmental Protection Group; Danone; HONOR Devices Co. Ltd.; International Bamboo and Rattan Organization; LENOVO Group Ltd.; MEBO International; Novozymes; PepsiCo (China) Ltd.; Tingyi (Cayman Islands) Holding Corp; Tomra Systems ASA; and Xiamen Airlines.

Source: UN Global Compact

INBAR commissions research, conducts project work and raises awareness about bamboo and rattan across its 49 Member States.

The Republic of Chad joins INBAR

At the tail-end of 2022, INBAR welcomed Chad as its 49th Member State and 21st Member State in Africa.

Prior to becoming a full member of INBAR, Chad had a long-lasting relationship with INBAR as an Observer to the organization. In April 2022, high-level officials from Chad attended the First African Bamboo and Rattan Congress convened in Yaoundé. Moreover, in 2020 and 2022, the Director General of INBAR accompanied by the Regional Director for Central Africa paid working visits to Chad and held bilateral strategic meetings with authorities in Ndjamená, the capital city.

In certain regions of the country, particularly the southeast, bamboo is a key resource and material used daily to make agricultural tools such as hoes, axes and fences. Bamboo is also used for making furniture (beds), with applications in construction (roofs), boosting livelihoods of local communities. However, smallholders face difficulties in obtaining bamboo seedlings and tend to lack the technical know-how for cultivation, challenging the standardization of bamboo management. INBAR, in partnership with the Government of Chad, will work to generate tailor-made solutions to address these challenges and support the sustainable development of the country's bamboo and rattan sector, with the main goal of tackling environmental and economic issues through South-South cooperation as well as technology and solutions transfer.

INBAR named official partner of New European Bauhaus

Recently, INBAR was named as an official partner of the New European Bauhaus, signaling the strong relationship between INBAR and the EU. The deepening ties reflect the bilateral commitment to set up networks and solutions for our living spaces that are beautiful, sustainable and affordable, particularly exploring the possibilities for bamboo in undertaking this endeavor. The New European Bauhaus will function as a platform for further productive exchange on sustainable construction,

standards, research and innovation, re-imagining a sustainable future with beauty at the center of discussions, and perhaps most importantly, unlock critical EU funding opportunities.

Bamboo stands to be an extraordinarily relevant and innovative material for the New European Bauhaus. It resides at the nexus of science and technology, art and culture, and bridges countless disciplines, uniting them with its durable fibers and willowy strength. It not only possesses multifunctional qualities and sleek design attributes, like the artistic works that emerged in the original Bauhaus movement, but its highly renewable nature as a fast-growing grass that thrives on degraded, sloping land, sequesters carbon, mitigates soil erosion, and enhances rural livelihoods make it an ideal resource for responsible development in Europe and beyond.

INBAR is excited to work with the EU and all partners in the days to come to realize the true potential of bamboo.

Bamboo buildings and products take stage at UN Climate Change Conference

From 6 November to 18 November, the 27th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP 27) convened in Sharm El-Sheikh, Egypt. INBAR, as an observer to the three Rio conventions, made a strong showing at the UN Climate Change Conference this year, organizing two side events and participating in another, championing the importance of bamboo to tackle global climate issues.

On 14 November, the side event "The potential of bamboo as a material for sustainable construction and circular economic development" kicked off at the UNFCCC Global Innovation Hub. The session was dedicated to exploring the potential of bamboo as a material for sustainable construction and circular economic development. The UNFCCC Innovation Hub is a critical platform for INBAR and the UN to strengthen their partnership and cooperation, particularly around

scaling up innovative bamboo products and applications to reduce carbon emissions, create employment and foster gender equality.

On 16 November, the side event organized at the China Pavilion was fully dedicated to the Bamboo as a Substitute for Plastic Initiative co-launched by INBAR and China earlier that month. Bamboo was discussed as an excellent resource capable of making significant contributions to achieving carbon neutrality and green growth while replacing plastics. Speakers discussed the need for a comprehensive roadmap that is feasible and operational for implementing the Initiative. Other supportive areas were mentioned as in need of more attention, such as conducting pricing interventions and technological interventions.

