



International Network for Bamboo and Rattan

# **In Partnership for Inclusive and Green Development**

**INBAR 15<sup>th</sup> Anniversary**





15th Anniversary Year

**In Partnership for Inclusive and Green Development**





國際竹藤組織

江澤民

Above: Calligraphy inscribed for INBAR by China's President Jiang Zemin in 1997.

Photo credit: Anji Bamboo Society



# Preface

**Dai Bingguo**

State Councilor of the People's Republic of China



"Settling down on the eastern peak of the Taishan Mountain, the wise sage with his plain bamboo hat and rattan belt welcomes friends from afar" (excerpt from "The Old Man of Taibai" by Zhang Ji). One feels a sense of awe for nature's vitality, power, perseverance, modesty, and generosity, whenever bamboo and rattan are mentioned. Since its formal launch in Beijing, China on 6 November 1997, the International Network for Bamboo and Rattan (INBAR) has advanced the development and utilization of bamboo and rattan resources, focusing on the protection of their ecosystems, working towards the goal of inclusive and green development. INBAR's wide branching network, like shading leaves, brings extensive benefits to the Earth and its people.

In the 1990s, the international community recognized the significant role bamboo and rattan played in the rural socio-economic development of developing countries in Africa, Asia and Latin America. In response to an initiative of the Canadian and Chinese governments in 1997, the International Development Research Center of Canada (IDRC), the Chinese Government and the United Nations International Fund for Agriculture Development (IFAD) jointly launched the International Network for Bamboo and Rattan (INBAR)—the only international intergovernmental organization in the world exclusively dedicated to the sustainable utilization and development of bamboo and rattan resources.

As the first independent, non-profit international organization headquartered in China, INBAR makes unremitting efforts and explores innovative ways to improve the technical capacity of its member states, facilitate sustainable development of the bamboo and rattan sectors, address climate change, protect biodiversity and increase benefits for bamboo and rattan producers and consumers. INBAR works to achieve these objectives through the promotion of South-South cooperation in the field of bamboo and rattan. INBAR now has an ever expanding global coverage, with member states and partners spanning across the globe and activities covering all major bamboo and rattan producing and consuming regions in Asia, Africa, Latin America, North America, Europe and Oceania.

The development of the green economy was highlighted as a key global issue at the 2012 United Nations Conference on Sustainable Development held in Rio de Janeiro, Brazil. At the conference the international community recognized the fundamental role of forestry in sustainable development. Addressing these global challenges and opportunities, INBAR is working to strengthen the role of bamboo and rattan in poverty alleviation and environmental protection by protecting and fostering product innovation, promoting sustainable resource utilization, and facilitating trade. INBAR focuses on promoting sustainable economic development in bamboo and rattan producing countries that follows an inclusive and sustainable development path.

The Government of China attaches great importance to issues concerning sustainable development, such as the green economy, ecological protection and inclusive development. Within the framework of South-South cooperation, China has made contributions to the UN Millennium Development Goals in developing countries and towards achieving global goals for sustainable development. As renewable plant resources with great production potential, bamboo and rattan play a unique and important role in poverty alleviation and environmental protection. The bamboo and rattan sectors have the potential and are bound to make great contributions to the sustainable development of the world. The Chinese Government will continue to support and work together with INBAR in China and globally for sustainable development using bamboo and rattan.

I sincerely wish INBAR a bright future with new accomplishments in inclusive and sustainable development and hope it will make a new and even greater contribution to humanity in the fields of poverty alleviation, environmental protection and economic development.



ABOUT INBAR



THE BIRTH OF INBAR



ACHIEVEMENTS



THE WAY FORWARD





# Bamboo

Over 1250 species of these giant woody grasses grow throughout the tropics and subtropics. More than 100 of these are used commercially. Their spreading, rhizomatous root systems help bind soil and prevent erosion, while their evergreen cover provides valuable wildlife habitats.

Bamboo is easy to cultivate on land unsuitable for crops or at the edges of forests. The woody stems (culms) grow quickly and can be cut to re-grow throughout the year, while yields respond exceptionally well to limited agricultural inputs. Bamboo can be a significant addition to farm or village incomes even if land is in short supply.

Many types of bamboo products can be made with little capital investment while initial processing and manufacture can be done by local people in villages. In some areas much of this work is done by women. But bamboo also lends itself to greater added value through innovation: for example, products such as textiles, flat-pack furniture, and laminated lumber that can be cut and used like tree wood have all been developed and the pace of new product innovations is accelerating. The international market potential for bamboo products is huge. In 2010, the export volume of the world's major bamboo products (bamboo, bamboo shoots, bamboo charcoal, bamboo pulp, bamboo handicrafts, bamboo plates, bamboo furniture, etc.) amounted to \$ 1.7 billion, with China, Indonesia, Vietnam, the European Union, the United States, the Philippines, and Thailand as the main exporting countries.





Photo credit: Chen Lixin





## Rattan

Rattans are spiny, climbing palms. Some 600 species grow in the tropical forests of Asia and Africa, with around 50 traded commercially. Unlike bamboo, rattan does not re-grow rapidly and is difficult to manage sustainably. Over-exploitation and loss of habitat have led to a dramatic reduction in the world's rattan resource over the last 50 years.

Rattan is used locally for bridges, netting and baskets. Most is gathered by villagers or forest dwellers and in some places communities have developed advanced management systems - such as the rattan gardens in Kalimantan, Indonesia.

Commercially, rattan is mainly used to make furniture and craft goods for export. Rattan collection is often separated from manufacture so the poorest people in the rattan producing area do not benefit from the value of the finished product. But products can be made by small craft industries to increase local incomes significantly.

Product quality and design are two of the most important factors influencing marketability. Export of rattan products can make important contributions to national incomes. In 2010, the export volume of the world's major rattan products (rattan, rattan handicrafts, rattan furniture) reached \$900 million. China, Indonesia, Malaysia and the Philippines produce and export the majority of the world's rattan and rattan products. Some countries, such as Indonesia, have introduced export controls on rattan poles and semi-processed rattan with the aim of protecting resources and boosting local manufacturing, but the effects on local and global trade appear to be mixed.





