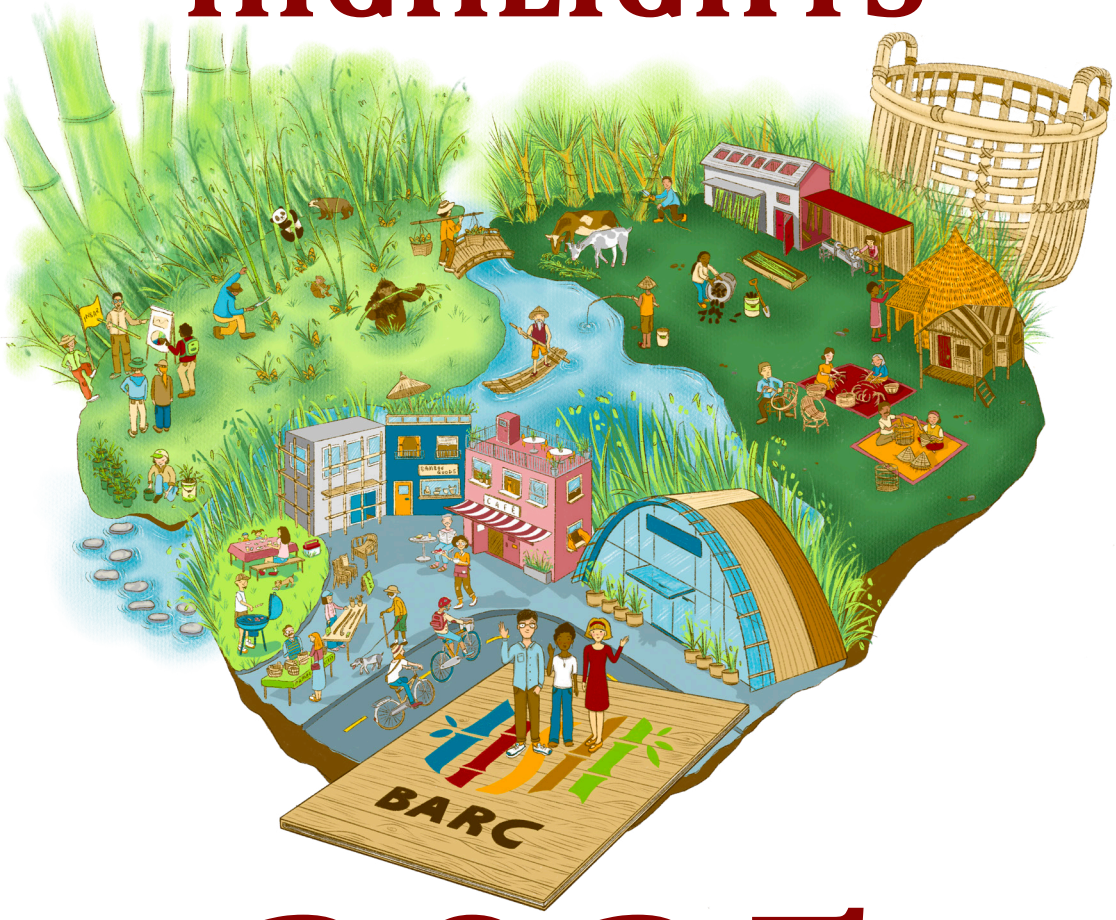
International Bamboo and Rattan Organization

INBAR

ANNUAL HIGHLIGHTS



2025

Cover image:
Bamboo and rattan provide essential ecosystem services, sustain biodiversity, and support livelihoods across rural and urban communities. Illustrations by Jen Rao.

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International Bamboo and Rattan Organization

Established in 1997, the International Bamboo and Rattan Organization (INBAR) is an intergovernmental development organization that promotes environmentally sustainable development using bamboo and rattan. INBAR is made up of 52 Member States. In addition to its Secretariat Headquarters in China, INBAR has five Regional Offices in Cameroon, Ecuador, Ethiopia, Ghana and India.

16 Member States in Asia-Pacific
Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Malaysia, Myanmar, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand, Tonga and Viet Nam.

22 Member States in Africa
Benin, Burundi, Cameroon, the Central African Republic, Chad, the Congo, the Democratic Republic of the Congo, Eritrea, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mozambique, Nigeria, Rwanda, Senegal, Sierra Leone, Tanzania, Togo and Uganda.

14 Member States in the Americas
Argentina, Brazil, Canada, Chile, Colombia, Cuba, the Dominican Republic, Ecuador, Jamaica, Panama, Peru, Suriname, Uruguay and Venezuela.

List of Abbreviations

ACREGIR	Increasing Communities' Resilience to Climate Change in Cameroon
ADB	Asian Development Bank
AECID	Spanish Agency for International Development Cooperation
BASP	Bamboo as a Substitute for Plastic
BMZ	Federal Ministry for Economic Cooperation and Development
CARO	Central Africa Regional Office
CBSW	composite bamboo shear wall
CIFTIS	2025 China International Fair for Trade in Services
CMA	China Meteorological Administration
CNCC	National Council for Climate Change (Dominican Republic)
CONABA	National Bamboo Commission (Panama)
COP30	2025 United Nations Climate Change Conference
EARO	East Africa Regional Office
ETH	Swiss Federal Institute of Technology
FAO	Food and Agriculture Organization of the United Nations
FEDA	Special Fund for Agricultural Development (Dominican Republic)
FONAFIFO	National Forestry Financing Fund (Costa Rica)
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GNS	Institute of Geological and Nuclear Sciences (New Zealand)
IFAD	International Fund for Agricultural Development
ICIMOD	International Centre for Integrated Mountain Development
INBAR	International Bamboo and Rattan Organization
INIFAP	National Institute for Forestry, Agriculture and Livestock Research (Mexico)
IOM	International Organization for Migration
IPS	Institute for Sustainability Policies (Costa Rica)
ISO	International Organization for Standardization
ISO/TC 296	ISO Technical Committee on Bamboo and Rattan
IUCN	International Union for Conservation of Nature
KEFRI	Kenyan Forestry Research Institute
LACO	Latin America and the Caribbean Office
MoU	Memorandum of Understanding
NIWA	National Institute of Water and Atmospheric Research (New Zealand)
NSFC	National Natural Science Foundation of China
PADFA II	Commodity Value Chain Development Support Project – Phase II
PES	payment for environmental services
RILEM	International Union of Laboratories & Experts in Construction Materials, Systems & Structures
RIUCI	International Network of Universities and Research Centers
PNAS	Proceedings of the National Academy of Sciences (United States of America)
SARA	Salon International de l'Agriculture et des Ressources Animales d'Abidjan
SARO	South Asia Regional Office
SEPAL	System for Earth Observations, Data Access, Processing & Analysis for Land Monitoring
SERFOR	National Forestry and Wildlife Service (Peru)
UAFAM	Fernando Arturo de Meriño Agroforestry University (Dominican Republic)
UN	United Nations
UNA	National University of Costa Rica
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNIDO	United Nations Industrial Development Organization
VGS	Voluntary Guideline Standards
WARO	West Africa Regional Office
WMO	World Meteorological Organization
WTO	World Trade Organization
ZJUT	Zhejiang University of Technology (China)

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Foreword by the Board Chair & Co-Chair

Ali Mchumo

Jiang Zehui

2026 is upon us! As the International Bamboo and Rattan Organization (INBAR) enters a new year of exciting activities, our impact continues to grow, even as the challenges facing us become increasingly complex. At the same time, these challenges also bring unprecedented opportunities for tapping into the benefits of bamboo and rattan around the world.

These opportunities manifest in many forms, from taking important steps toward climate action and tackling plastic pollution to developing sustainable policy across the Global South. There is now a narrow but critical window for action to respond to, mitigate and even reverse the negative trends facing us.

In this regard, INBAR has been a pioneer for over two and a half decades. Inclusive and green development with bamboo and rattan has always been at the core of our strategic, multifaceted vision to advance climate action, safeguard biodiversity, restore the environment and strengthen livelihoods. As nature-based solutions, these plants contribute to a wide range of global issues, including at least eight Sustainable Development Goals of the United Nations (UN).

We look back on the past year's achievements with immense pride. Our technical expertise and diverse project portfolio across our network of Member States place us at the forefront of international sustainable development with bamboo and rattan. They have also been levers of real growth, and we were delighted to see our network expand in 2025. The Dominican Republic formally joined INBAR, reaffirming its commitment to integrating bamboo and rattan resources into green policy frameworks. The occasion was marked with a memorable flag-raising ceremony at Headquarters in Beijing.

The UN Decade on Ecosystem Restoration presented the prestigious World Restoration Flagship award to an INBAR-led bamboo restoration initiative for restoring 200,000 hectares of land across nine countries. This counts our work among the most ambitious and promising large-scale restoration efforts taking place around the globe. By 2030, the initiative aims to restore an additional 300,000 hectares.

Progress in restoring land has also been matched by progress in improving livelihoods. Thousands of households benefited from 15 projects underway in 20 countries, valued at nearly USD 14 million. These projects are organizing training programs, capacity building, enterprise support and delivering planting materials. At the same time, over a dozen standards were developed, offering guidance on key issues related to sustainable governance with bamboo and rattan.

In 2025, we entered into new partnerships, signing cooperation agreements with the International Organization for Migration (IOM), the leading intergovernmental organization in the field of migration, and the National Natural Science Foundation of China (NSFC), the country's premier science funder. We also reaffirmed a longstanding commitment with a key partner, renewing our alliance with the Food and Agriculture Organization (FAO) of the UN.

These partnerships went beyond institutional boundaries. INBAR showed up in international conferences and meeting rooms, including but not limited to the Climate Change Conference in Belém, the UN Forum on Forests (UNFF) in New York, the International Union for Conservation of Nature (IUCN) World Conservation Congress in Abu Dhabi, and the Trade and Environment Week of the World Trade Organization in Geneva. In the Host Country, INBAR designed and hosted a 200 m^2 pavilion at the 2025 China International Fair for Trade in Services, welcoming thousands of visitors curious to learn about bamboo's potential for replacing plastics, among its countless other ecological and economic benefits.

INBAR specialists produced a robust collection of high-quality publications pertaining to the diverse applications of bamboo and rattan, often working together with partners around the world. These works represent some of our main channels for sharing knowledge on a variety of pressing topics, from architecture to resource mapping.

Two publications in particular stand out. One major release, the *Bamboo Construction Manual for Single-story Housing,* is a step-by-step guide on how to build bamboo structures using an innovative method known as the "composite bamboo shear wall" system. This method combines full bamboo culms with modern construction techniques for affordable and climate-resilient housing. Another publication worth mentioning is the report entitled *Bamboo resources assessment: A methodological approach using SEPAL with case studies in Asia*. Proposing a novel methodology for mapping bamboo at a large scale in Southeast Asia, the report integrates advanced technologies, open-access platforms and collaborative tools to streamline the process for conducting bamboo resource inventories.

These important publications and many more are freely accessible to the public, downloadable from INBAR's web portal in English, Chinese, Spanish and French. They comprise a crucial part of INBAR's mission to function as a global knowledge broker, putting vital information in the hands of those who need it most.