INBAR participates in key committee on global plastic pollution

The first session of the Intergovernmental Negotiations Committee (INC) convened on 28 November 2022. INBAR participated in the meeting, submitting a written statement alongside other international organizations. The statement makes the powerful case for the capacity of bamboo to act as a green alternative material to curb plastic pollution, drawing attention to the Bamboo as a Substitute for Plastic Initiative co-launched by China and INBAR at BARC 2022. The Initiative will strengthen the usage of bamboo as a green alternative to plastics to address the twin problems of plastic pollution and climate change while contributing to the Global Development Initiative.

In its own released statement, China expressed the hope that the legal instrument on plastic pollution will be problem-solving in nature, focus on plastics that are easy to leak into environments, adopt control measures for different types of plastics, and strengthen recycling and safe disposal. In addition, the statement also reiterated the importance of considering different conditions and capabilities across countries for implementing such a legal instrument to ensure fairness and common but differentiated responsibilities.

INBAR, as an intergovernmental organization with 49 Member States largely found across the Global South, is ideally situated for involvement in the design of an international legally binding

instrument on plastics and its subsequent implementation. This is because bamboo, as a green, low-carbon, fast-growing, renewable and degradable biomass material, can play a unique role in not only addressing global challenges like plastic pollution but also climate change, poverty alleviation and ecological restoration. INBAR has already begun to work with stakeholders from China and other Member States to implement an action plan to support the achievement of the goals established in the Bamboo as a Substitute for Plastic Initiative.

UN Biodiversity Conference concludes with major deal

On 19 December 2022, members of the 15th Conference of the Parties to the UN Convention on Biological Diversity (UNCBD COP 15) announced the passage of the Kunming-Montreal Global Biodiversity Framework. The framework will act as the world's blueprint for the next decade of biodiversity conservation and management. Its measures intend to stabilize and reverse the accelerating loss of biodiversity and strengthen our capacity to protect nature.

Pablo Jácome, Regional Director for INBAR's Latin America and the Caribbean Region, delivered INBAR's statement at the high-level segment plenary session on behalf of INBAR Director General Ali Mchumo.

In the speech, he highlighted that bamboo and rattan are critical resources for communities spread across the globe. But beyond that, they are vital for sustaining planetary biodiversity, with numerous iconic animals drawing food and shelter from the plants, such as giant pandas, gorillas, lemurs and other lesser-known organisms. Given the pragmatic and implementable nature of INBAR's solutions, the time is right for global adoption and support. As mentioned at the end of the statement, INBAR is now "appeal[ing] for more financial resources for our Members to continue implementing practical solutions using bamboo and rattan that contribute directly to the post-2020 global biodiversity framework."

Bamboo and rattan – "green gold" as it were – are now ready to join the fight to make the world better for our current and future generations.

35 PARALLEL SESSIONS



INBAR staff from left to right: Wang Renfei, Program Officer; Durai Jayaraman, Director of Global Programs; and Li Yanxia, Senior Program Officer.

...The number of sessions held in total at BARC 2022. Speakers from around the world gave presentations at the hybrid parallel sessions, with approximately 1000 online and offline participants tuning in.

Topics were divided across four themes. The first theme, The Road to Carbon Neutrality, featured a presentation from Marco Piazza, Senior Forestry Officer for FAO's Regional Office for Asia and the Pacific. He discussed the current state of remote-sensing technologies and their implications for improving global resource assessment, particularly in the resource-starved Global South where large gaps still exist in the data for bamboo forestland. To meet this challenge, FAO and INBAR have been working hand-in-hand to conduct forest surveys across the world. He stressed that these types of cross-

institutional partnerships are crucial when national capacities are lacking. He advocated for capacity building from developed countries and better flow of technical resources into the hands of local forest practitioners. He emphasized that precise resource assessment forms the bedrock for any development scheme, and as long as data gaps exist, countries will not be able to fully capitalize on their potential in a responsible manner.