# ABOUT INBAR

Photo credit: Wu Guangmin



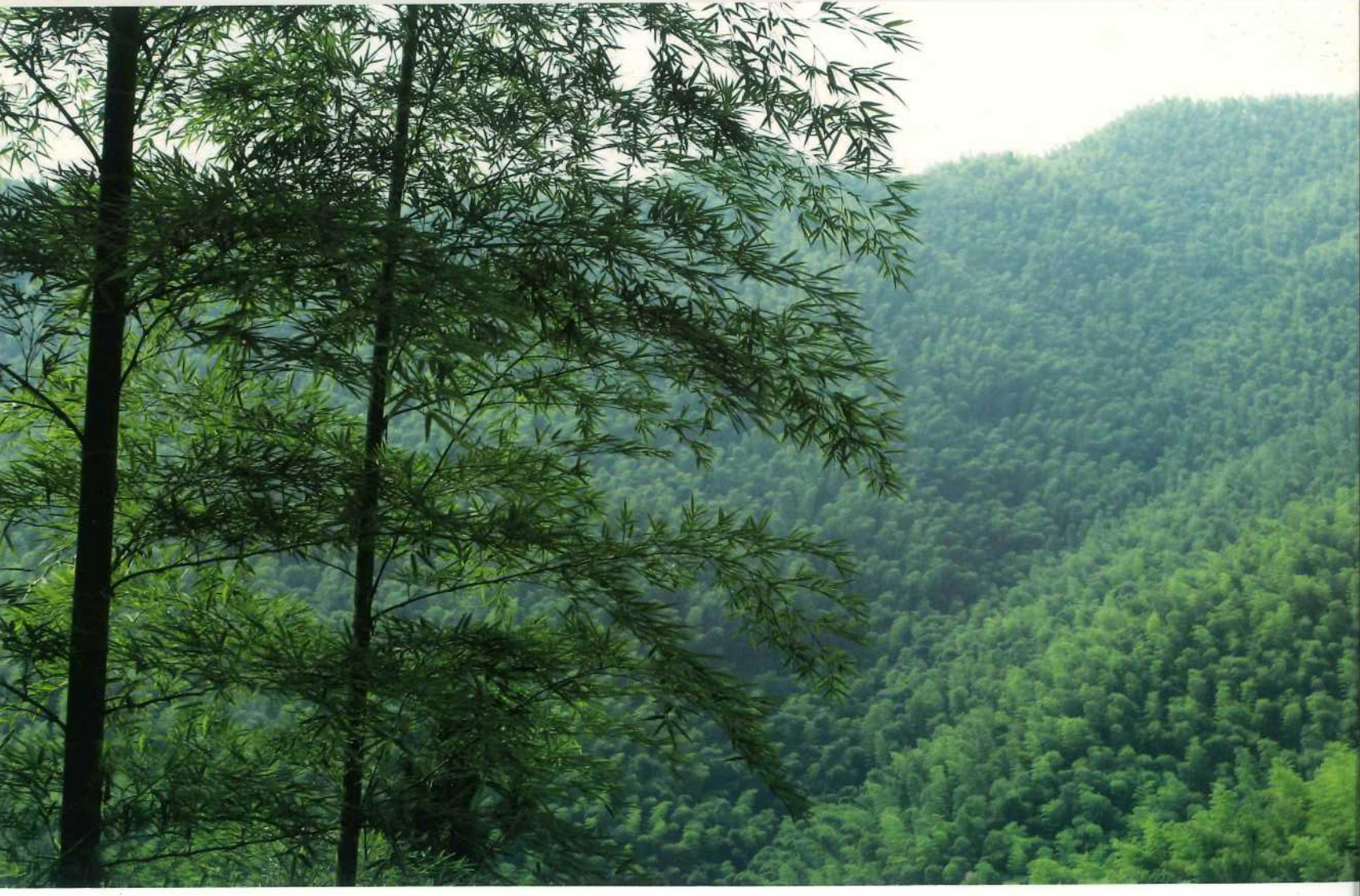
## INBAR - Leadership



Hasan Mahmud  
Chairman, INBAR Council



Sileshi Getahun  
Vice Chairman, INBAR Council





Tesfai Teclé  
Chair, INBAR Board of Trustees



Jiang Zehui  
Co-Chair, INBAR Board of Trustees



Coosje Hoogendoorn  
Director General, INBAR Secretariat

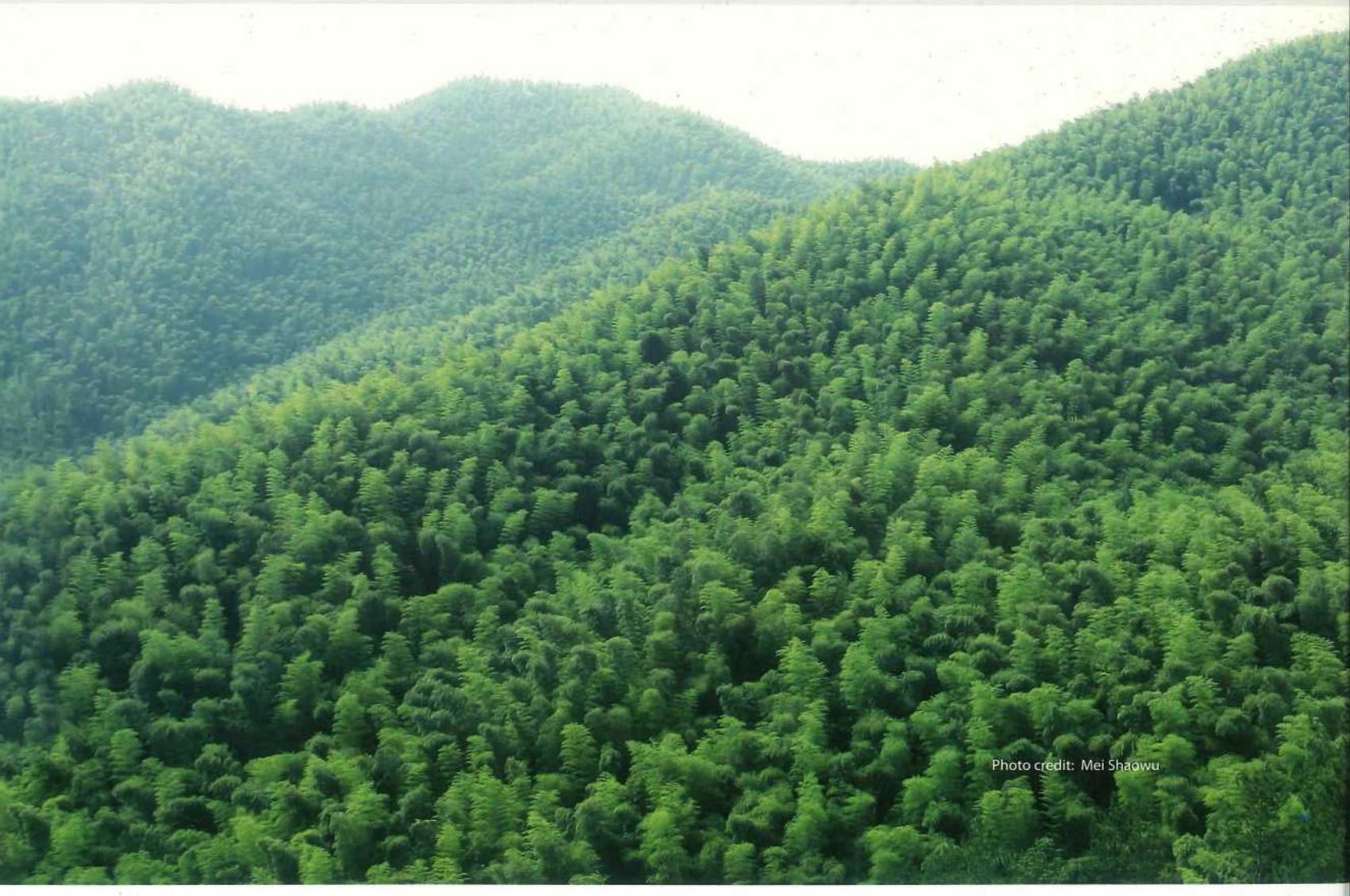


Photo credit: Mei Shaowu





## Introduction to INBAR

The International Network for Bamboo and Rattan (INBAR) is an inter-governmental organization established in 1997. INBAR's headquarters is located in Beijing, China, and we have regional offices in Asia, Africa and Latin America. Our network connects governments, research institutions, commercial organizations, NGOs, rural communities and individuals, to undertake development projects involving bamboo and rattan, and provide a range of support to develop the sector.

In fifteen years INBAR has developed a unique role in finding and demonstrating innovative ways of using bamboo and rattan to alleviate poverty and protect environments and biodiversity, setting up programmes to prove their value and to help people apply what we have learned. The INBAR network is widely recognized as the premiere source of expertise on bamboo and rattan. INBAR is a field-based organisation with active work programmes in our member countries. It works on technical innovations that help people make use of bamboo and rattan in development programmes; and assists the development of new institutions and policies that help increase the contribution of bamboos and rattans to sustainable growth and poverty reduction.