Looking ahead to 2026, we will continue to collaborate with all willing and ready actors to execute on our sustainable mandate. INBAR is steadfast in its commitment to harness the transformative potential of bamboo and rattan for tackling global problems like climate change, the biodiversity crisis and plastic pollution.

We sincerely thank all we have met along the way, many of whom are working tirelessly to rise up and meet the challenges of our time. Together, we can forge a more inclusive and greener future for all.

Ali Mchumo
Chair of the INBAR Board of Trustees

Jiang Zehui
Co-Chair of the INBAR Board of Trustees

UNITED NATIONS RECOGNIZES RESTORATIVE POWER OF BAMBOO

In October 2025, the UN conferred one of its most prestigious environmental awards on an initiative built around one of the planet's fastest-growing and often overlooked plants. During the World Food Forum in Rome, ahead of World Food Day, INBAR's bamboo-based restoration initiative was named a UN World Restoration Flagship. The initiative joined three other projects to receive that distinction for their outstanding contributions to global restoration efforts under the UN Decade on Ecosystem Restoration.

The award was jointly administered by the Food and Agriculture Organization of the UN and the UN Environment Programme. The awards aim to support and recognize initiatives that are working toward the commitment of one billion hectares of restoration, which is an area equivalent to roughly the size of China. That INBAR's initiative received this commendation reflects how the international community now views bamboo: as a versatile "super restorer" ready for deployment in degraded landscapes around the world.

Across nine countries in Africa, Asia and Latin America, bamboo is already being harnessed as a multifunctional, sustainable plant for land restoration, capable of reversing the impacts of intense agriculture, logging, demand for fuelwood and charcoal, and even climate change. The scale of what has been achieved is considerable. The initiative has restored approximately 200,000 hectares, aiming to attract enough investments to restore an additional 300,000 hectares by 2030.

Bamboo is particularly well suited for integration in large-scale restoration projects due to its synergistic benefits. It grows rapidly, with some species reaching up to a meter per day, producing a dense evergreen canopy from which leaves fall throughout the year, mulching the soil. Extensive, dense rhizomes — the plant's root systems — bind the topsoil, controlling erosion and slowing water runoff. On severely degraded land where other species may not be able to survive, the hardy nature and rapid growth capacity of bamboo allow it to quickly become established in the land and stabilize it within a timespan of months, instead of years.

Carbon storage adds another positive dimension to bamboo's growing acceptance in international development circles. Bamboo forests in China currently store over 700 million tons of carbon, a figure that is expected to reach 1.2 billion by 2050. At the same time, bamboo's commercial versatility, be it in construction, furniture, flooring, fuel, packaging, single-use goods and more, means that carbon is locked into these products for their lifespan rather than returning to the atmosphere. The environmental and economic realities make a compelling case for its adoption.

Bamboo's value extends deep into the realm of biodiversity. The plant is an integral part of tropical and subtropical ecosystems across the globe. Across biodiversity hotspots, a range of endangered species rely on it for food and shelter, including well-known species such as the giant panda, mountain gorillas and bamboo lemurs, and even lesser-known organisms like bioluminescent fungi and tarantulas. This makes it a useful instrument in the toolkit of conservation specialists. In practice, restoring bamboo habitats and protecting threatened wildlife go hand in hand.

▲ *Bamboo seedlings growing in Uganda. Credit: Todd Brown/ UNEP*

The stakes have never been higher, but great opportunities are also presenting themselves for meaningful action. INBAR's initiative takes a comprehensive approach, covering several fronts. These include harmonizing multi-sector policies, selecting high-quality, appropriate bamboo species to match the target environment, acknowledging the rights and cultural practices of Indigenous Peoples and strengthening value chains from beginning to end.

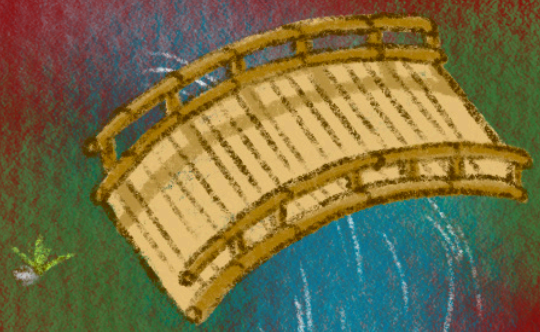
The work of species selection must be done particularly carefully. If the wrong bamboo is integrated into the wrong environment, it can create new problems or exacerbate existing ones rather than solve them. However, bamboo is nonetheless a powerful nature-based solution and underutilized driver of rural industry. Stuart Maniraguha, Acting Executive Director of Uganda's National Forestry Authority, has highlighted bamboo as a key environmental resource with the power to create jobs for women, young people and marginalized communities. These are the groups who are affected most by deforestation and land degradation.

The World Restoration Flagship designation elevates INBAR's initiative, placing it in distinguished company. Together with the other three newly recognized flagships, the projects span 18 countries across four continents, responsible for restoring over half a million hectares in total. Inger Andersen, Executive Director of the UN Environment Programme, commended these efforts: "These flagships show what is doable when people come together to reverse the impacts of climate change, biodiversity loss, pollution and waste. Like a worn-out rug restored to its old glory, degraded ecosystems can be revived."

The award confirms what science and fieldwork have long shown: bamboo is one of the most flexible and underutilized restoration tools available. From degraded hillsides in Uganda to eroded farmland in China, the evidence is persuasive, and growing each day. Invest in bamboo, and the land heals. INBAR is heartened to see bamboo now getting the recognition it deserves on the international stage. The time is ripe for financial investment and policy commitments to match our ambitions.

POLICY SHAPING & PARTNERSHIPS

INBAR continued to support the inclusion of bamboo and rattan in socioeconomic and environmental development policies at national, regional and international levels.



The Dominican Republic's national flag is raised at INBAR Headquarters in Beijing, China.

The Dominican Republic joins INBAR

INBAR welcomed the Dominican Republic as its 52nd Member State at a Flag-Raising Ceremony held on 22 May at INBAR Headquarters in Beijing, which took place as part of INBAR's 13th Council Session. Senior representatives from Nepal, China and the Dominican Republic delivered remarks underscoring bamboo and rattan's role in sustainable development, poverty alleviation and climate resilience, and expressed commitment to deepening South–South cooperation in the sector.

The Council Session elected Panama as Chair and Uganda as Vice-Chair. The session drew the largest number of participating countries and representatives in INBAR's history. INBAR is ready to work alongside the Dominican Republic to formulate sustainable development policy frameworks that capitalize on the extraordinary potential of the native bamboo and rattan resources in the country. The accession of the newest Member State opens new avenues for growing its bamboo and rattan industries and strengthens INBAR's footprint across Latin America and the Caribbean.

Growing stronger with allies

INBAR and FAO have renewed their Memorandum of Understanding (MoU) until October 2030, extending a natural alliance that was originally established in 2020. The two organizations have also co-developed a joint workplan aligned with both INBAR's Strategy 2015–2030 and FAO's Strategic Framework 2022–31, covering technical collaboration, knowledge exchange and capacity development in support of climate resilience and rural prosperity.

Over the past five years, the collaboration has fruitfully advanced the sustainable management of bamboo and rattan across Africa, Asia and Latin America and the Caribbean, supporting policy development, strengthening local capacities and improving rural livelihoods. A broad range of aligned programmatic work continues to be carried out in close coordination on global resource mapping, harmonized trade codes and building demonstration sites that function as clear evidence for bamboo and rattan as nature-based solutions.

Bamboo and rattan also showed up in an unexpected but potentially very

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Training workshop held on bamboo nursery establishment, propagation techniques, plantation development and agroforestry under the ACREGIR project in Bafoussam, Cameroon.

promising area of global concern: overcoming migration hurdles. INBAR and the International Organization for Migration (IOM) signed an MoU on 30 October, formalizing a partnership to leverage sustainable strategies to address migration challenges. The MoU commits both organizations to strengthen cooperation on humanitarian responses, climate change mitigation and adaptation, resilient livelihoods, capacity building and knowledge sharing.

Bamboo and rattan are at the core of the collaboration. Their properties make them well suited to resilient construction, including flood-proof shelters and earthquake-resistant structures, while their role as drivers of climate adaptation and livelihood improvement can benefit both migrants and host communities. Together, INBAR and IOM aim to scale up the use of these plant resources to reduce vulnerability and address some of the root causes of forced migration.

At the national level, a new cooperative agreement came into effect in Central Africa. Cameroon's Ministry of Employment and Vocational Training and INBAR signed a joint workplan on 22 May, launching their collaboration under the project on "Increasing Communities' Resilience to Climate Change in Cameroon" (ACREGIR), which aims to boost resilience to climate change through youth entrepreneurship and integrated natural resource management in the country. The new workplan defines clear terms for supporting vocational training centers in Mora, Dschang and Gamba, with the twin objectives of promoting and enhancing the economic value of bamboo and rattan and rehabilitating the Support Structures for Reintegration and Training centers, particularly benefiting young people and women.

The initiative reflects both organizations' commitment to eco-entrepreneurship and market-aligned vocational training, backed by modern equipment and technical platforms. It also prioritizes the mobilization of additional resources to ensure the long-term sustainability of the training programs, laying the foundation for new bamboo and rattan-based enterprises and closer cooperation between the Cameroonian government and INBAR.

Dou Xiankang, President of the NSFC (left), and Jiang Zehui, Co-Chair of the INBAR Board of Trustees (right), shaking hands at the Signing Ceremony in Beijing, China.

On 1 December, another major partnership was solidified. INBAR and the National Natural Science Foundation of China (NSFC) signed an MoU in Beijing to undertake scientific collaboration on bamboo and rattan. The agreement will advance fundamental research, accelerate talent development and support global bamboo and rattan industries. Areas for future cooperation include the conservation and utilization of key germplasm resources.

Paving the way with policy

Togo's Ministry of Environment and Forest Resources has begun incorporating the newly presented National Bamboo and Rattan Development Strategy (2025–2029) into its National Forest Sector Plan. This new policy vision comes in alignment with the country's target of increasing forest cover to 25% by 2030. It also seeks to improve biodiversity and livelihoods through sustainable forest management and the development of the non-timber forest sector. The strategy was presented to Togo's Minister of Environment and Forest Resources on 26 June.

The Minister welcomed the strategy and confirmed that it will be integrated with national programs covering environmental protection, forest management, biodiversity conservation, livelihood improvement and climate change mitigation. The Forest Resources Department will supervise the implementation in collaboration with multi-sectoral stakeholders, while actively seeking international cooperation and donor funding to further develop national programs and projects. The strategy is one of three national assessments being undertaken in Togo, with financial support from INBAR, which include a National Bamboo Resource Assessment and a National Bamboo Value Chain Analysis.

Togo is not the only African nation now benefiting from a new national development strategy. In 2025, Kenya launched its National Bamboo Development Strategy and Action Plan, outlining a ten-year roadmap to accelerate the commercialization of the bamboo sector, with the core objectives of sustainable development, environmental conservation and wealth creation. Policy coordination resides with the national government, while implementation will be driven at the county level by a broad range of

governmental and non-governmental stakeholders working through a value chain approach.