The second theme, Green Industry and Economic Recovery, saw a presentation from Professor Xu Jianchu at the Centre for Mountain Futures. He explained that nature-based solutions stem from the five basic pillars of biological diversity: Microbes, plants, fungi, insects and animals. In his work, he is particularly interested in the keystone role of fungi in rural revitalization.

He spoke on their interconnected nature with tree, plant and animal species, and underlined the necessity of symbiotic relationships for ecosystems to flourish. Moreover, they can be used in agroforestry systems to not only boost biodiversity but also generate additional income for rural households. This is particularly evident in China's own Yunnan Province, where a flourishing mushroom trade transfers money into the hands of farmers in a traditionally impoverished rural region. Globalization continues apace connecting these remote villages with developed markets abroad, where rare edible mushrooms like *Matsutake* are in high demand. Ultimately, given the inextricable and complex relationship between humankind and nature, our fates are entwined. Helping the planet, as he put it, is really just another form of helping ourselves.

The third theme, Innovative Materials and Market Development, hosted Vidya R. Sankar, postdoctoral researcher at Kerala Agriculture University and expert on INBAR's Taskforces on Sustainable Bamboo Forest Management and Bamboo Nutrition. Her talk highlighted the potential of bamboo for raising living standards in rural communities. In particular, she advocated for the greater development and marketization of bamboo shoots as an ideal vegetable product teeming with nutrients and fiber. With over 300 species of edible bamboo capable of growing across a wide range of soils while not competing with other lucrative crops for soil, its applications for strengthening rural economies and springboarding green development remain extremely promising. She further described technological advancements in processing and storage to allow for global distribution regardless of seasonality, and outlined household methods to provide an additional source of income for bamboo farmers and small-scale shoot processing industries.

Under the fourth theme, Working Together for Inclusive and Green Development, Li Lan, Director of Industrial Development at the International Centre for Bamboo and Rattan, spoke on China's bamboo sector and the development of collaborative bamboo platforms. She also reported on the potential for utilizing "cluster development," a developmental mode in which different industry chains and interrelated businesses unite in a collaborative endeavor for stimulating not only

China's sustainable economic development but also that of global regions, many of which underutilize their natural bamboo resources. This development mode could, she mentioned, accelerate the green transition. A robust Q&A for her session featured potential solutions for bridging gaps in technology, personnel, markets and trade, with broad consensus on the importance of promoting dialogue between disparate actors across the supply chain and regulatory bodies.



Li Lan, Director of Industrial Development, International Centre for Bamboo and Rattan.

These parallel sessions represented the beating heart of the Congress, gathering stakeholders from around the world to exchange lessons learnt, best practices, and other expert knowledge with colleagues in other fields. The conversations held across these sessions helped establish the informal links that undergird the kinds of formal partnerships, collaborative endeavors and joint programs of the future that will directly tackle challenges global in scope. Herein lies the true power of BARC 2022: It served as a platform for not only facilitating dialogue and but also uniting stakeholders engaged in the grand project of mitigating climate change, healing our degraded soils and safeguarding vital ecosystems.