## Mission

INBAR'S mission is to improve the well-being of producers and users of bamboo and rattan while maintaining a sustainable bamboo and rattan resource through consolidating, coordinating and supporting strategic and adaptive research and development.

## Present Board Members



Tesfai Teclé  
Eritrea



Jiang Zehui  
China



Maharaj Muthoo  
Italy



Gerardo Segura Warnholtz  
Mexico



Tachrir Fathoni  
Indonesia



Andrew Bennett  
United Kingdom



Wu Zhimin  
China



Coosje Hoogendoorn  
The Netherlands

## Former Chief Executives of INBAR



Wang Zhibao  
Council Chair China



Zhou Shengxian  
Council Chair China



Jia Zhibang  
Council Chair China



S. Regupathy  
Council Chair India



Christophe Bazivarno  
Council Chair Rwanda



Howard Balloch  
Council Vice Chair Canada



Gordon Houlden  
Council Vice Chair Canada



Philip Calvert  
Council Vice Chair Canada



Mark Steven Kruger  
Council Vice Chair Canada



Stanislas Kamanzi  
Council Vice Chair Rwanda



Gordon Smith  
Board Chair Canada



Keith Bezanson  
Board Chair Canada



Rodney Cooke  
Board Chair United Kingdom



Cherla B. Sastry  
DG, Trustee Canada



Ian Hunter  
DG, Trustee United Kingdom



M.S. Swaminathan  
Trustee India



Seewant Bhoojedhur  
Trustee Mauritius



Salleh Mohd. Nor  
Trustee Malaysia



Kazuhiko Takeuchi  
Trustee Japan



Ana Cecilia Chaves  
Trustee Costa Rica



Chu Fuxiang  
Trustee China



David Hopper  
Trustee Canada



Abdelmajid Slama  
Trustee Tunisia



Hubert Zandstra  
Trustee Canada



Yoshiko Y. Nakano  
Trustee Japan



Romualdo L. Sta. Ana  
Trustee The Philippines



Josefina Takahashi Sato  
Trustee Peru



Pekka Patosaari  
Trustee Finland

## Organization structure

The governing body is the INBAR Council, made up of representatives from our member countries. It meets once every two years to make policy and strategic decisions. Its chair and vice-chair are elected from the Council and serve two year terms. The vice chair usually becomes the chair when the chair's term expires. Since 2008 the council has held its meetings in the Council chair's home country. Bangladesh holds the presidency of INBAR in 2012. Given a series of activities in celebration of INBAR's 15th Anniversary will take place in Beijing, the Council agreed that this year's Council meeting will be held in Beijing.

The responsibility for approving, adopting and overseeing implementation of those policies and strategic plans is the task of INBAR's Board of Trustees, who meet once a year and ensure the organisation is managed effectively.

The secretariat consists of the professionals who are responsible for implementing INBAR's work programmes. They operate from headquarters in Beijing and from regional offices in Ecuador, Ethiopia, Ghana and India.



INBAR staff members meet at the headquarters in Beijing, China.

## Funding

At present, 90% of INBAR's income is from core and project-related funding from various donors. Key among them are the Chinese government (PRC), UN International Fund for Agricultural Development (IFAD), the European Community (EC), the Common Fund for Commodities (CFC), Canadian Government and the Citi Foundation. About 10% comes from annual fees from member countries. In order to operate as widely as we do, we also depend on co-financing and in-kind contributions from our partners. INBAR's total financial resources currently stand at approximately US\$6 million per annum.

## Member countries



INBAR's membership is open to all sovereign states under the UN system and to regional organizations of sovereign states. Prospective member countries or organisations must agree to the 'INBAR Treaty' (the Agreement on the Establishment of the International Network for Bamboo and Rattan) before initiating the membership process.

By June 2012, INBAR had 38 member countries:

**15 in Africa:** Benin, Burundi, Cameroon, Ethiopia, Ghana, Kenya, Madagascar, Mozambique, Nigeria, Rwanda, Senegal, Sierra Leone, Tanzania, Togo and Uganda; **11 in Asia:** Bangladesh, Bhutan, China, India, Indonesia, Malaysia, Myanmar, Nepal, the Philippines, Sri Lanka and Vietnam; **11 in the Americas:** Argentina, Canada, Chile, Colombia, Cuba, Ecuador, Jamaica, Panama, Peru, Suriname and Venezuela; **1 in Oceania:** Tonga.

## Strategic Goals - How INBAR makes its mission a reality

INBAR's work in eradicating poverty and conserving the environment, particularly in developing countries, is realised through networking and effective international cooperation in innovative conservation, sustainable use and fairer trade of the world's bamboo and rattan products and resources.

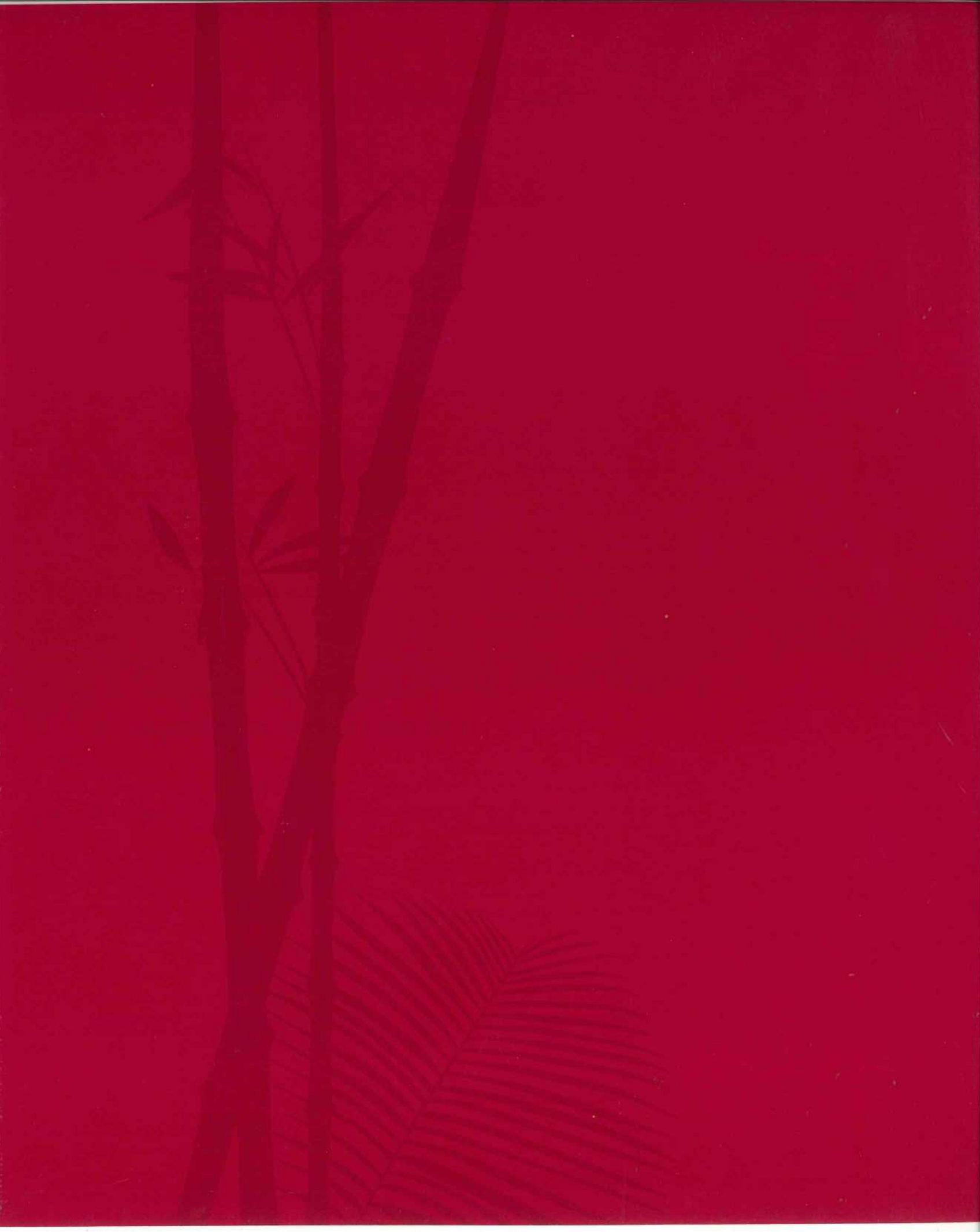
INBAR has defined four strategic goals that it aims to achieve by 2015:

1. An expanded, highly effective network of committed stakeholders.
2. Enhanced contribution of bamboo and rattan to environmental sustainability, particularly ecosystem services and coping with and combating climate change.
3. Better ways and means of inclusive livelihood development, particularly in rural areas.
4. Enhanced, more innovative and sustainable market environments.

To do all this, INBAR concentrates firmly on poverty reduction combined with environmental protection while stimulating a global bamboo and rattan sector. INBAR has support from development donors, member countries and industry partners, prioritising the use of global public funds to create global public goods.

## What makes INBAR unique?

1. INBAR is the only independent intergovernmental network that links stakeholders at all levels from producers to consumers, including global trading systems.
2. INBAR is unique in its focus on bamboo and rattan which, apart from timber, are the two forest resources with the greatest potential to help the world's poorest people and simultaneously conserve the environment.
3. INBAR exercises innovative leadership by continually researching new ways to use bamboo and rattan to address poverty and environmental degradation and by supporting others in the application of new innovations in development programmes.
4. INBAR works flexibly with all major stakeholders wherever they are.
5. The headquarters of INBAR is in China which has one of the strongest traditions of cultivating and developing bamboo and rattan and an outstanding knowledge base of bamboo culture to draw on.
6. INBAR secretariat remains small and efficient, so can continue to evolve and respond effectively to changes in the way global development operates.



# THE BIRTH OF INBAR





**INBAR** evolved out of an informal network of bamboo and rattan researchers, set up in 1984 by Canada's International Development Research Centre (IDRC), which became more formal with its own secretariat and staff in 1993. At this stage it was a temporary project, which made it difficult to encourage partners to join activities and to secure funds. By 1995 a number of supporters began to work to establish INBAR as an independent intergovernmental organization - an objective that was achieved just two years later.



Under the leadership of Professor Jiang Zehui, head of the China-INBAR Preparatory Leading Group, all the legal procedures for the establishment of INBAR were completed in a period of 20 months by November 1997. Professor Jiang Zehui (front center) and the staff of the China-INBAR Preparatory Leading Group.



The INBAR Interim Advisory Board Meeting was held in Beijing before the establishment of INBAR.

## ***Speeding up the international establishment process of INBAR***

September 1995 saw the first meeting to discuss procedures for establishing INBAR, including the proposal to base its headquarters in China.

In the following March, the China-INBAR Preparation Leading Group was established, led by the China State Forestry Administration (SFA) and composed of senior officials from SFA, State Commission of Science and Technology, Ministry of Finance, and Ministry of Foreign Affairs of China, and was tasked with the international establishment process of INBAR – both nationally, with the Chinese government coordinating activities among all related government agencies, and internationally.

The group worked with its international counterparts to agree the location of the INBAR Headquarters, the text of the Establishment Agreement, funding of the organisation and so on – on the basis of which the INBAR Establishment Agreement was drafted, including ensuring international and Chinese legal requirements were met, and subsequently approved by the relevant national and international authorities.



The Multilateral Negotiating Meeting on the INBAR Agreement was held in Beijing, June 1997.

## ***Official launching of INBAR, the first intergovernmental or ganisation Headquartered in China***

INBAR was officially launched on 6th November 1997 with the signing of the INBAR Establishment Agreement in the Great Hall of the People in Beijing. China's President Jiang Zemin inscribed for INBAR and Premier Li Peng and Vice Premier Qian Qichen attended the signing ceremony. Representatives of the nine founding members - Bangladesh, Canada, China, Indonesia, Myanmar, Nepal, the Philippines, Peru and Tanzania - signed the Treaty, and six countries - Italy, Japan, Korea, the Netherlands, Pakistan and Thailand - sent observers to the ceremony. The following day a grand Inauguration Ceremony for INBAR was held in the Beijing Friendship Hotel, hosted by the Government of China.



《成立日  
SIGNING CEREMONY OF



# 《国际竹藤组织协议》签字仪式

THE AGREEMENT ON THE ESTABLISHMENT OF INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN



The signing ceremony of INBAR Establishment Agreement was held in the Great Hall of the People, Beijing on November 6, 1997. H.E. Mr. Li Peng, former Premier of China and H.E. Mr. Qian Qichen, former Vice Premier of China, attended the ceremony.



On November 6, 1997, Li Peng, Chinese Premier, met representatives of INBAR member States at the Signing Ceremony of the INBAR Establishment Agreement.



Top: On November 6, 1997, Qian Qichen, Chinese Vice Premier, shaking hands with the representatives of INBAR member States at the signing ceremony of INBAR Establishment Agreement.

Middle: On November 6, 1997, Jiang Chunyun, Chinese Vice Premier, giving a speech at the INBAR Inauguration Ceremony.

Bottom: On November 6, 1997, Song Jiang, Chinese State Councilor (center), conversing with Dr. Gordon Smith, Chairman of INBAR Board of Trustees (left), Dr. Keith Bezanson, previous President of IDRC and member of INBAR Board of Trustees (right) at the INBAR inauguration banquet.





Dr. Gordon Smith, the first Chairman of INBAR Board of Trustees (right) and Prof. Jiang Zehui, Co-chair of INBAR Board of Trustees (left).

The launch received strong international support. More than 20 countries in Asia, Africa and Latin America expressed their interest in becoming member states or developing cooperation with INBAR. Many research institutes, international organisations and enterprises extended their congratulations to INBAR and conveyed their best wishes for its future development.



Calligraphy inscribed for INBAR by China's President Jiang Zemin. On November 7, 1997, Bu He, Vice Chairman of the Standing Committee of the National People's Congress and Wan Guoquan, Vice Chairman of the Chinese People's Political Consultative Conference unveiling the INBAR inscription during the INBAR Inauguration Ceremony.



The first INBAR Council Session was held in November 1997 in Beijing, China, and formally announced the appointment of INBAR's first Board and Director General.



The first INBAR Board Meeting was held in November 1997 in Beijing, China. The meeting established basic procedures and standards for the new organization, and reviewed the transitional programme of work and budget prepared by the Interim Secretariat.



On June 3, 1998, the INBAR Headquarters Agreement was signed between the Government of China and INBAR.