The strategy acknowledges the slow pace of bamboo sector growth despite three decades of effort by the Kenyan Forestry Research Institute (KEFRI) and partners including the International Development Research Centre, the United Nations Industrial Development Organization (UNIDO) and INBAR. It also signals a shift from research and policy corridors to practical farm-level action. To evaluate the success of this strategy, stakeholders will measure improvements in household livelihoods, rehabilitation of degraded land and broader economic impact at both local and national levels, with funding marshaled from both internal and external sources.

One significant development in bamboo policy occurred in Chad. In January 2025, Chad hosted a pivotal workshop in N'Djamena, aimed at shaping a national strategy for the bamboo and rattan sector. Organized by the Ministry of Environment, Fishery and Sustainable Development, in collaboration with INBAR, the workshop gathered key stakeholders including government officials, researchers, non-governmental organizations and international partners. Participants discussed the potential of bamboo and rattan in driving sustainable economic growth, climate resilience and job creation. The workshop identified ten strategic areas critical for the sector's development, including governance, resource utilization, promotion of bamboo products and environmental impact. The goal is to establish a thriving bamboo industry by 2035, making it a major driver of Chad's green economy.

Key outcomes included the formation of a broad coalition of stakeholders, including international financial institutions and local community-based organizations, to ensure the sustainable growth of the sector. The Chadian government expressed its commitment to leveraging bamboo for socioeconomic development and environmental protection. A national strategy and action plan will be finalized in the coming months, with a focus on innovation, sustainable practices and community empowerment. The bamboo sector is poised to attract investment and transform Chad's natural resources into a sustainable source of income, addressing environmental challenges such as deforestation and climate change.

Cameroon also took steps toward drafting its own bamboo policy. In September 2025, Cameroon hosted a two-day workshop to advance the participatory development of a national bamboo policy and action plan. Organized by INBAR with support from the ACREGIR project, the workshop aimed to refine a draft bamboo policy and align it with the Ministry of Forestry and Wildlife's strategy. It brought participants from government, civil society, the private sector and research institutions.

The workshop reviewed progress made since the 2024 policy workshop, presenting the refined draft bamboo policy, developed through stakeholder interviews and public consultations. Participants engaged in group discussions to identify gaps and propose improvements. Key recommendations included recognizing bamboo as a strategic resource, enhancing financing mechanisms, creating a national bamboo promotion plan and forming a dedicated national committee. The

workshop emphasized the importance of involving relevant ministries, improving governance and promoting sustainable bamboo practices.

The event highlighted bamboo's potential to contribute to Cameroon's economy and environmental sustainability. The draft policy now includes a comprehensive framework for resource management, market development and research, aimed at unlocking the sector's untapped ecological and socioeconomic benefits. Moving forward, stakeholders committed to refining the policy to ensure it is context-tailored, actionable and supportive of the long-term growth of the bamboo industry in Cameroon.

In Latin America and the Caribbean, 2025 also saw noteworthy policy advancements. Panama has taken a major step toward unlocking the potential of bamboo as a tool for sustainable development with the launch of its first National Bamboo Programme 2025–2035. It was developed through a nationwide consultative process involving members of the National Bamboo Commission (CONABA), producers, entrepreneurs, student researchers and public and private institutions, with the support of INBAR and Spanish Agency for International Development Cooperation (AECID). The Programme aims to support decision-making by the Ministry of Environment and CONABA to strengthen and promote the national bamboo value chain.

The Programme was officially launched on 18 September on World Bamboo Day, with the participation of the Minister of Environment, CONABA, the Ministry of Agricultural Development, local producers, artisans, universities and other key national stakeholders. During the event, the Director of Forestry of the Ministry of Environment and the President of CONABA highlighted the strategic importance of bamboo and the significant opportunities available to Panama for developing a competitive and sustainable bamboo industry.

Panama is one of the most bamboo-diverse countries in the Neotropics, with 26 native species covering more than 13,000 hectares, although nearly 74% of the resource remains underutilized. The Programme responds to existing gaps by presenting a structured roadmap for development. These actions focus on capacity building, research, regulation, commercial plantations, market development, financing for rural micro, small and medium enterprises and outreach. Ultimately, the Programme positions bamboo as a nature-based solution for climate resilience, restoration, bioeconomy development and inclusive rural livelihoods.

INBAR's newest Member State, the Dominican Republic, took a decisive step toward harnessing bamboo as a strategic resource for sustainable development with the launch of the National Strategic Plan for the Promotion of Bamboo 2025–2035. The country currently has an estimated 955 hectares of bamboo distributed across several provinces. While important advances already exist, including pilot plantations, institutional nurseries, an industrial processing plant in Bonao and artisanal cooperatives, the sector remains constrained by limited technology, the absence of specific regulations, weak institutional coordination and an underdeveloped market.

The Strategic Plan was presented on 14 May, led by the Special Fund for Agricultural Development (FEDA), the Fernando Arturo de Meriño Agroforestry University (UAFAM) and the National

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Project team from AECID, one of INBAR's key partners in 2025, visiting a women-owned bamboo enterprise in Arba Minch, Ethiopia.

Council for Climate Change (CNCC), together with other national institutions, with the support of INBAR and AECID under the project "Regional Bamboo-Based Solutions." The Plan establishes a comprehensive roadmap to formalize and strengthen the bamboo sector through a national governance framework, integration of bamboo into public policies, development of technical standards for construction and energy and reinforcement of the entire value chain.

Concrete targets set out in the strategy include reforesting 5000 hectares, establishing regional nurseries, training 500 technicians and 500 farmers, promoting bioenergy projects, installing new processing plants and mobilizing international cooperation. Through these actions, bamboo is positioned as a catalyst for climate resilience, green employment, innovation and rural development in the Dominican Republic.

Costa Rica has also proactively moved to position bamboo as a strategic resource for sustainable development with the launch of the National Bamboo Strategy 2025–2035, which was developed through a rigorous, participatory and multisectoral process. The Strategy was coordinated by the National University of Costa Rica (UNA) through the PROBAMBÚ Programme. It received significant contributions from the National Forestry Financing Fund (FONAFIFO), the Institute for Sustainability Policies (IPS), the Participatory Strategies for Climate Change at the Local Level Programme, the Smithsonian Institution, local producers and relevant actors involved in the bamboo sector, with both INBAR and AECID providing support for creating the policy.

The Strategy represents one of the country's first comprehensive roadmaps dedicated to bamboo, responding to the longstanding need to recognize and institutionalize this resource beyond traditional uses. It proposes bamboo as a pillar of public policy, the green economy and territorial equity, while addressing structural gaps that have limited sectoral development. The Strategy outlines concrete actions for the medium and long term. A national assessment identified over 1200 hectares with high levels of underutilization but strong environmental value, particularly for watershed protection and carbon sequestration.

▲ *The "Regional Bamboo-Based Solutions" initiative leverages bamboo for climate solutions in Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, Panama and Peru.*

Among its comprehensive transformative proposals are the legal recognition of bamboo, a National Bamboo Registry, quality and sustainability standards, financing mechanisms and multilevel governance. Working in coordinated fashion, these measures aim to scale up bamboo as a nature-based solution, capable of simultaneously delivering climate resilience, inclusive economic opportunities and sustainable territorial development throughout the varied contexts of Costa Rica.

In addition, Cuba has taken an important step toward consolidating bamboo as a pillar of sustainable development through the formulation of the Comprehensive Bamboo Development Plan 2025–2035. The country hosts the highest level of bamboo diversity in the Caribbean, with eight genera and 19 native species found growing on the island, complemented by introduced species that together cover nearly 13,000 hectares nationwide. This rich resource base is supported by more than three decades of multidisciplinary research and practical experience in bamboo reforestation, processing techniques, construction, handicrafts and applications as an energy source.

Cuba's Plan was developed through a participatory and evidence-based process led by the National Institute for Agroforestry Research, with support coming from INBAR and AECID. The process engaged 32 specialists through interviews and surveys and was subsequently validated by stakeholders. Participants represented national and local government, academia, rural producers, micro, small and medium enterprises, entrepreneurs and civil society organizations.

The Plan features three main pillars. The first pillar focuses on management and coordination, proposing the creation of a National Bamboo Network and knowledge management systems. The second pillar promotes afforestation and sustainable management, emphasizing genetic conservation, nurseries, reforestation and technical capacity. The third pillar advances business development and value addition, supporting entrepreneurship, promoting processed bamboo products, technological innovation and the revitalization of bamboo industries. Together, these programs position bamboo as a driver of climate resilience, innovation and inclusive rural development in Cuba.

REPRESENTATION & ADVOCACY

INBAR continued to engage with countries around the world to raise awareness about bamboo, rattan and INBAR's work.

▲ *Recent graduates of the Workshop School of Sustainable Bamboo Construction display their certificates in Chone, Ecuador.*

Taking the stage at global events

INBAR attended the International Ministerial Conference on Payments for Environmental Services (PES) in Kinshasa, the Democratic Republic of the Congo, in January, where representatives from INBAR's Central Africa Regional Office made the case for bamboo and rattan as nature-based solutions within the PES framework. The presentation covered agroforestry, reforestation, perennial crops, regeneration, sustainable forest management and conservation. It also highlighted that INBAR's existing digital tools for assessing bamboo resources and selecting species bolster these activities. The conference also brought together ministers, technical experts and international partners from across the Congo Basin to align on a joint position ahead of the 2025 UN Climate Change Conference (COP30) in Belém, Brazil. The conference ultimately positioned the Congo Basin — home to one of the world's largest tropical rainforests — as a potential global model for climate action through nature-based solutions.

Part of the project "Post-pandemic Local Economic Revitalization in the Province of Manabí through Strengthening Sustainable Bamboo Construction," and with funding by AECID, the third cycle of Ecuador's Workshop School of Sustainable Bamboo Construction based in Chone, Manabí, Ecuador, graduated 67 new master craftsmen in 2025. This brings the program's total to 245 certified professionals who are now trained in carpentry and bamboo structure assembly. Over 11 months, students from across Manabí and neighboring provinces learned sustainable bamboo management, construction and project planning through hands-on engagement with the methodology, completing seven bamboo projects in total. The school has already left a meaningful mark on the province, with 27 bamboo structures built and 20 fully bamboo houses constructed in Olmedo. INBAR now plans to expand the model to other regions of Ecuador.

At the Marine-based Products and Services Expo in Geneva in March, INBAR showcased bamboo and rattan as sustainable alternatives to plastics in marine and coastal contexts, drawing interest from officials, businesses and researchers. The expo, organized by

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Bamboo products on display at the Marine-based Products and Services Expo in Geneva, Switzerland.

UN Trade and Development around the theme of ocean economy and climate, provided INBAR with a platform to showcase the ways in which bamboo and rattan can replace conventional plastics in oceans, through fishing gear, shipping containers and aquaculture. These plastics contribute to the estimated 19–23 million metric tons that enter aquatic ecosystems annually.

Beyond replacing single-use plastics, which alone make up 89% of ocean plastic litter, bamboo is also finding new uses in floating solar power stations and even surfboards. At the same time, bamboo supports coastal livelihoods, boosting the ocean economy. In 2022, INBAR and China launched the Bamboo as a Substitute for Plastic (BASP) Initiative, advocating for incorporating bamboo into plastic-reduction strategies and frameworks at prominent global fora. The initiative is now running pilot projects in six countries to build up a viable bamboo substitute industry.