INBAR ANNUAL INTERNATIONAL PHOTO COMPETITION

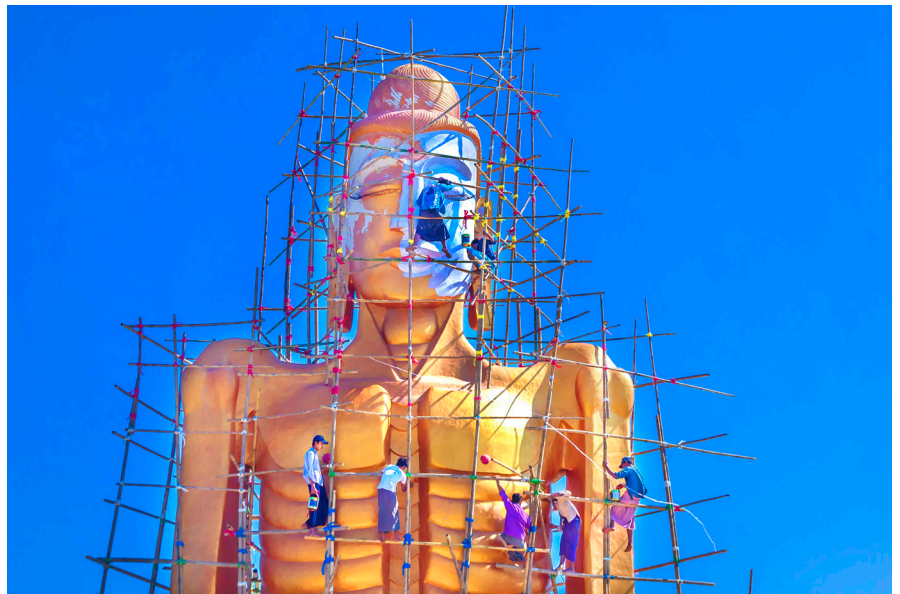
This year, the INBAR International Bamboo and Rattan Photo Competition received almost 200 impressive entries from 22 countries around the world. Out of such a talented pool of artists, it was difficult to select the winners. A panel of expert photographers selected the images which best reflected the uses of bamboo and rattan for sustainable development, particularly across INBAR's key focus areas.

This year marks the third consecutive year of INBAR's annual photo competition. To all who are looking, it is clear that the world of bamboo and rattan is a vibrant place, teeming with majesty and excitement. It gives the Editorial Team great pleasure to showcase the winning submissions below, which were also exhibited at BARC 2022, and to congratulate all participants on their artistic vision and talent.

1st Prize

First place, Best of Bamboo –
“Bamboo Scaffolding” by Kyaw
Zay Yar Lin from Myanmar

“Artisans are using bamboo scaffolding in construction. They are painting and cleaning the Buddha statue using bamboo scaffolding, high off the ground with a brilliant blue sky setting them off. It is a common sight to see bamboo scaffolding in Southeast Asia.”



First place, Best of Rattan –
“Rattan Basket for Durians” by Muhammad Syarif. S from
Indonesia.

“Rattan is an important plant for durian farmers. At the foot of the Bukit Barisan, there are many durian gardens, but there is no access to transportation. Durian farmers transport the harvested durians in their rattan baskets, cross the river and walk for about 30 minutes. With the elastic and strong properties of rattan, durians are carried safely in transit.”





2nd Prize

Second place – “Bamboo in Cow Races” by Muhammad Syarif. S from Indonesia (above)

“Pacu jawi (cow race) is an important part of the culture of the Minangkabau people in the province of West Sumatra, Indonesia. This race is held before the rice planting season, aiming to celebrate the harvest season. This event loosens the rice fields. In the cow race, the cow-racing jockey uses jawi steering gear consisting of two bamboo sticks on the left and right sides that are attached to the cow’s neck. The cow will run and the jockey will control the cow using the bamboo. The cow that reaches the finish line first wins the race.”

Second place – “City Spiders” by Wong Chi Keung from Hong Kong, China (right)

“Compared with iron rods, bamboo rods are cheaper, faster to build, and easier to transport. In Hong Kong, bamboo scaffolding is often used for building skyscrapers and building refurbishment, which at first glance, might seem a little frightening, but is actually quite safe when done properly.”





3rd Prize

“Sustainable Fishing” by Sujan Sarkar from India

“India is blessed with rich and varied fishery resources and habitats, and many people depend on fishing for their livelihood. The fishermen of rural India cast fishing nets across the rivers with the help of bamboo, which is an important part of sustainable development in their lives.”



“Rattan Collectors” by Pyi Soe Tun from Myanmar

“Rattan trees, which are natural products, are often cut in groups. In forests, the husbands collectively cut down the rattan trees and the wives left behind in the village cleaned them, dried them, and tied them together. They usually make a living by exporting and selling the rattan to workshops and factories that make human utensils from rattan at home and abroad.”