## How China supports INBAR

As the host country government, China has been a strong supporter of INBAR since long before its launch. Soon after establishment, China established the China-INBAR Coordination Leading Group headed by Professor Jiang Zehui, Leading Member of China's State Forestry Administration - the government body charged with overseeing all forestry matters in China - and who is also Co-Chair of the INBAR Board of Trustees. The Leading Group advises the host government on matters pertaining to its support of INBAR, canvassing opinion from across government and other entities in China, and is composed of government officials from the State Commission of Reform and Development, Ministry of Foreign Affairs, Ministry of Finance, Ministry of Science and Technology, Ministry of Commerce, the State Forestry Administration, the Chinese General Administration of Customs and Beijing's Municipal Government.



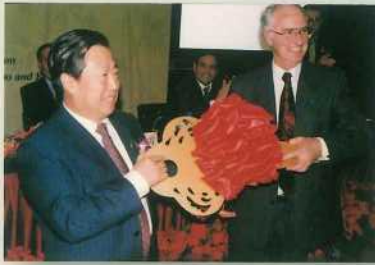
On October 13, 2006, the Fifth INBAR Council Session was held in Beijing. Mr. Jia Zhibang, Administrator of the SFA and Chairperson of the INBAR Council, chaired the session.



The Chinese government has been giving strong support to the development of INBAR, conscientiously implementing the INBAR Headquarters Agreement and committing itself to providing INBAR with necessary financial support. On November 6, 2003, Mr. Hui Liangyu, Chinese Vice Premier, attended the International Conference on INBAR's Development in China and the World (left). He is seen here (above) in a group photo with diplomats from embassies of INBAR member States attending the conference.



The International Bamboo and Rattan Tower (photo: September 2004)



On November 6, 2003, Mr. Zhou Shengxian, Administrator of China's State Forestry Administration (SFA), handed the key of INBAR's Headquarters building to Dr. Ian Hunter, Director General of INBAR, on behalf of the Government of China.



The Foundation Stone Laying Ceremony of the INBAR Headquarters Building on November 7, 1997. From left: Mr. Hemayet Uddin, Minister of the Embassy of Bangladesh to China; Dr. I.V. Ramanuja Rao, INBAR Programme Coordinator; Professor Jiang Zehui, Co-chair of the INBAR Board of Trustees; Mr. Jim Moody, Vice President of IFAD; Dr. Gordon Smith, First Chair of the INBAR Board of Trustees; Mr. Jia Qinglin, Mayor of Beijing; Mr. Wang Zhibao, Administrator of the China State Forestry Administration; Ms. Zhu Lilan, Chinese Minister of Science and technology; Mr. Wang Chunzheng, Executive Vice-Chairman of the Chinese State Planning Commission; Mr. Seewant Bhoojedhur, member of the INBAR Board of Trustees and Mr. Zhang Youcai, Chinese Vice Minister of Finance.



Bamboo and Rattan Showroom



INBAR Board of Trustees Conference Room

In August 2003, INBAR headquarters buildings provided by the Government of China were put into use. Together with China's International Bamboo and Rattan Key Open Laboratory and China's International Bamboo and Rattan Training Centre, they form a building complex, providing research and development, personnel training and facilities for international conferences. In addition to the 5000m<sup>2</sup> headquarters buildings free of charge, the Government of China also pays a membership fee and donates to INBAR since its establishment. The annual financial contribution by the government has reached \$2 million since 2010.



Mr. Joseph J. Jen, former Under Secretary of USDA, accompanied by Professor Jiang Zehui, visits the laboratories of ICBR.

To help INBAR fulfill its goal and mission, the Government of China established the International Centre for Bamboo and Rattan (ICBR), which focuses on bamboo and rattan research and training, and with which INBAR often collaborates. Combining efforts from home and abroad, ICBR takes as its responsibilities the research work of Bamboo and Rattan Key Open Laboratory, scientific research and international cooperation and exchanges on bamboo and rattan, training of relevant professionals, establishment of international information network of bamboo and rattan science and technology and support services for INBAR headquarters. In 2005, INBAR and ICBR signed a memorandum of understanding for their long-term partnership.

Recently INBAR and ICBR have collaborated on the following projects: C

ollection. of Bamboo Species Germplasm by establishing the Bamboo Species Germplasm Conservation Base in Huangshan City, Anhui Province of China; Bamboo Shoot Development Project sponsored by the Common Fund for Commodities (CFC); Disseminating bamboo shoots technology to Bangladesh and Sri Lanka" sponsored by the CFC; Bamboo buildings project for the reconstruction of post-earthquake Sichuan sponsored by the CFC Sustainable Management and Utilization of Tropical Bamboo Species project in Yunnan Province, China sponsored by the International Tropical Timber Organization (ITTO); Development and commoditization of pre-fabricated modular bamboo housing in Asia and Africa Project sponsored by the CFC.

In addition, INBAR and ICBR also cooperate in organizing many international bamboo and rattan training workshops and in facilitating the exchange of bamboo and rattan scientists among INBAR's member countries. These activities have enhanced exchange with bamboo and rattan producing and consuming countries in the world, and have provided a new platform for south-south cooperation in bamboo and rattan.

Over the years, the Chinese Ministry of Commerce has given continuous and stable financial support to bamboo and rattan training activities co-organized by INBAR and ICBR. Altogether 12 international training classes and symposiums on bamboo and rattan were held from 2005 to 2012, with over 400 students from about 60 countries participating in the training, including those from INBAR member states. These training classes are diversified in form and rich in content. Trainees include government officials from INBAR member states and potential member states with thriving or aspiring bamboo and rattan industries, research and technical personnel and entrepreneurs, all welcoming and thinking highly of such trainings. Local governments of China's major bamboo and rattan producing areas, such as Zhejiang, Sichuan and Anhui provinces, also



Mr. Xu Guanhua, Chinese Minister of Science and Technology, visits the ICBR laboratories, accompanied by Professor Jiang Zehui.



Professor Jiang Zehui meets Mrs. Monique Barbut, Chief Executive Officer and Chairperson of GEF.



Mr. Yang Jiechi, former Chinese Ambassador to the United States of America, visits the INBAR bamboo and rattan product exhibition, accompanied by Mr. Zhang Jianlong, Director General of ICBR.



Professor Jiang Zehui meets Dr. Manoel Sobral Filho, Executive Director of the International Tropical Timber Organization (ITTO).



Mr. Rolf Jordens, Vice Secretary General of the International Union for the Protection of New Varieties of plants (UPOV), visits the laboratories of ICBR, accompanied by Mr. Yue Yongde, Deputy Executive Director General of ICBR.



Professor Jiang Zehui exchanging the agreement on establishing the UNCCD International Training Center with Mr. Diallo, the UNCCD Executive Secretary.



H.E. Mr. Bu He (center right), the former Vice Chairman of CPPCC visits the bamboo industry exhibition during the fifth China Bamboo Cultural Festival, accompanied by Professor Jiang Zehui (center left), Vice Chair of Committee of Population, Resources and Environment of CPPCC and Co-Chair of the Board of Trustees of INBAR, Dr. Coosje Hoogendoorn (right), Director General of INBAR and Mr. Wu Zhimin (left), Deputy Director general of INBAR.

The China Bamboo Cultural Festival, a major international academic and commercial event, is held once every two years and is organised by the SFA, INBAR and the host province. So far, six such festivals have been held. Activities during the festival usually include an international workshop, bamboo industry exhibition, construction of bamboo gardens and visits to bamboo forest cultivation sites and processing mills. The bamboo festival plays a key role in information exchange and promoting cooperation among both the bamboo provinces in China and the INBAR member countries. It has become an important platform for economic cooperation and exchange in the bamboo industry.