Staff from INBAR's Central Africa Office participated in the 7th edition of the Salon International de l'Agriculture et des Ressources Animales d'Abidjan (SARA 2025), the leading agricultural exhibition in sub-Saharan Africa, in Abidjan, Côte d'Ivoire, advocating for bamboo and rattan's role in sustainable forest management and economic development. At the event, INBAR hosted a booth featuring 37 artisanal crafts as alternatives to plastics and textiles. Minister of Water and Forests Laurent Tchagba visited the booth to learn more about bamboo and rattan's sustainable applications. INBAR specialists also joined a panel on Côte d'Ivoire's Forest Products Valorization Strategy, arguing that bamboo and rattan are versatile drivers of economic diversification, creating jobs and reducing pressures on natural forests.

During the panel, some of the structural impediments that are currently holding back the sector's growth were also mentioned by participants. These included inefficient organization, limited research capacity and the lack of clear legal frameworks to help standardize practices in the sector. Responding to these challenges, INBAR has proposed a set of recommendations covering national strategy development, artisan training, research, public-private partnerships and a national quality label for bamboo and rattan products.

Li Lan, Director of INBAR's External Relations and Partnerships (left), and Qu Dongyu, FAO's Director-General, unveiled two bamboo pavilions at FAO Headquarters in Rome, Italy.

Bamboo is truly a wonder plant for ecosystem restoration. In 2025, INBAR's bamboo-based restoration initiative was selected as a UN World Restoration Flagship under the UN Decade on Ecosystem Restoration. This initiative uses bamboo to stabilize soils, jump-start local industries with sustainable growth, reduce deforestation driven by charcoal use, help wildlife thrive and more. It has already restored about 200,000 hectares of land spread over Africa, Asia and Latin America. The main article at the beginning of the Annual Highlights goes into greater detail on its capacity for restoration.

Marking FAO's 80th anniversary, INBAR donated two bamboo pavilions to FAO Headquarters in Rome on 14 October. Both were unveiled in a ceremony attended by FAO Director-General Qu Dongyu and over 50 guests. Qu praised the structures as embodiments of FAO's spirit of harmony and dialogue, while Jiang Zehui, Co-Chair of the INBAR Board of Trustees, noted bamboo's credentials as a low-carbon building material with a long history of architectural use and promising future, sometimes called the "steel of the plant world" for its strength and flexibility. The pavilions represent the shared commitment of INBAR and FAO to worldwide sustainable development through multilateral cooperation.

In October, INBAR attended the IUCN World Conservation Congress in Abu Dhabi, where it mounted an exhibition of bamboo products from Member States. As part of the proceedings, INBAR experts also took part in a side event organized by the French government, themed "Sustainable Alternatives to Plastic for a Pollution-Free Future," presenting on the BASP Initiative, as well as another event on "Cultural Approach to Promoting Natural Heritage Conservation."

In January, INBAR chaired and participated in the Expert Group Meeting organized by the UNFF in Bangkok. That work continued later in May, when INBAR co-organized a side event with Indonesia's Ministry of Forestry at the 20th session of the UNFF in New York. The side event on "Unlocking the Potential of Timber and Bamboo in International Trade through Sustainable Forest Governance" explored the various ways in which sustainable forest governance

can generate economic opportunities while strengthening conservation efforts in forests.

In July, an exhibition kicked off at the World Trade Organization's (WTO) headquarters in Geneva during Trade and Environment Week, featuring bamboo products from Member States across Asia, Africa and Latin America and the Caribbean. Organized by INBAR, the exhibit intended to raise awareness among European countries of bamboo's potential as a green, low-carbon and biodegradable alternative to plastics. Technological advancements and growing environmental awareness now position bamboo as a flexible material for replacing plastics across industries from packaging and construction to transportation and chemicals. The exhibition also effectively communicated the synergies between bamboo and Europe's efforts to phase out plastics. INBAR also joined a panel at a side event on "Harnessing Natural Solutions: Leveraging Non-Plastic Substitutes for Sustainable Development Through the Dialogue on Plastics Pollution."

INBAR hosted a high-level delegation from the WTO at its Beijing Headquarters in September, bringing together ambassadors, senior officials and WTO representatives to discuss how multilateral cooperation can advance the BASP Initiative. The BASP Initiative is a highly suitable framework for closer alignment with the WTO's work on plastic pollution.

Ambassadors from Uganda and Cabo Verde made the persuasive case for bamboo and rattan as practical alternatives to plastics, also mentioning their significant value, economic and cultural, for rural communities, industries and climate action. Permanent representatives from Cambodia, Colombia, Jamaica and Morocco joined the discussion, spotlighting some of the key obstacles to overcome, including tariff barriers, market access, international standards and capacity building across value chains.

The meeting reflected INBAR's expanding presence in global trade and multilateral environmental governance. Alongside existing cooperation agreements with UN Trade and Development, the UN Framework Convention on Climate Change (UNFCCC) Secretariat and FAO, INBAR has been working with the International Organization for Standardization (ISO) and the World Customs Organization to embed bamboo and rattan into international trade frameworks. It is in this key arena that the WTO dialogue is expected to make a real contribution.

In June, INBAR, in collaboration with the Mountain Partnership Secretariat and the Government of Kyrgyzstan, co-organized a side event at the 62nd Session of the UNFCCC Subsidiary Body for Scientific and Technological Advice in Bonn, Germany. The event focused on the BambooBoost Initiative, co-launched by UNFCCC and INBAR to leverage bamboo to accelerate climate action, enhance biodiversity conservation and strengthen ecosystem and community resilience. Shining a light on the role of bamboo for climate adaptation and biodiversity, the event highlighted mountain-centric climate action, where communities are most vulnerable to a changing climate. On the heels of the meeting, INBAR also had a strong presence at COP30 in Belém, organizing side events, including one on "Bamboo for Climate Change Mitigation and Adaptation of Smallholders and Communities in the Global South," alongside an exhibition.

At the 2025 European Bamboo Expo in Dortmund, spanning 22 to 24 May, INBAR staff used the occasion to showcase key outputs from its project "Developing Bamboo-Based Enterprises for Sustainable Livelihood and Income Generation in Ghana," funded by the Federal Ministry for Economic Cooperation and Development (BMZ). The exhibit featured hand-woven bamboo bags and demonstrations of skills transferred to women and youth beneficiaries. These green products were conceived to generate income and build enterprise capacity across Ghana.

The expo also revealed a pathway to European market opportunities for bamboo producers from not only Ghana but also across West Africa, where interest in bamboo products has been steadily growing in recent years. For many of the project beneficiaries, INBAR's participation marked a step toward connecting local producers with international buyers and building a more sustainable future overall for the sector in the region.

INBAR staff also attended the UK Bamboo Summit 2025 in Stoke-on-Trent, England, on 10 October, participating as part of ongoing efforts to strengthen ties between INBAR and actors in the United Kingdom's bamboo sector. The summit offered INBAR a platform to share its experiences and lessons learned supporting bamboo development across its Member States and to engage with a growing professional community of bamboo practitioners in the country.

Bamboo products from Ghana were put on display as part of the occasion. INBAR's implemented project work was highlighted, presenting an overview of its ongoing work in the country. The participation also opened conversations around potential future collaboration in various fields, including bamboo research, technical cooperation and development, with the potential for broader networking across Africa and the UK, bringing together stakeholders in government, the private sector and civil society.

Major outreach occurred in Italy in October. The Governor of the Province of Mantova, Carlo Bottani, along with several of the province's mayors, hosted the INBAR delegation led by Li Lan, Director of External Relations and Partnerships, for a meeting in Mantova, Italy. The Municipality of Borgo Mantovano and AgriCO2 announced plans to launch a pilot project on a disused area using bamboo as an alternative material to plastics, in order to promote the new industrial applications and the contribution of bamboo plantations to carbon sequestration. INBAR highlighted bamboo's potential across numerous industrial sectors and how such uses could substantially increase farmers' per-capita income. Both parties expressed willingness to engage in dialogues and exchanges on bamboo and rattan, aiming to promote bamboo cultivation in northern Italy and develop a sustainable bamboo industry chain, harnessing INBAR's technical expertise and platforms to realize the potential of Italy's bamboo industry.

Central Africa Regional Office

In 2025, INBAR's Central Africa Regional Office (CARO) made significant contributions to environmental sustainability, the promotion of bamboo and rattan as nature-based solutions and the advancement of green economies across Central Africa and beyond through vigorous participation in various international events and programmatic work tasks.

▲
Laurent Tchagba, Minister of Water and Forests, Côte d'Ivoire (right), visited INBAR's booth at SARA 2025 in Abidjan, Côte d'Ivoire.

From 27 to 29 January, INBAR CARO attended the Ministerial Conference on the Deployment of PES in Kinshasa, organized by the Ministry of Environment and Sustainable Development. The primary goal of the conference was to strengthen ecosystem preservation in the Congo Basin, focusing on integrating local and Indigenous communities into sustainable management strategies. INBAR CARO emphasized the crucial role of bamboo and rattan in PES mechanisms, highlighting their contributions to agroforestry, reforestation, sustainable forest management and conservation. These services are essential to preserving the unique ecosystems of the Congo Basin, reinforcing the importance of nature-based solutions in climate action.

From 27 to 31 May, staff from INBAR CARO attended the SARA 2025 agricultural exhibition in Abidjan, Côte d'Ivoire, INBAR representatives highlighted the role of bamboo and rattan in sustainable forest management and the Forest Products Valorization Strategy. Staff also participated in a panel discussion on how the implementation of the Strategy creates additional income opportunities for women and youth throughout the entire forest products value chain. This participation reinforced INBAR's commitment to promoting bamboo and rattan as integral elements of forest-based economies across Central Africa.

On 1 October, INBAR CARO, in partnership with the Government Bilingual High School Essos-Yaoundé, celebrated World Bamboo Day 2025. The event engaged over 300 students and school administrators in an awareness session about the environmental and socioeconomic benefits of bamboo and rattan. Local staff delivered two presentations, including one on INBAR's global mandate and mission and another on the applications, properties and economic potential of bamboo. The event emphasized how bamboo can help address challenges like biodiversity loss, land degradation and climate change while offering opportunities for job creation and green industry development. The celebration inspired students to see bamboo as a pathway for future research and entrepreneurial ventures in the green economy.

Through these initiatives, INBAR

Multipurpose Bamboo Center inaugurated in Bonke, Ethiopia.

CARO continues to lead the international promotion of bamboo and rattan as sustainable resources, positioning them as vital solutions for environmental challenges, socioeconomic development and green job creation. CARO's efforts in 2025 have helped increase awareness, foster partnerships and provide actionable frameworks for integrating bamboo into national development strategies across the Central African region.

East Africa Regional Office

As part of its Dutch-Sino East Africa Development Programme, INBAR commissioned and provided technical support and guidance through the East Africa Regional Office (EARO) in developing the National Bamboo Policy of Kenya. This policy aims to develop a vibrant bamboo industry benefiting present and future generations through sustainable management, developing the resource and enabling commercialized value-addition. The policy will help to develop a framework for improved governance, resource allocation, partnerships and collaboration. It will also bring together state and non-state actors, enabling the sub-sector to contribute to meeting the country's growth and poverty alleviation goals. The Kenya Parliament has now officially classified bamboo as a cash crop to accelerate commercialization of the resource.