“Sandur kalongking folk show” by Wahyu Budiyanto from Indonesia

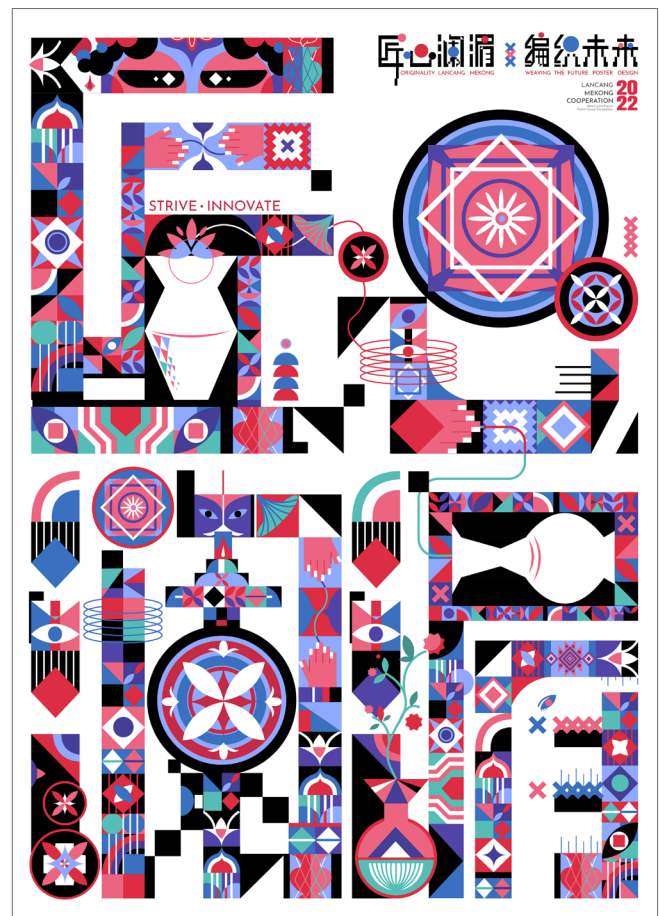
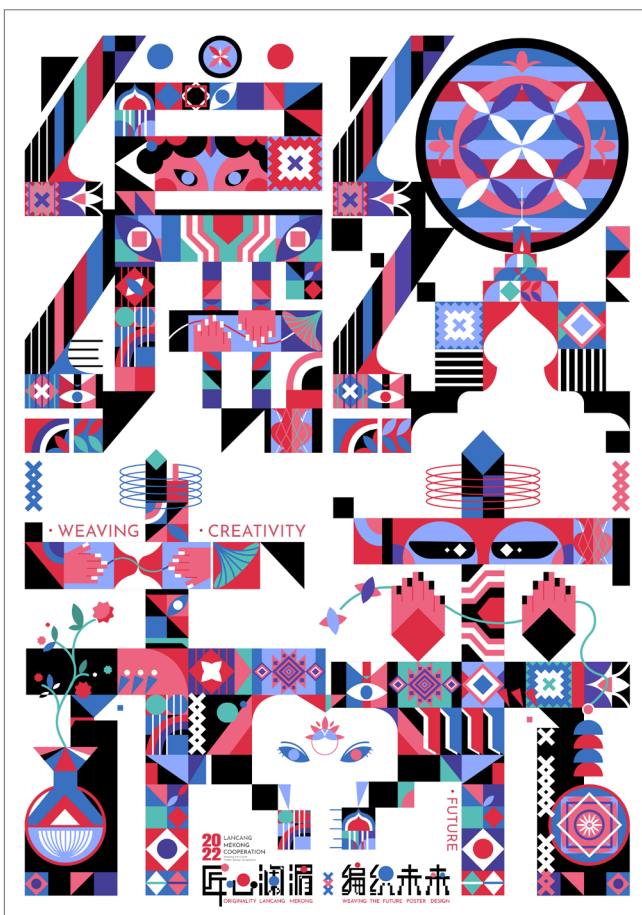
“Since ancient times, bamboo has always been present in the daily lives of people in Indonesia. Though it is typically used in handicrafts, this moment captured here features a man using two towering bamboo poles to enact a traditional performance that symbolizes the journey of human life from childhood to adulthood and finally old age.”