INBAR has co-organized, together with the Chinese Government, five Chinese Bamboo Cultural Festivals. At each of the Bamboo Cultural Festivals INBAR has held a seminar spanning a diverse range of topics including the following: Bamboo Cultivation, Processing and Utilization; Industrial Utilization of Bamboo; Bamboo: Trade, Development and Environment; Bamboo Sector and Green Development. The 7th Chinese Bamboo Cultural Festival will be held in 2012, Yixing, Jiangsu.



INBAR holds the forum on bamboo and rattan commodities demand during the fifth China Bamboo Cultural Festival.



Professor Jiang Zehui, Deputy Director of Human Resources and Environmental Committee of CPPCC and Co-Chair of the INBAR Board of Trustees, gives a speech on the opening ceremony of the third China Bamboo Cultural Festival.



The bamboo products exhibition held in the fourth China Bamboo Cultural Festival attracts many visitors from home and abroad.



INBAR holds the international symposium on industrialized processing and utilization of bamboo during the fourth China Bamboo Cultural Festival.



In October, 2011, INBAR holds the international symposium on bamboo during the sixth China Bamboo Cultural Festival.



INBAR's pavilion at Shanghai World Expo



People visiting the pavilion

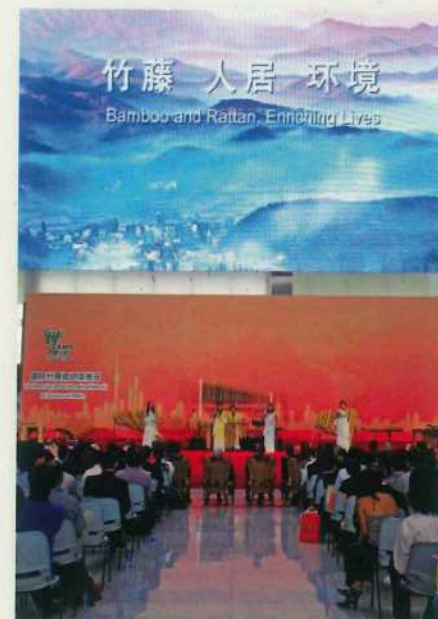


Former SFA secretary Jia Zhibang(center) and Professor Jiang Zehui (right) visited the exhibition hall



Ministers from member countries watching the circular-screen movie

The Government of China also actively supports INBAR's participation in major international exhibitions and in enhancing its global image as a world leader in field of bamboo and rattan. At the 2010 Shanghai World Expo, the International Bamboo and Rattan Pavilion sponsored by the Government of China became one of the most popular pavilions among the international organizations represented. The Chinese government funded the International Bamboo and Rattan Garden at the 2011 Xi'an International Horticultural Expo, featuring environmentally-friendly bamboo and rattan products. INBAR's participation in international exhibitions has raised people's awareness of bamboo and rattan, and INBAR's work.



INBAR Honor Day of the Shanghai World Expo



Photo credit: Zen Weijian

# INBAR Timeline

## Formation of a Network for Bamboo and Rattan

### 1979-1980

Canada's International Development Research Centre (IDRC) arranges meetings on rattan and bamboo in Singapore.

Leading scientists from around the world meet and explore how these neglected plants offer exciting opportunities as resources to improve the livelihoods of hundreds of millions of people.

IDRC puts bamboo and rattan on its research agenda and begins to develop an informal network to play the role of a centre of expertise connecting researchers and practitioners scattered across the globe.

### 1985&1988

Further scientific workshops on bamboo bring more than 100 specialists together. Idea of a formal organisation to co-ordinate bamboo and rattan research and development suggested (1988).

### 1993

As bamboo and rattan projects increase, a meeting is organised between researchers and potential funders. INBAR is formed as part of IDRC - its aims are to improve the contribution bamboo and rattan make to rural livelihoods, and to investigate the role of bamboo and rattan in tropical forest conservation.

## Formation of INBAR

### 1994

The United Nations' International Fund for Agricultural Development (IFAD) provides funds to IDRC for INBAR's for socio-economic research. IDRC directly supports INBAR's technical innovation research work.

INBAR becomes a broad network covering an increasingly diverse range of activities including processing technologies, construction, and information provision. Rattan and bamboo specialists realise INBAR's efforts to build partnerships are hampered because it remains a time-limited IDRC project.

### 1995

Group consisting of IFAD, IDRC, the MS Swaminathan Research Foundation (an Indian sustainable development organisation) and the Chinese Government meets to discuss establishing INBAR as an independent organisation. China offers to host its headquarters and begins to push the process forward by coordinating with other governments and international organisations.

### 1996

INBAR Preparatory Leading Group is established in China. Guided by the Ministry of Forestry, this preparatory committee made up of officials from State Science and Technology Commission, Ministry of Finance and Ministry of Foreign Affairs, are responsible for coordination among different domestic departments, communication with international coordinating bodies and initiators, and bilateral and multilateral talks, so that the internationalization of INBAR can be advanced.

### 1997

The International Network for Bamboo and Rattan is officially established in Beijing as an intergovernmental international organization.

The Chinese government, IFAD, IDRC and the MS Swaminathan Research Foundation and others set up Interim Advisory board for INBAR.

Meeting to establish an independent INBAR attended by governments of Canada, Italy, Myanmar, Malaysia, Nepal, Pakistan, Peru, the Philippines, Republic of Korea, Tanzania, Thailand, and Vietnam, plus INBAR, IFAD, IDRC and four ministries of the government of China is held in Beijing, China.

Signing ceremony held on 6 November attended by the nine founding members: Bangladesh, Canada, China, Indonesia, Myanmar, Nepal, Peru, the Philippines and Tanzania. Observers from Italy, Japan, Korea, the Netherlands, Pakistan and Thailand attend.

INBAR begins new role with four funding partners: the governments of China, Canada, the Netherlands and IFAD.

## Out into the world

### 1998-1999

INBAR commences systematic studies on the role of bamboo and rattan in the economic and social activities of people in seven African nations.

Regional consultations held with experts in Africa, Asia and Latin America help define INBAR's development agenda.

Sixth World Bamboo Congress in Costa Rica brings hundreds of bamboo practitioners together from all over the world.

The first of our on-going annual training and awareness-raising workshops is held, in 1999, in China.

Work begins to develop standards for safer use of bamboo as scaffolding.

INBAR begins to define priority focal areas in consultation with key partners.

### 2000

INBAR restructures to focus on environment, livelihoods, trade and outreach.

Common Fund for Commodities works with INBAR to launch new International Commodity Body for Bamboo and Rattan, with INBAR in the lead role. By 2012, ten projects supported by the fund were or had been running in Bangladesh, China, Nepal, Bhutan, Sri Lanka, Ghana, Ethiopia, Kenya, Uganda, Peru and Ecuador.

### 2001

INBAR opens Latin America regional representative office in Ecuador, which has led network and project development in Latin American member nations ever since.

INBAR's new Action Research Projects funded by IFAD commence in Ecuador, Ghana, India and Tanzania.

INBAR develops an information strategy, new databases and publications, including the International Journal of Bamboo and Rattan.

INBAR, State Forestry Administration of China and Sichuan Provincial Government jointly organizes the third China Bamboo Cultural Festival in Yibin, Sichuan, during which the international symposium on bamboo cultivation, processing and utilization is held.

#### **2002**

The Ford Foundation funds INBAR's first development project in western China, in Chishui, Guizhou province.

INBAR helps establish bamboo and rattan-based organisations in Ecuador, India and Ghana.

INBAR moves into the digital age with its first CD publications, covering Transfer of Technology Models and Species-to-Site Matching.

INBAR fosters two 'world-firsts': flat-pack bamboo furniture and bamboo shoot crisps.