Bamboo has continued to gain acceptance in Kenya as a multipurpose plant, including as a timber substitute; source for bioenergy; sustainable raw material for micro, small and medium enterprises; and provider of ecosystem services, such as water catchment rehabilitation. Promoting the expansion of bamboo forests and bamboo growth on farmland can therefore play a critical role in ensuring steady supply for industries to help meet growing domestic consumption.

The Office participated in the Second Africa Climate Summit from 8 to 10 September, held in Addis Ababa, Ethiopia and presented its experience on bamboo industry development for climate adaptation practices at UNIDO's side event on "Unlocking Private Investment for African-Led Climate Solutions." During this event, INBAR EARO presented its bamboo initiative experiences as nature-based solutions

▲ *Distinguished participants at the 2025 Climate and Innovation Conference in Abidjan, Côte d'Ivoire.*

that could be leveraged to attract and sustain climate adaptation investment, while also strengthening the resilience of local communities and ecosystems. Marketing, policy development and technical measures that are essential for transforming nature-based solutions into commercially viable and replicable models for adaptation and resilience were discussed during the UNIDO-hosted session.

West Africa Regional Office

The West Africa Regional Office (WARO) of INBAR, together with the Liberia Forestry Development Authority organized a National Stakeholders and Donors Dialogue to highlight the importance of bamboo to the development of Liberia. The National Dialogue collaboration between the two organizations helped bring stakeholders and potential donors in the bamboo and rattan sector to gain firsthand awareness on the critical role bamboo plays in the development of Liberia's economy while identifying potential sources of financing to design and implement national projects and programs. The dialogue brought together representatives of the World Bank, FAO, the European Union Delegation, Liberia's Ministry of Internal Affairs, embassies and high commissions, the private sector and other key stakeholders.

The 2025 Climate and Innovation Conference was organized in Abidjan by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the Ministry of Water and Forests of Côte d'Ivoire, the Ministry of Environment and other government departments from 11 to 14 June. INBAR WARO was invited to speak on bamboo's importance as an impactful plant species in forest restoration due to its rapid growth, myriad benefits for the soil, ability to store carbon and diverse applications. The presentation demonstrated how bamboo represents a sustainable solution that combines ecological regeneration with socioeconomic benefits, thus contributing to both ecosystem restoration and community resilience in the face of climate challenges. The bamboo sector remains underdeveloped in Côte d'Ivoire. As a result, as part of the strategy to enhance the value of forest products and achieve forest landscape restoration objectives, INBAR WARO spoke in detail about Ghana's lessons learned in the use

▲ *The Second International Seminar of the International Network of Universities and Research Centers on Bamboo was held at Autonomous Metropolitan University in Mexico City, Mexico.*

of bamboo for landscape restoration initiatives.

Latin America and the Caribbean Office

Throughout 2025, sustained advocacy and technical engagement by INBAR's Latin America and the Caribbean Office (LACO) and its partners played a decisive role in positioning bamboo as a strategic resource across national, regional and global policy arenas. This work unfolded through a series of coordinated actions, progressing from national policy dialogue to international knowledge exchange and capacity building.

The year began with high-level policy engagement in Panama. In February 2025, meetings were held with the Minister of Environment and Director of the Forestry Department to present progress on bamboo-related initiatives, discuss the need to strengthen and reform CONABA and highlight the relevance of bamboo within the broader agenda of INBAR. These exchanges reinforced political awareness of bamboo's role in climate action, forestry governance and productive development.

In March, INBAR LACO's advocacy efforts expanded to Paraguay, where meetings were held with the Deputy Minister of Urbanism and Housing and leading architects. Paraguay's social housing programs currently do not incorporate bamboo, largely due to limited technical knowledge and regulatory validation. Discussions focused on pathways for including bamboo as a construction material, the role of the New Materials Committee in approving innovative solutions and potential avenues for collaboration with AECID Paraguay to support pilot initiatives and technical cooperation.

As national dialogues progressed, diplomatic engagement further strengthened regional advocacy. During the year, a coordination meeting was held with the Ambassadors to Ecuador from Spain and China, as well as the Executive Director of the Binational Plan Peru-Ecuador. The meeting reviewed the actions of INBAR LACO and explored future collaboration opportunities, including technical cooperation, capacity building, and South–South and triangular partnerships to scale up bamboo-based solutions across the region.

Parallel to these efforts, capacity building and South–South cooperation were advanced through targeted training initiatives supported by China. INBAR LACO supported coordination with the Embassies of China in Ecuador and Brazil. Accordingly, from 6 to 24 June, a training course in Hangzhou took place on bamboo production and creative uses for Ecuadorian participants, funded by China's Ministry of Commerce. This was followed by a training course on bamboo technologies for plastic substitution, held in Nanping from 9 to 29 October, targeting Brazilian professionals and reinforcing bamboo's role in circular economy solutions.

A major advocacy milestone occurred in mid-2025, when bamboo was formally integrated into the national development agendas of four countries in the region — Cuba, the Dominican Republic, Panama and Costa Rica — through the formulation and presentation of National Bamboo Plans or Strategies. Developed in close collaboration with local authorities, academic institutions, producers and civil society, these instrumental policy documents elevated bamboo from a sectoral resource to a relevant policy solution linked to climate resilience, rural development and green industrialization.

In September, regional visibility was on display during the National Bamboo Week and the VI International Symposium on Bamboo, held in Pichari, Peru from 15 to 19 September. The event brought together more than 100 participants, including researchers, practitioners, policymakers and community representatives.

From 8 to 11 October, the Second International Seminar of the Network of Universities and Research Centers (RIUCI) was held in Mexico City, convening researchers from across Latin America and beyond to exchange knowledge on bamboo's environmental benefits, construction applications and sustainable management. Shortly after, from 13 to 17 October, bamboo featured prominently at the Indigenous Peoples Food Systems Global Hub, a parallel event to the World Food Forum at FAO Headquarters in Rome. At this event, the Ambassador and Permanent Representative of Ecuador presented joint work by FAO's Indigenous Peoples Unit and INBAR on biocentric restoration with Kichwa communities in Napo, highlighting bamboo's cultural and ecological significance.

Taken together, these milestones reflect a consolidated advocacy effort that moved bamboo from the margins to the center of policy dialogue, technical cooperation and international exchange. By linking national strategies with global platforms, strengthening South–South cooperation and engaging decision-makers across sectors, INBAR and its partners helped lay the institutional and technical foundations for scaling up bamboo-based solutions. This trajectory reinforces bamboo's value as a nature-based solution and sets the stage for deeper integration with climate policies, sustainable housing, food systems and green economies across Latin America and the Caribbean.

South Asia Regional Office

INBAR's South Asia Regional Office (SARO) has been actively engaged in various projects, policy initiatives and the transfer of knowledge and technology among its Member States in the region and across the Global South.

Notably, INBAR SARO is collaborating with the Asian Development Bank (ADB) on a technical assistance initiative titled

"Assessment of Bamboo Resources, Enterprise Development Needs and Opportunities in the Northeast Region of India." To guide evidence-based policymaking and targeted interventions for the Northeast Region's bamboo sector, INBAR has completed an in-depth appraisal of regional bamboo resources and their suitability for diverse industrial uses. The work maps out current and emerging value chains, diagnoses constraints and growth levers, and sets out a practical action plan to reinforce existing chains while catalyzing new ones to deliver economic, environmental and social gains across the region.

The study also outlines priority infrastructure needs, including dedicated bamboo parks and community-based aggregation and primary processing hubs, to enable sectoral growth in the region. For field-level resource mapping, INBAR developed a mobile application and trained local practitioners to deploy it. More than 1000 farmer records have been recorded across six states in the region. As part of this initiative, a series of events were organized to identify potential sources of investment for new enterprises and start-ups, and explore funding opportunities for value chain upgrading and the development of new value chains. Representatives from state and other government bodies and implementing agencies of various projects and initiatives, entrepreneurs, business development service providers and other key stakeholders also participated in such events and shared their experiences and inputs to create an appropriate action strategy for bamboo sector development.

INBAR SARO has also collaborated with GIZ and Dalmia Cement to facilitate the transition from fossil fuels to bamboo in Dalmia's cement plants and similar manufacturing facilities across India. This initiative includes support for scientific methods of bamboo plantation, management, utilization and the establishment of supply chain linkages. Additionally, various ecosystem service initiatives have been launched in the country, alongside efforts to restore degraded land through the promotion of bamboo planting. The initiative has benefited over 4000 farmers with training inputs, technical guidance and high-quality bamboo planting materials.

INBAR SARO is actively supporting Viet Nam and Sri Lanka as beneficiary countries under INBAR's bamboo-based restoration flagship, which was recognized by the UN Decade on Ecosystem Restoration in 2025.

As a "Pivotal Partner" in a GIZ-funded project, the office successfully supported triangular cooperation between India, Germany and Ghana to promote bamboo-based enterprise development and create sustainable high-value economic opportunities for farmers, artisans, micro and small enterprises, designers, traders and exporters. Local staff also facilitated the transfer of skills and knowledge from India to Ghana as part of this trilateral cooperation.

INBAR SARO has also supported Member States such as Viet Nam, Sri Lanka, Bangladesh and India to create new action project ideas and proposals to mobilize funding. It also entered into an MoU with the Odisha Bamboo Development Agency to support bamboo sector development in the state of Odisha, India. The office has organized several awareness-building meetings and workshops for bamboo start-ups, and also supported several of them with product design and planning. Support has also been given for strengthening INBAR's plastic substitution initiative in the region.

Host Country

On 1 December, INBAR and NSFC signed an MoU in Beijing, formalizing a new phase of scientific collaboration on bamboo and rattan. The agreement aims to advance fundamental research, accelerate talent development and support the global bamboo and rattan industry. As part of the ceremony, talks were also held to prioritize the conservation and utilization of bamboo and rattan germplasm resources as a key area for future cooperation while contributing Chinese knowledge and technical expertise toward the UN Sustainable Development Goals.

The Chinese government awarded the 2025 Chinese Government Friendship Award to Ali Mchumo, Chairman of the INBAR Board of Trustees, in recognition of his contributions to China's development. A Tanzanian diplomat with nearly five decades of experience, Mchumo served as INBAR's Director General from 2019 to 2024 before taking on his current role as Chairman of the INBAR Board. During his tenure, he championed bamboo and rattan as nature-based solutions for sustainable development, advanced South–South cooperation and North–South dialogue and played a major role in significantly raising the international profile of China's bamboo and rattan industry.

The 2025 China International Fair for Trade in Services (CIFTIS) was held in Beijing from 10 to 14 September at the Shougang Convention and Exhibition Center. INBAR participated in the CIFTIS for the fifth consecutive year. This year, INBAR unveiled a 200 m^2 bamboo pavilion themed "BASP: Making the World Greener and Cleaner for Future Generations," featuring a diverse range of bamboo products and showcasing bamboo's potential to combat plastic pollution and climate change. The INBAR Pavilion drew a number of diplomats and dignitaries from embassies and UN organizations in Beijing, including the Ambassadors of Panama and the Philippines to China. Visitors to the INBAR Pavilion at CIFTIS had the opportunity to learn more about bamboo's industrial development and other ways to support the broader promotion of bamboo and rattan.