LANCANG-MEKONG COOPERATION DESIGN AWARD

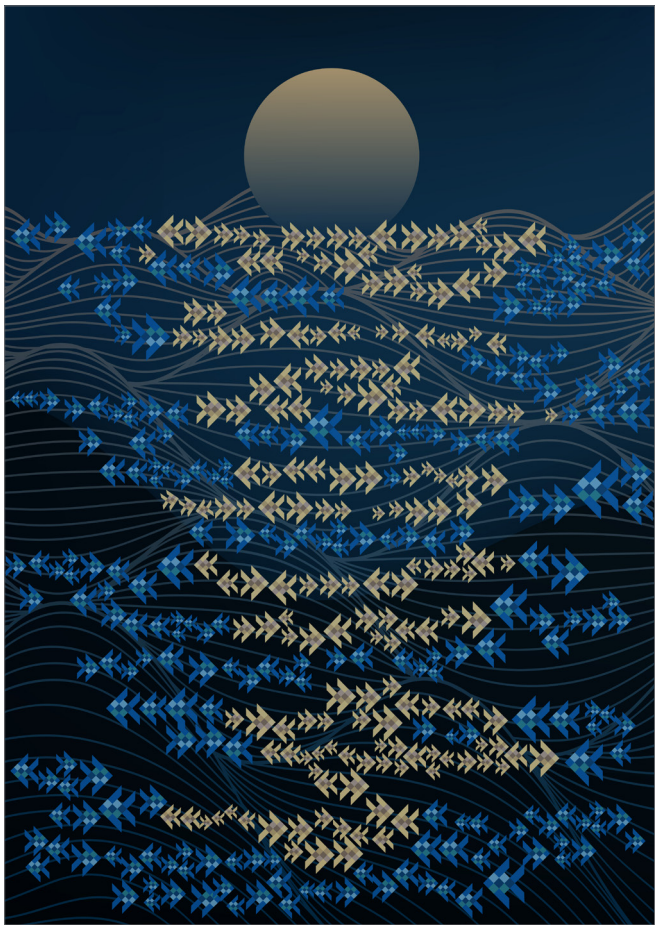
During the 7th Lancang-Mekong Cooperation (LMC) Foreign Ministers' Meeting held in Bagan, Myanmar in July 2022, a Joint Statement on Deepening Exchanges and Mutual Learning among Civilizations within the LMC Framework was adopted to promote exchanges between cultural celebrities and mainstream cultural organizations in LMC member states and encourage support for and participation in international arts festivals organized by countries in the region.

In the spirit of the framework, the 2022 Lancang-Mekong Cooperation Design Award kicked off, issuing a call for entires across the Lancang-Mekong region. The competition selected the theme "Weaving the Future," with particular focus on poster design and bamboo and rattan weaving. Posters celebrated the spirit of dedication and cooperation as well as presented a vision of innovation, evolution, and lively exchange. Woven submissions showcased the unique qualities of bamboo and rattan materials as furniture, household items, and creative works, while incorporating other materials like metal, leather, glass, ceramics, wood and fabrics.