#### **2003-2005**

INBAR's secretariat moves to permanent headquarters in Beijing provided by the Government of China.

A West Africa regional office opens in Kumasi, Ghana.

INBAR commences its gender work with a socio-economic study of women processors of bamboo in Yunnan province, China.

INBAR persuades World Customs Organisation to release new customs codes to identify specifically bamboo and rattan products.

Conservation status and needs of bamboos in Asia and Africa highlighted in report by INBAR and UNEP-WCMC.

Global Marketing Initiative launched.

Member Countries pay membership fees to INBAR for the first time.

Standards developed by INBAR for bamboo housing approved by the International Organization for Standardization.

Bamboo and Rattan Volunteers Scheme launched.

INBAR, State Forestry Administration of China and Hubei Provincial Government jointly organized the fourth China Bamboo Cultural Festival in Xianning, Hubei, during which the international symposium on bamboo industrialization was held.

## **New Start-- INBAR Strategy to the Year 2015**

#### **2006**

INBAR develops and publishes its 'In Partnership for a Better World - INBAR Strategy to the Year 2015', to guide its work and development. Its work areas are adjusted to environmental sustainability, livelihood and economic development and trade development.

Non-Timber Forest Products Global Partnership Programme recognised by GFAR, launched with INBAR as lead umbrella organisation. Starts first project on charcoal in sub-Saharan Africa.

Bamboo Housing Partnership Programme launched, and starts its first project in China and Sri Lanka with funds from the Blue Moon Fund.

INBAR starts its open distance education project.

Ethiopia bamboo technical training courses funded by the Chinese Ministry of Commerce are successfully held for the second time in Addis Ababa, capital of Ethiopia.

INBAR, State Forestry Administrations of China and Fujian Provincial Government jointly organizes the fifth China Bamboo Cultural Festival in Wu Yishan, Fujian, during which the international symposium of "Bamboo: Trade, Development and Environment" is held.

## **Ten years to become a leading international network**

#### **2007**

10 years of networking sees INBAR become a leading international network. In 10 years INBAR membership grows from 9 to 34 member countries and organisations:

Asia 10  
Africa 13  
Latin America 10  
North America 1  
Oceania: 1

INBAR 10th anniversary events held in November, including a global conference, an international trade fair, a cultural night and a photographic competition.

First collaboration with the EU - our China biodiversity project - begins.

## **Proven success fuels the future**

#### **2008 - 2009**

INBAR runs its first dedicated rattan project in Ghana.

First training programme specifically for member country focal points brings officials to INBAR and others from 30 current and potential member countries to learn more about INBAR, bamboo and rattan.

INBAR starts two new large projects - one in Ghana and Ethiopia on bamboo charcoal funded by the EU, the other in China and Africa on bamboo housing funded by the CFC.

Two studies of the impact of INBAR's work in India show major improvements in poor people's lives and livelihoods, and offer hope for the many millions in the region trapped in similar poverty.

INBAR attends COP 15 in Copenhagen in 2009, raising the profile of bamboo amongst an audience of world decision-makers. At subsequent COP meetings, INBAR presents its climate change work, and builds new partnerships for low carbon development.

The EU funded "development of bamboo industry chain in Sichuan earthquake-stricken areas" project implemented by INBAR.

### **In Partnership for a Better World**

#### **2010-2011**

INBAR's pavilion at the World Expo in Shanghai receives over half a million visitors during the six month-long festival. INBAR's attendance at the Expo includes a high level ministerial workshop and an international conference on bamboo and rattan, and a world bamboo and rattan product design competition.

EU president Herman van Rompuy visits INBAR's rehabilitation project in earthquake-hit Sichuan province, China. Sichuan project wins the innovation award of "new ways for world post-disaster reconstruction".

INBAR, State Forestry Administration and ICBR jointly organized bamboo planting activities on the World Earth Day in Beijing Zizhuyuan Park, highlighting the important role of bamboo in low carbon, environmental protection, poverty reduction.

At the Xi'an International Horticultural Exposition, INBAR's International Bamboo and Rattan Garden show the public the diversity of the world's bamboo resources and application of high-grade bamboo and rattan innovative products in daily life, emphasizing the contribution of bamboo and rattan to the future living environment of mankind.

INBAR, State Forestry Administration of China and Jiangxi Provincial Government jointly organized the sixth China Bamboo Cultural Festival in Yichun, Jiangxi, during which the international symposium of "Bamboo Industry and Green Development" is held.

INBAR releases its first studies on bamboo and climate change at the United Nations Climate Change Conference (UNFCCC-COP16) in Cancun, Mexico.

INBAR demonstrates the potential of bamboo charcoal and a bamboo alternative to wood fuel at the United Nations Climate Change Conference (UNFCCC-COP17) in Durban, South Africa, raising international awareness of bamboo as a high-quality biomass energy.

The Latin American Bamboo Industry Development Programme started, which is funded by the European Union, the World Bank and the Common Fund for Commodities.

INBAR and partners develop the first carbon accounting methodology for bamboo.

Construction standards for bamboo houses adopted by the governments of Ecuador and Peru, and INBAR builds a bamboo house in Bhutan.

International Bamboo and Rattan Trade Database is revamped and is now firmly based on the United Nations Commodity Trade Database.

### **In Partnership for Green and Inclusive Development**

#### **2011-2012**

At the first APEC Ministerial Meeting on Forestry, Co-Chair of INBAR Board of Trustees Jiang Zehui calls for the joint efforts of Asia-Pacific countries to promote the inclusive and sustainable growth of bamboo and rattan industry.

INBAR launches its Roadmap to 2015 that highlights the importance of building partnerships across national and continental boundaries to share knowledge and experience.

With support from the host country China a vice-ministerial level symposium on green economic development policy of global bamboo and rattan resources with participants mainly from member states is held on the occasion of the 15th anniversary of INBAR.





# ACHIEVEMENTS





Bamboo and rattan are incredibly versatile plants that can be managed not only to help poor people escape from poverty but also to protect the environment. Over the last 15 years, INBAR has conducted development projects in over 20 countries in the areas of ecological and environmental protection, livelihood development, technological expansion spread and product development, illustrating the significant ecological and environmental benefits of bamboo and rattan. These projects, with fruitful results, have strengthened the cooperation and exchanges between INBAR and its partners and promoted sustainable economic and social development in the project areas.





Environmental sustainability



## Growing rattans

In 1997 INBAR began investigating rattan species that would grow well in plantations in Cuba, and we started one of our first programs, which promoted the growth and use of rattan. We brought Cuban scientists to Asia to learn techniques for propagation and management of rattan forests. Rattans are native to Asia and Africa but *Calamus* and *Daemonorops* species were taken to Cuba and, 12 years on, rattan plantations are growing well in their new habitats.

Soon after, we started working with partners in Nepal and some African countries to improve rattan growing methods there.