In April, INBAR invited delegates from embassies in Beijing, including the Ambassadors of Panama, Uganda and El Salvador, to the 2025 International Bamboo Industry Brand Expo in Yibin, Sichuan Province, held from 24 to 27 April. The trip presented the chance for a high-level foreign audience to learn more about China's sustainable bamboo industry firsthand.

In June, 24 delegates from the Institute of South–South Cooperation and Development at Peking University, including senior government officials, visited the INBAR Secretariat for active exchanges with INBAR representatives.

Throughout the year, a series of high-level meetings took place at INBAR Headquarters. Visitors included France's Ambassador for the Environment; Uruguay's Minister for Foreign Affairs and Minister of Livestock, Agriculture and Fisheries; Nepal's Minister of Forests and Environment and the Nepalese Ambassador; Panama's Ambassador; and delegates from the Embassies of Fiji, Nepal and Zimbabwe. Across all of these meetings, talks emphasized renewing commitments, strengthening collaboration across a range of thematic topics of mutual interest and exploring new partnerships to advance common goals in sustainability, spearheaded by bamboo and rattan.

▲ *Ali Mchumo, former Director General of INBAR and current Chairman of the INBAR Board of Trustees (center), was the recipient of the 2025 Chinese Government Friendship Award.*


addis
bamboo

BAMBOO AND RATTAN THROUGH THE LENS

In 2025, INBAR held its annual photo competition under the theme "Celebrating the Global Presence of Bamboo and Rattan." Photographers from across Africa, Asia and the Pacific, Europe and North America, and Latin America and the Caribbean submitted entries, with a panel of professional photographers and INBAR experts selecting the Best Photo Award winners. A People's Choice Award was introduced for the first time this year, allowing the public to vote for their favorite images through social media.

The winning photographs span a wide range of subjects, vividly illustrating the diverse applications of bamboo and rattan around the world. These images include a bamboo plantation in Kenya, an artisan market in Ethiopia, traditional bamboo fish traps in the Philippines, novice monks crossing a bamboo bridge in Myanmar, a bamboo-timber gridshell at Edinburgh Napier University, a lively dance in an Ecuadorian bamboo forest and bare feet resting on a bamboo floor in Mexico. Together, they weave a story of how bamboo and rattan sustain ecosystems, livelihoods and cultural traditions around the world.

Top to bottom, left to right:

Best Photo:

- Africa: Stephen Barasa
- Asia & the Pacific: Reu Dawner Flores
- Latin America: Juan Salazar
- Europe: Hexin Zhang

People's Choice (bottom row):

- Africa: Fitsum Abera
- Asia & the Pacific: Nay Myo Hlaing
- Latin America: Antonio Flores Calvario

ACTION RESEARCH & COUNTRY SUPPORT

INBAR continued to pilot case studies and facilitate the exchange of best practices across its Member States.

Training course for community stewards and stakeholders was held on bamboo resource development in Maroua, Cameroon.

Africa

Increasing Local Communities' Resilience to Climate Change through Youth Entrepreneurship and Integrated Natural Resources Management — Cameroon

This project, funded by the International Fund for Agricultural Development (IFAD) and the Ministry of Environment, Nature Protection and Sustainable Development from 2023 to 2026, focuses on building climate resilience in communities around three national parks in Cameroon: Bénoué, Waza and Kimbi-Fungom. In 2025, the project established 22 kilometers of natural bamboo fencing in the buffer zones of all three parks and planted almost 19,000 bamboo and other non-timber forest product plants on degraded land within and around the parks. Three Farmer Field Schools were also established in communities near Bénoué and Waza National Parks for capacity building.

Training activities in 2025 reached over 2000 eco-entrepreneurs, including a substantial number of women and young people, on ecologically friendly business development, while two workshops on bamboo agroforestry and silvopasture were organized for over 70 participants. A joint workplan was signed with the Ministry of Employment and Vocational Training to strengthen training with bamboo. In addition, a two-hectare experimental plot was established at the University of Dschang Botanical Garden for conducting trials with bamboo.

Building Circular Economy and Climate Change Resilience through Bamboo Supply Chain Development — Ethiopia

Funded by AECID and implemented in partnership with Ethiopian Forestry Development from 2023 to 2025, this project targeted bamboo supply chain development and climate resilience in Ethiopia. Major outputs from 2025 included the publication of a peer-reviewed journal article and technical report to estimate biomass and carbon stock for highland bamboo in the Sidama Region. At the same time, project implementers established two common production facilities to enhance bamboo product manufacturing.

Two bamboo charcoal kilns were manufactured and delivered to small

▲
Drake Ndyamuhaki of Bamboo Innovation Hub making a bamboo craft coffee mug in Kampala, Uganda. Credit: Todd Brown/ UNEP

and medium enterprises to convert production and processing waste into value-added products. The Bamboo Multi-Purpose Centre was established to function as a bamboo market depot, which was handed over to bamboo-growing cooperatives in Bonke District, South Ethiopia. The project came to a close in 2025, concluding with a final evaluation and technical report.

Developing Bamboo and Rattan-Based Enterprises for Sustainable Livelihood and Income Generation — Ghana

This project, delivered in partnership with Ghana's Forestry Commission Training Centre, the Ministry of Lands and Natural Resources and GIZ, ran from 2024 to 2026. It focused on building artisan capacity and cross-sectoral knowledge in bamboo and rattan enterprise development. Two workshops were organized with Kwame Nkrumah University of Science and Technology and India's North East Centre for Technology Application and Reach for 100 faculty members and students of Indigenous art technology. Four training programs on design and bamboo processing were also carried out by Indian experts for 200 master trainers in Ghana. Five Ghanaian bamboo and rattan master artisans participated in an advanced technical training and cross-learning field visit to India.

PADFA II–INBAR Initiative: Bamboo Value Chain Development to Support Rice and Onion Post-Harvest — Cameroon

Funded by the International Fund for Agricultural Development with an operational period spanning 2024 to 2025, this initiative supported smallholder farmers and craftsmen in Cameroon through bamboo value chain development. In 2025, two nurseries were established in Pitoa and Bangangté, producing over 20,000 bamboo plants. Two training programs on bamboo planting material production were conducted for almost 80 beneficiaries, and two Farmer Field Schools were also established in Pitoa and Tchontchi.

Bamboo Sector Development — Chad

This project, funded by the Government of Chad and running from 2023 to 2025, aimed to lay the groundwork for the

Workshop aimed at advancing the national bamboo and rattan sectors was conducted in N'Djamena, Chad.

growth of a national bamboo sector. In 2025, a remote sensing-based bamboo resource assessment and value chain study were completed, and the report validated. Work on developing a national bamboo strategy for Chad was also undertaken.

Bamboo Sector Development — Togo

Implemented in partnership with the Government of Togo from 2023 to 2025, this project focused on establishing a robust foundation for future bamboo and rattan development. A bamboo and rattan value chain analysis study was completed, with final editing and translation from English to French undertaken in 2025. A National Bamboo and Rattan Strategy was finalized and is pending final approval by the Minister for Environment and Forests.

Asia

BASP Initiative — China, Global

Since its launch in 2022, the BASP Initiative has aimed to leverage bamboo to reduce plastic pollution, address climate change and accelerate the achievement of the UN's 2030 Agenda for Sustainable Development. Over the last four years, it has been a major highlight at key international events and conferences. Extensive work has been carried out to coordinate the selection, collection, preparation and transportation of bamboo materials from pilot countries for product development tests in China. Native species with the best performance in timber use and productivity were selected. To date, bamboo materials from three countries, namely, Cameroon, Brazil and Ecuador, have been collected, and mechanical performance tests and physical and chemical studies have been completed.

Alongside this, investigative fieldwork has been conducted in the bamboo sector of pilot countries. Research covering the full life cycle of bamboo as a plastic substitute has been carried out, spanning bamboo growth characteristics, material properties, genetic studies, processing technologies and equipment, and life cycle assessments. Key progress includes: 1) highly efficient cultivation systems for large-sized tropical bamboo species; 2) major breakthroughs in genetic studies revealing the key to the rapid growth of bamboo (published in the *Proceedings*

of the National Academy of Sciences of the United States of America (PNAS)); 3) efficient processing technology for bamboo materials to replace plastic household products; 4) a new machine prototype for high-precision and rapid milling of bamboo-wood composite components; 5) high-value-added bamboo materials to replace plastics in floriculture and farming; and 6) key performance regulation technology for bamboo used in speaker enclosure construction. Related research is still ongoing and is expected to be rolled out to pilot countries across Africa, Asia and Latin America, erecting the scaffolding to support a global value chain that chooses bamboo over plastics.

Utilization of Atmospheric Measurements to Establish the Carbon Sequestration Capacity of Bamboo Forests — China

Implemented in partnership with the World Meteorological Organization (WMO), Zhejiang University of Technology (ZJUT), China Meteorological Administration (CMA), UNFCCC, the Institute of Geological and Nuclear Sciences (GNS) and the National Institute of Water and Atmospheric Research (NIWA) from March 2022 to February 2026, this project focuses on quantifying the carbon sequestration potential of bamboo forests.

In 2025, field biomass carbon inventories were conducted in February and August, and the data have been analyzed and details shared with the donor. A summary report on bamboo forest management practices at project sites was also produced and distributed. An analytical report integrating four years of field survey data from Anji on the impact of forest management on carbon sequestration of Moso bamboo is underway, and a journal paper investigating the rapidly increasing carbon uptake of bamboo forests in the context of climate-induced greening is under review.

Life Cycle Assessment Research on Carbon Emissions and Carbon Storage of Structural Glued Laminated Bamboo Products — China

Implemented in partnership with Tsinghua University, Swiss Federal Institute of Technology in Zurich (ETH Zurich), EcoInvent and Greezu, this project aims to investigate the life cycle of carbon emissions resulting from engineered bamboo products, lasting from 2023 to 2026. Comparative research is being done on life cycle analysis covering glued laminated bamboo structures as well as concrete, steel and timber alternatives, the manuscript of which is now under review for publication.

Assessment of Bamboo Resources, Enterprise Development Needs and Opportunities in the Northeast — India

Funded by ADB, this project assessed bamboo resources and value chain opportunities across the North Eastern Region of India in the 2024–2026 period. A mobile app-based bamboo resource assessment was completed on a pilot basis covering 1000 households, and detailed value chain studies were held across six pilot states with proposed action strategies. International and national market projections were completed and submitted to ADB and India's National Bamboo Mission, along with a detailed policy roadmap with implementation guidance for the State Bamboo Missions of the participating project states.

Latin America and the Caribbean

Promoting Bamboo as a Nature-Based Solution for Livelihood Development and Environmental Management — Costa Rica, Panama, Cuba, Dominican Republic, Colombia, Ecuador and Peru

Funded by AECID and implemented across seven countries for three years from 2022 to 2025, this regional project advanced bamboo policy, training and institutional development.

In Costa Rica, four training sessions on the topic of value addition were held for at least 70 participants, a National Bamboo Round Table was operationalized and the Costa Rica National Bamboo Strategy 2025–2035 was formally published.

In Panama, seven training programs on value addition were also held, which reached over 110 participants, the CONABA 2025–2026 Bamboo Development Action Plan was approved and other awareness events engaged 120 participants.