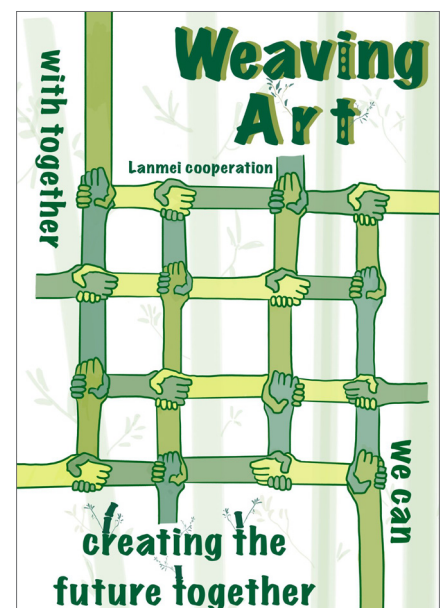
Posters Design Winners



"Weaving the future" by He Xinyue from China (First Prize).



Second Prizes, left to right: “Golden Light of Carp” by Piyanoot Saiyakit from Thailand; “Weaving the Future” by Zhangyi Yanghong from China.



Second Prizes, left to right: “Weaving the Future“ by Cui Yuezhao from China; Together for a Shared Future” by Yu Xi & Yao Shenglei from China; “Seizing New Opportunities“ by Chen Ying from China.

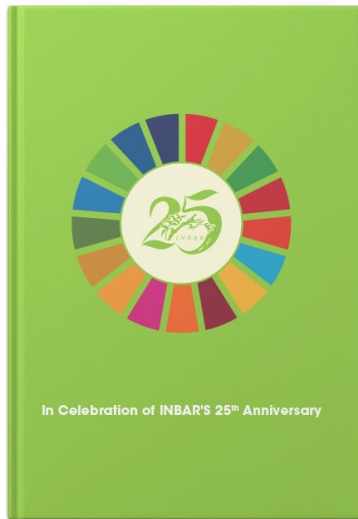
Woven Design Winners



"China Solidarity" by Yang Yuan from China (First Prize).



Second Prizes, top to bottom, left to right: "Time Flies" by Wang Guoliang from China; "Muffin Stool" by Su Htewe from Myanmar; "Blue Lancang-Mekong" by Xu Yuelin & Zhou Tian from China; "Roaring rattan" by Gui Chun from China; "On the cloud" by He Dongze from China.



IN CELEBRATION OF INBAR'S 25TH ANNIVERSARY

Produced in commemoration of INBAR's 25th anniversary in 2022, the INBAR Album was written to serve as an introduction to INBAR's history as well as a gallery of INBAR's achievements over the last 25 years. The book is divided into five main sections that feature in-depth discussion of bamboo, rattan, INBAR's founding, highlights, and a timeline.

The first section details the direct contributions of bamboo and rattan to UN Sustainable Development Goals (SDGs). For SDG 1, "Ending poverty in all its forms," bamboo and rattan can be sourced for a range of products that bring in additional income and generate ecotourism opportunities for rural households and contribute to global trade. SDG 7 aims to "Ensure access to affordable reliable, sustainable and modern energy for all," where bamboo plays a critical role as a renewable resource that can be converted into charcoal and briquettes. Bamboo-based construction materials can significantly lower greenhouse gas emissions and thereby contribute to SDG 11: "Make cities inclusive, safe, resilient and sustainable." Bamboo and rattan can provide low-carbon, recyclable alternatives to many materials, with big implications for the development of circular economies, supporting SDG 12: "Ensure sustainable consumption and production patterns." Bamboo's astonishing natural

rate of carbon sequestration makes it competitive for storing and preventing the release of more carbon than even some trees species, directly contributing to the fight against climate change (SDG 13). Finally, SDG 15 on "conserving forests, preserving biodiversity" benefits from the critical and manifold ecosystem services provided by bamboo and rattan such as supporting animal habitats, binding soil, preventing water run-off and more.

The next section focuses on INBAR's foundational history, mission and organizational structure. Founded in 1997 with the mission "to improve the well-being of producers and users of bamboo and rattan within the context of a sustainable bamboo and rattan resource base, by consolidating, coordinating and supporting strategic and adaptive research and development," INBAR has tirelessly strove to promote bamboo and rattan as nature-based solutions for sustainable development. It tackles systemic challenges like unsustainable consumption patterns, biodiversity loss, deforestation, climate change and more. Currently, INBAR's original 9 Member States have grown to 49, with Regional Offices around the world and Headquarters in Beijing. Its efforts over the years have led to bamboo and rattan being recognized across the three Rio conventions, and INBAR has been granted Observer status at the UN General Assembly.