In Cuba, 11 workshops on sustainable management, construction and strategic planning helped to educate nearly 200 participants.

In the Dominican Republic, two construction workshops were held for over 60 participants, the 2025–2035 National Bamboo Strategy was launched and a sensitization workshop was convened for over 160 participants.

At the regional level, the Second International Seminar of RIUCI was organized in Mexico, bringing together top researchers from eight Member States from Latin American and the Caribbean.

Productive and Technological Innovation with Bamboo in Cross-Border Regions — Peru

In 2025, implemented in partnership with Plan Binational (Ecuador and Peru) and the National Forestry and Wildlife Service (SERFOR), seven Bamboo Technical Roundtable workshops were held in Piura, Cajamarca and Amazonas for nearly 200 beneficiaries, and two technical skill development workshops were organized for two producer organizations, with 60 individuals taking part. The project will last until June 2026.

Significant progress has been observed during the project period. Notables include 110 hectares of demonstration bamboo plantations have been created in three departments, or regions, of Peru. A bamboo preservation center has been established in the Castilla District. Bamboo charcoal processing enterprises have also been established in Yamango.

Skill development training programs in bamboo construction, preservation and treatment reached approximately 200 participants, and one municipal ordinance was approved for the Imaza District, which prioritized bamboo in disaster risk management schemes. The project also completed market analyses of charcoal consumption and evaluated potential demand for round bamboo in coastal regions.

KNOWLEDGE SHARING & LEARNING

INBAR shared knowledge and coordinated training programs to raise awareness and build capacity among its Member States.

Vegetative bamboo propagation training was provided for the SCOOP NARRAL co-op in Bawan, Cameroon.

Equipping bamboo champions worldwide with skills to thrive

A four-day workshop on the development of Chad's bamboo and rattan sectors was held in N'Djamena on 24 January, organized by Chad's Ministry of Environment, Fishery and Sustainable Development in collaboration with INBAR. Participants from government ministries, research institutions and international institutions including the World Bank, the UN Development Programme and the European Union gathered to develop a national strategy and action plan. Representatives at the workshop identified 10 strategic areas covering governance, sustainable resource use, research and innovation, financing, capacity building and climate change mitigation.

The meeting also established a broad coalition of stakeholders who are committed to developing the sector and identified potential funding partners to support implementation. The overarching vision is to transform bamboo and rattan into pillars of Chad's green economy by 2035, driving economic growth and climate resilience. INBAR committed to continuous technical and financial support as the strategy evolves and comes closer to finalization and implementation.

The ACREGIR project hosted a two-day capacity-building workshop on gender mainstreaming and gender-transformative approaches in Cameroon from 11 to 12 March. The event brought together dozens of community stewards from Kimbi-Fungom, Waza and Bénoué National Parks. Organized in collaboration with the Commodity Value Chain Development Support Project – Phase II (PADFA II), INBAR and the IUCN, the workshop introduced participants to gender-focused approaches, explored ways to strengthen gender inclusivity in field activities and provided a platform for stewards to share challenges and propose improvements.

Field experiences from the workshop illustrated both progress and persistent gaps. In Waza National Park, women have played a central role in maintaining community nurseries. In Bénoué, 70% of members of one cooperative are women actively involved in plantation management. In Kimbi-Fungom, however, only 20% of activities involve women, largely due to religious and

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Bamboo construction training program concluded with participants building a bamboo charcoal briquette processing facility in Piura, Peru.

traditional barriers. Participants agreed that continued efforts are needed to boost women's participation and embed gender considerations into the project.

As part of the project "Productive and Technological Innovation with Bamboo in the Economic Border Corridor of Northeastern Peru," workers and construction foremen in the Piura region completed a Specialized Training Program for Bamboo Builders, delivered in partnership with the Universidad San Martín de Porres. Spanning 120 hours of virtual and in-person instruction, the training program covered layout, frame assembly, joint connections and structural installation. Participants completed the practical phase and received certification, with their training culminating in the construction of a 300 m^2 processing center for bamboo charcoal in the village of Piscan.

The new facility will benefit 60 producers from the Association of Small Bamboo Producers of the Yamango District, enabling them to make productive use of residues from their bamboo plantations. Bamboo briquette production offers a sustainable and more affordable alternative to algarrobo charcoal, demand for which reaches over 426,000 kilograms per month in the region. By reducing pressure on dry forests while delivering promising economic opportunities for local producers, the project aims to promote the briquette plant as a strategic hub for bamboo transformation and local market development.

In 2025, the Second International Seminar of RIUCI was held at the Autonomous Metropolitan University in Mexico City. The conference united researchers, professors and students from across Latin America and the Caribbean. The event featured over 30 presentations on bamboo research and innovation, eight hands-on technology transfer workshops on topics from shoot production to sustainable building systems, and a Meeting of RIUCI Delegates, which reviewed the current workplan. Established in 2022 with support from AECID and implemented by INBAR, RIUCI now consists of 54 member institutions across the region.

Among the initiatives highlighted at the delegates' meeting was the launch of the First International Bamboo Chair, led by the Technological University of Pereira.

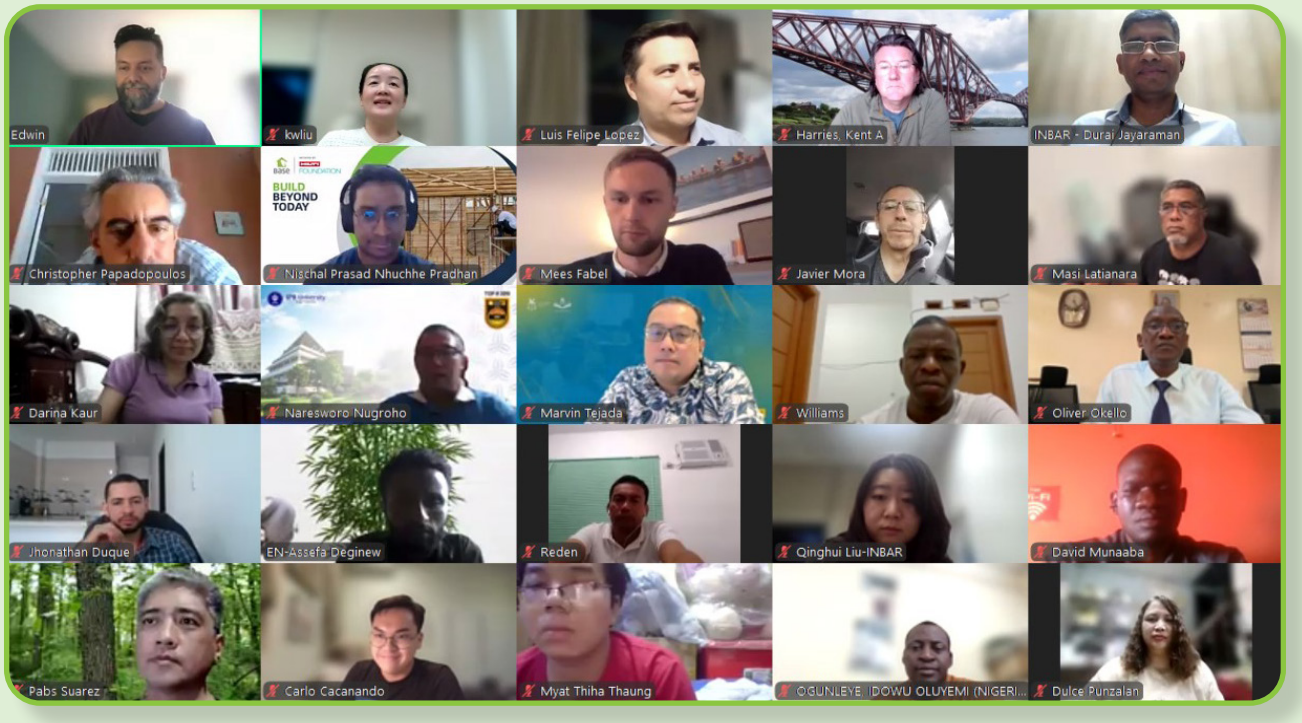
Participants of the ADB-INBAR Forum displayed their woven bamboo artwork created during the event in Anji, China.

Academic collaborations between São Paulo State University and the National Institute for Forestry, Agriculture and Livestock Research (INIFAP) were also highlighted, alongside national coordination efforts among other universities. The seminar reaffirmed RIUCI's role as a platform for scientific cooperation and reinforced bamboo's standing as a versatile and robust nature-based solution for green development across the region.

In July, INBAR coordinated a study tour in Zhejiang Province, China, for 40 delegates from the Philippines, Indonesia and Nepal, including officials from ADB as well as representatives from government and the private sector. The tour included field visits to Anji and an ADB-INBAR Bamboo Innovations and Value Chain Development Forum, with the goal of deepening participants' knowledge of bamboo value chains and fostering a healthier business environment for bamboo enterprises in their home countries.

Traditional human settlements in the Hindu Kush Himalaya region face growing threats from climate change and unplanned urban growth. To help combat these challenges, the International Centre for Integrated Mountain Development (ICIMOD) and INBAR took major steps to strengthen cooperation and develop sustainable solutions in 2025. ICIMOD expressed interest in joining hands under the BASP Initiative, co-launched by INBAR and China, to explore bamboo's potential as a sustainable alternative to cement, wood and plastics. At the Regional Conference on Sustainable and Resilient Mountain Settlements in Thimphu, Bhutan, INBAR introduced the BASP Initiative and Global Action Plan (2023–2030) to more than 50 experts and officials from the eight countries in the region, covering demonstration construction projects, value chain cases, international standardization progress and capacity building.

The conference concluded with a leaders' call for regional cooperation to scale up vernacular architecture and nature-based solutions, and recommended the following actions: Policy identification and urban planning; development of sustainable vernacular constructions and related supply chains; and related research, knowledge sharing and talent cultivation projects. Later



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Over 1000 participants from nearly 70 countries attended the 2025 International Online Seminar — Towards Mainstreaming Bamboo Construction.

in the year, an ICIMOD delegation embarked on a study tour following the conference to two of the major industrial bamboo clusters in China's Sichuan Province to deepen their understanding about the practical applications of bamboo for clustered development. The delegation gained firsthand exposure to bamboo construction materials, advanced technologies and the broader value chain. Both organizations are planning further collaboration on shared priorities in the region.

The 2025 International Online Seminar — Towards Mainstreaming Bamboo Construction: Research and Practice — convened from 6 to 27 November. Organized by the INBAR Task Force on Bamboo Construction, and with support from the International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM) Technical Committee 322, the event drew over 1000 registered participants from nearly 70 countries. The seminar focused on advancing bamboo as a sustainable construction material, with emphasis on reducing environmental impact and building resilience.

Across four sessions, senior experts from Canada, China, Colombia, Germany, India, Indonesia, the Philippines, Switzerland and the United Kingdom delivered 12 presentations covering life cycle assessment of bamboo materials and buildings, engineering challenges and standards, architectural innovation and the social and policy frameworks essential to scale up bamboo construction globally. By bringing together leading experts and young researchers, the seminar advanced both the science and the practical pathways for wider bamboo adoption in the built environment. Since its launch in 2020, the annual seminar has offered a free, accessible platform for global audiences to stay updated on the latest developments in bamboo construction research and practice.

In 2025, INBAR and China jointly implemented four bilateral seminars targeting Brazil, Cameroon, Ecuador and Guinea, and two multilateral seminars for Bangladesh, Benin, Cuba, Gabon, Gambia, Kenya, Lao PDR, Nepal, Nigeria, the Philippines and the Solomon Islands. Across the 15 countries mentioned, nearly 140 participants took part in the program.

▲ The Bamboo Construction Manual for Single-story Housing *is a comprehensive introduction to the composite bamboo shear wall system. Credit: Base Bahay*

Now in its third year, the BASP Initiative is reaching a growing number of countries. Many participants identified INBAR and China's joint seminars as key platforms for learning about advanced technologies and adaptable bamboo development models. INBAR received positive responses during the BASP courses of each seminar, with strong interest for more robust exchange. Regarding the bilateral seminars for Brazil, Cameroon and Ecuador, participants were key representatives from each country. They learned about specific technologies, best practices and adaptable experiences. At their request, INBAR carried out dedicated exchange sessions to discuss each country's needs and the potential for collaborative actions.

Building standards to ensure quality

The Task Force on Construction advanced INBAR's international standardization efforts in 2025, with one ISO standard (ISO 7567) published, two further standards (ISO 22157 and ISO 19624) under development and two new standards under consideration covering bamboo scrimber products and design specifications on engineered bamboo structures. INBAR experts contributed valuable expertise in the 37th ISO Technical Committee (TC) plenary meeting held in Ottawa. Two landmark knowledge products were published: 1) *Bamboo Construction Manual for Single-story Housing*, authored as a joint project between INBAR and Base Bahay Foundation; and 2) *Manual for the design of bamboo structures to ISO 22156:2021* published by the Institution of Structural Engineers, the authors of which are all members of the INBAR Bamboo Construction Task Force.

The Task Force on Rattan continued developing two Voluntary Guideline Standards (VGSs). One is a field guide to the rattans of the world; the other is on the mechanical grading of commercially important rattan canes.

The Task Force on Bamboo for Renewable Energy finalized three VGSs on bamboo charcoal kiln design, bamboo charcoal commoditization and improved cook stove design for bamboo charcoal. Work commenced on a new standard addressing bamboo biochar for the agriculture sector.

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Straws made from small-diameter round bamboo culms or branches.

The Task Force on Sustainable Bamboo Management finished two VGSs on the step-by-step use of bamboo for forest landscape restoration as well as on the certification of natural and established bamboo plantations. Two further standards are under development. They focus on the certification of quality planting material for bamboo as well as bamboo nursery management and production of quality planting material for bamboo. Finally, the Task Force initiated the development of a new item on guidelines on empirical methods for bamboo data collection and processing.

On 22 January, ISO published ISO 16830, the world's first international standard for a BASP product. The standard lays out clear requirements, test methods, storage, packaging and labeling for bamboo drinking straws. The standard, the 12th issued by ISO's Technical Committee on Bamboo and Rattan (ISO/TC 296), was led by the International Center for Bamboo and Rattan, INBAR's sister organization focused on research that supports and cooperates with INBAR to promote the sustainability of bamboo and rattan industries. The standard also received diverse contributions from experts in industry, universities and other stakeholders across ISO/TC 296 member countries.

The standard addresses an urgent environmental problem: single-use plastic straws are rarely recycled and add a considerable amount of plastic waste to soils, waterways and oceans. Bamboo straws, made through techniques such as drilling holes in bamboo sticks or rolling bamboo veneer, offer a renewable and biodegradable alternative with strong market potential. The publication of this standard marks a tangible step forward for scaling up sustainable substitutes for single-use plastics and making better use of global bamboo resources.

Released on 5 November, the *Bamboo Construction Manual for Single-story Housing* is a joint publication by INBAR and Base Bahay Foundation, produced with support from the Hilti Foundation. The manual provides a comprehensive, step-by-step guide to the composite bamboo shear wall (CBSW) system, which integrates full bamboo culms with modern construction techniques and exterior plaster coating. The work offers a detailed account of the entire

▲ *Bamboo homes are environmentally friendly, cost-effective and resist disasters like earthquakes and typhoons. Credit: Base Bahay*

construction process, from treating and grading bamboo culms to prefabricating wall components and roof trusses. It also elaborates on site preparation, foundation work, best practices and common pitfalls.

Originating in Latin America, this bamboo wall system has been widely adopted in the Philippines and Nepal for its resistance to earthquakes and typhoons. The work is aimed at architects, engineers, builders and communities in lower- and middle-income countries where bamboo grows in abundance. It addresses a longstanding gap in standardized practice and positions bamboo as a viable material for resilient, low-carbon housing construction.

The Institution of Structural Engineers has published the *Manual for the design of bamboo structures to ISO 22156:2021.* The work is an authoritative guide for structural engineers and construction professionals regarding the safe use of bamboo in permanent structures up to two stories high. Authored by four international experts — all members of the INBAR Bamboo Construction Task Force — the manual covers the complete design protocol, from sourcing and grading bamboo to structural analysis, seismic and wind hazard design, connections, durability and successful cases in the real world.

The world has long lacked standard guidance for bamboo construction. This manual fills that gap. Given that the construction industry is responsible for nearly 40% of global carbon emissions, the authors argue for bamboo as a low-carbon, durable alternative that is gaining recognition as an effective building material. The manual is written to support engineers at every stage, drawing on the ISO 22156:2021 standard, which has been the most widely accepted international bamboo standard since the 2000s. The work represents a culmination of decades of progress, drawing on a growing body of evidence that continues to reveal bamboo's potential for novel applications across the built environment.

Publications

All publications listed below are in English unless stated otherwise. A full list of INBAR publications can be found on the online Resources Center: www.inbar.int/resources/.

Annual Highlights

INBAR Annual Highlights 2024 (English, French, Spanish, Chinese)

Bamboo and Rattan Update

Volume 6 Issue 1 (March) Sustainable Production and Consumption with Bamboo (English, French, Spanish, Chinese)
Volume 6 Issue 2 (June) Bamboo for Climate Action (English, French, Spanish, Chinese)
Volume 6 Issue 3 (September) Life on Land with Bamboo (English, French, Spanish, Chinese)
Volume 6 Issue 4 (December) Bamboo and Rattan: Together for the Goals (English, French, Spanish, Chinese)

General Information

La voz de la guadua – Historieta para niños (Spanish only)
Manual for the design of bamboo structures to ISO 22156:2021
Bamboo Construction Manual for Single-story Housing
Cartillas técnicas del manejo sostenible del bambú – ECA BAMBÚ en el Perú (Spanish only)
Bamboo in Fisheries and Aquaculture: Fact Sheet
Conociendo el Bambú para su Reproducción (Spanish only)
Modelo de Articulación e Integración de los actores del Bambú en el Perú (Spanish only)

National Plans and Policies

Kenya National Bamboo Development Strategy and Action Plan (2025–2035)
Togo National Bamboo and Rattan Development Strategy and Action Plan (2025–2029) (English and French)

Trade Reports

Trade Overview 2023: Bamboo and Rattan Commodities in the International Market

Technical Reports

Bamboo resources assessment: A methodological approach using SEPAL with case studies in Asia

Working Papers

Análisis de la Cadena de Valor del Bambú en Argentina (Spanish only)
Revisión y análisis de políticas nacionales que contribuyen o limitan el desarrollo del sector del bambú en la República Dominicana (Spanish only)
Community Engagement in Mapping On-Farm Bamboo Resources in Ethiopia
Allometric Modeling, Biomass Estimation, and Carbon Stock Potential of Highland Bamboo in Natural Forests and Homestead Farms in the Sidama Region, Ethiopia
Análisis Rápido de la Cadena del Bambú en Cuba y su normativa (Spanish only)
Análisis de los Recursos de Bambú en Argentina (Spanish only)

Academic articles published by INBAR staff

Abebe, S., Jayaraman, D., Malinga, M., Perry, A., and Reza, S. (2026). "Carbon stock of Oxytenanthera abyssinica (A.Rich.) Munro forests in northern Uganda: A vital nature-based climate solution." *Advances in Bamboo Science*, 14. https://doi.org/10.1016/j.bamboo.2025.100216.

Burru, D., Jayaraman, D., Chinke, M., Sileshi, G., Rawat, Y., Gizachew, B., Reza, S., Desalegne, F., and Worassa, K. (2025). "Allometric Models for Estimating Biomass and Carbon Stocks in Natural and Homestead Highland Bamboo Stands in the Sidama Region, Ethiopia." *Forests*, 16(4). https://doi.org/10.3390/f16040701.

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Sasu, P., Opara, E., Ellison, F., Koblah, R., Adjei-Mensah, B., Anim-Jnr, A., Kotoku, V., and Kwaku, M. (2025). "Valorising bamboo leaves for climate-smart livestock production: Nutritional profile, emission reduction, and farmer adoption in Ghana's transitional zones." *Advances in Bamboo Science*, 11. https://doi.org/10.1016/j.bamboo.2025.100151.

Wang, M., Liu, K., Lu, Q., Leng, Y., Song, X., and Xu, Q. (2025). "Experimental study on seismic performance of braced laminated bamboo frames." *Journal of Building Structures*, 46 (S1). https://doi.org/10.14006/j.jzjgxb.2025.S1.0026.

Events

Expert Group Meeting on Strengthening the Engagement of Regional and Subregional Entities in the Work of the United Nations Forum on Forests, 21–23 January, Bangkok, Thailand

Ministerial Conference on the Deployment of Payments for Environmental Services, 27–29 January, Kinshasa, the Democratic Republic of the Congo

Marine-based Products and Services Expo, 3–5 March, Palais des Nations, Geneva, Switzerland

Graduation of the third cycle of the Workshop School of Sustainable Bamboo Construction in Manabí, 7 March, Ecuador

INBAR International Photo Competition, 17 March–15 October, global

11th session of the Africa Regional Forum on Sustainable Development, 9–11 April, Kampala, Uganda

20th Session of the UN Forum on Forests, 5–9 May, New York, United States

European Bamboo Expo, 22–24 May, Dortmund, Germany

Third UN Ocean Conference, 9–13 June, Nice, France

62nd session of the UN Framework Convention on Climate Change Subsidiary Bodies, 16–26 June, Bonn, Germany

6th International Conference on Bio-Based Building Materials, 17–20 June, Rio de Janeiro, Brazil

Trade and Environment Week of the World Trade Organization, 30 June–4 July, Geneva, Switzerland, hybrid

Webinar: Future-Proof Housing: Sustainable Construction, Comfort, and Climate Resilience in Latin America, 20 August, hybrid

Second Africa Climate Summit, 1–6 September, Addis Ababa, Ethiopia

China International Fair for Trade in Services, 10–14 September, Beijing, China

IUCN World Conservation Congress, 9–15 October, Abu Dhabi, UAE

UK Bamboo Summit 2025, 10 October, Stoke-on-Trent, United Kingdom

2025 International Online Seminar – Towards Mainstreaming Bamboo Construction: Research and Practice, 6–27 November, online

UN Climate Change Conference, 10–21 November, Belém, Brazil

Third International Young Scientist Forum for Climate Change, 3–5 December, hybrid

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