Section three highlights the exemplary work of INBAR in different fields. Key mentions include uniting Member States and partner organizations in the face of global challenges; shining a light on bamboo and rattan as nature-based solutions; leveraging policy expertise to grow bamboo and rattan sectors; using project demonstrations to drive industries; advocating for bamboo and rattan at international events; advancing research on bamboo and rattan; conducting trainings around the world; formulating new standards and facilitating trade; launching the Bamboo as a Substitute for Plastic Initiative; and acting as a knowledge broker for the Global South. Taken in totality, these highlights represent major achievements not just for the institution of INBAR but for the entire global community as it takes on climate change, environmental degradation, rural poverty, economic development and more.

The last two sections focus on INBAR's strategic goals and feature a detailed timeline of INBAR's historical milestones. With the overall objective of helping countries use bamboo and rattan to contribute to solving land degradation, regeneration of forests and rangelands, unsustainable energy practices, the global housing crisis, rural poverty, wasteful agriculture and husbandry techniques, and other related issues, INBAR targets four specific priority areas for measuring its progress. These include policy shaping, representation and advocacy, knowledge sharing and learning, and action research and country support, all of which provide useful feedback for INBAR to know if it is getting the job done. The timeline is an exhaustive account of the last 25 years, featuring important dates

like INBAR's founding and headquartering in China in 1997, the former President of China Jiang Zemin visiting INBAR in 2008, BARC 2018 and 2022, other visits from Heads of State as well as important events.

The book is ultimately a useful guide for those interested in learning more about the role of bamboo and rattan in the sustainable development sector, particularly given INBAR's unique role as the first intergovernmental organization to be headquartered in China. In particular, the book serves as an insightful reference point and knowledge base for planners and policymakers seeking to incorporate bamboo and rattan into sustainable development schemes, policies and strategies around the world, particularly those in the Global South.

EVENTS

6–18 November
UN Framework Convention on Climate Change COP 27
 Sharm El-sheikh, Egypt

6 November
INBAR's 25th Anniversary

7–8 November
Celebration of INBAR's 25th Anniversary and the Second Global Bamboo and Rattan Congress (BARC 2022)
 Beijing, China & Online

8 November – 13 December
International Conference – Bamboo: A Very Sustainable Construction Material & the 3rd World Symposium on Sustainable Bio-Composite Materials and Structures
 Online

21 November
UNIDO side event at the African Union Summit on Industrialization and Economic Diversification: Bamboo Value Chains for Inclusive and Sustainable Industrialization in Africa
 Niamey, Niger & Online

28 November – 2 December
First session of the Intergovernmental Negotiating Committee (INC)
 Punta del Este, Uruguay

6 December 2022
WTO-UNCTAD Workshop on Sustainable and Effective Substitutes and Alternatives for Plastics
 Geneva, Switzerland

8 December 2022
International Yong'an Bamboo Expo 2022
 Yong'an, China

8 December 2022
High Ambition Coalition to End Plastic Pollution: Road map to end plastic pollution by 2040
 Kigali, Rwanda

8–12 December 2022
International Bamboo Industry Fair 2022
 Sichuan, China

7-19 December 2022
15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 15)
 Montreal, Canada



Leaders met at BARC 2022 to speak on the importance of sustainably developing bamboo and rattan resources. They participated in a variety of events across the Congress, giving keynote speeches and engaging in an Ambassadors' Dialogue. In their roles as ambassadors, state officials, department chiefs, and other intergovernmental figureheads, they represent a considerable amount of institutional firepower ready to use on the frontlines of climate change, the biodiversity crisis, global poverty and more. Events like BARC 2022 and more function as platforms for dialogue and exchange, and are crucial for generating international cross-sectoral consensus to set the global development agenda.



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