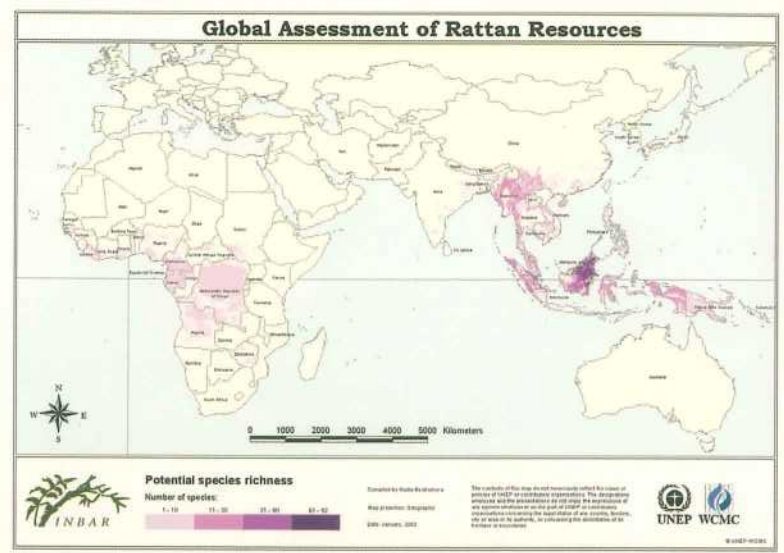
The best way to conserve natural stands of rattan is often to encourage local people to use them more sustainably. A project to develop conservation management for rattans in Nepal began in 1998 with surveys to find out the plants' current ecological status; which species were most at risk, and why; and how local people were managing and marketing rattans at the time.

In 1999 we began looking at the evolutionary relationships and ecology of African rattans, and at the tremendous diversity of uses they were put to by local people - some species being more widely used and for more diverse purposes than others. In Cameroon, Nigeria and Ghana we supported the study of the complete chain from rattan growing or harvesting through processing to the final marketing and uses by people, that enabled us to make recommendations for improving the chains for poverty alleviation.

In an effort to promote more sustainable use of natural resources, we collaborated with the UN's World Conservation Monitoring Centre, in a project which estimated the population sizes and distribution of 610 rattan species and subspecies within natural forests throughout Africa and Asia.

In 2011, INBAR commissioned a study on the global demand for rattan resources and opportunities. Building on this foundation, INBAR will develop a rattan development plan to guide future actions. INBAR has recognized a demonstration and training base focused on the cultivation, processing and utilization of rattan resources at Hongqi Rattan Firm, in Hainan, China.





## The right bamboo in the right place

Bamboos can grow in many areas where they are not native but the climate and soil are suitable. In 2001 we published a CD that not only maps the natural distribution of 77 species but - by using climate data - shows where else each species could be grown. It also shows all the species suitable for any chosen location so bamboo growers and plantation planners throughout the world can select the right bamboo for their conditions, and invest appropriately.

## Taking stock of the world's bamboos

Having plotted the size and distribution of the world's rattan populations we did the same for its bamboos. It was a longer job - there are more species and bamboos are more widely spread - and it took four years, working again with the World Conservation Monitoring Centre. The study covered over 1,000 species and was the first truly comprehensive estimate of bamboo biodiversity. The first part, covering bamboos in the Asia-Pacific region, was published in 2003 and was followed by Africa, Madagascar and the Americas in 2004.

We regard just 2% of the world's bamboo species as high priority because of their commercial importance. But the remaining 98% are a crucial component of the forest ecosystems to which they belong and are just as threatened from deforestation as many other forest plants.



photo credit: Melaku Tadesse

## Bamboo for rehabilitating degraded lands

Soon after its establishment, INBAR worked with Indian partner organizations in a project using bamboo plantations to restore 4,000 hectares of land degraded by clay extraction and brick-making in the villages of Kotwa and Rahimabad in Allahabad.

By 2003 the project had made a clearly visible impact. The bare red earth had been replaced by green expanses; bamboo grew in abundance and the local microclimate had improved. People had begun farming again and many were able to earn a living from growing and processing the bamboo crop. A survey found that the ground water level, which had fallen to 40 metres deep before the project began, had risen by more than 6 metres - particularly important as the area is at the head of a water catchment.

## Bamboo for water and soil conservation and sustainable land management

Planting bamboo forests has also given poor people in Chishui, Guizhou Province, a remote mountainous area in western China, a way to earn a living while protecting their hillsides from soil erosion. INBAR worked with the Ford Foundation to return hillside farmland to forest, and monitored soil erosion from 2002 to 2005. Before planting began, rainfall washed away 450kg of valuable soil from each hectare of land every year, but planting bamboo reduced this erosion by 75%. The project provided a model for community-based bamboo afforestation and management, showing how conservation and income generation could go hand in hand.

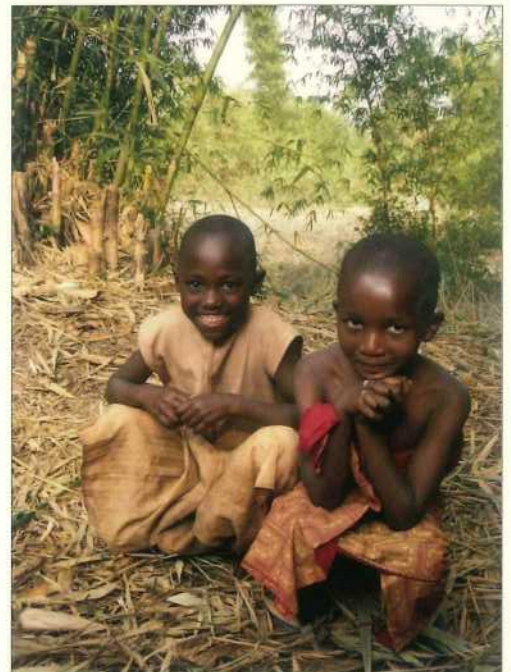
## Global bamboo thematic study

INBAR has played a key role in helping the United Nations recognize the increasing value of bamboo in forestry; in helping people out of poverty; and in sustainable economic and environmental development. Working with the UN's Food and Agriculture Organisation (FAO) in 2005 we started to include bamboo in the framework of the FAO Global Forest Resources Assessment. More than 20 of the most important bamboo producing countries submitted reports on the extent of their bamboo forests - information that is vital for increasing development with bamboo around the world. In the same year, the international training courses named "global bamboo resources investment" received support and cooperation from the United Nations Food and Agriculture Organization (FAO), the United Nations Environment Programs (UNEP), the United States Geographical Survey (USGS) and the International Centre for Bamboo and Rattan (ICBR).

The assessment on global bamboo resources is significant to the development of global bamboo industry. In 2007, the first official report of the assessment on global bamboo resources – The World Bamboo Resources was published by FAO.

## Standards for biodiversity-rich bamboo forest management

INBAR's Bamboo Forest Biodiversity Protection project developed a set of standards, based on practical trials in intensively managed bamboo forests, on how to manage them to maximize not only the yields of bamboo poles, but also the biodiversity of the forest ecosystem. We are now using this to develop a community-certification scheme that is helping farmers make the most of their forests, and preserve them for the future.



INBAR

## Bamboo and Climate Change

Bamboo is one of the world's fastest growing and most productive plants. In 2008, INBAR held the international symposium on bamboo and climate change during the Asia-Pacific Forests Week in Vietnam and suggested an assessment on bamboo's contribution to mitigating and adapting to climate change. Subsequently, INBAR carried out research on bamboo's potential to mitigate and adapt to climate change. At the United Nations Climate Change Conference (UNFCCC-COP15) held in Copenhagen, INBAR presented its first research results on the subject.

In 2010, INBAR presented further data on bamboo and climate change at the United Nations Climate Change Conference (UNFCCC-COP16) in Cancun, Mexico. In 2011, INBAR demonstrated the potential of bamboo charcoal as an alternative to household wood fuel at the United Nations Climate Change Conference (UNFCCC-COP17) in Durban, South Africa, raising international awareness of bamboo as a high-quality biomass energy. In 2012, INBAR attended the United Nations Conference on Sustainable Development in Rio, Brazil, and presented its new Roadmap for 2015 'In partnership for inclusive and green development'.

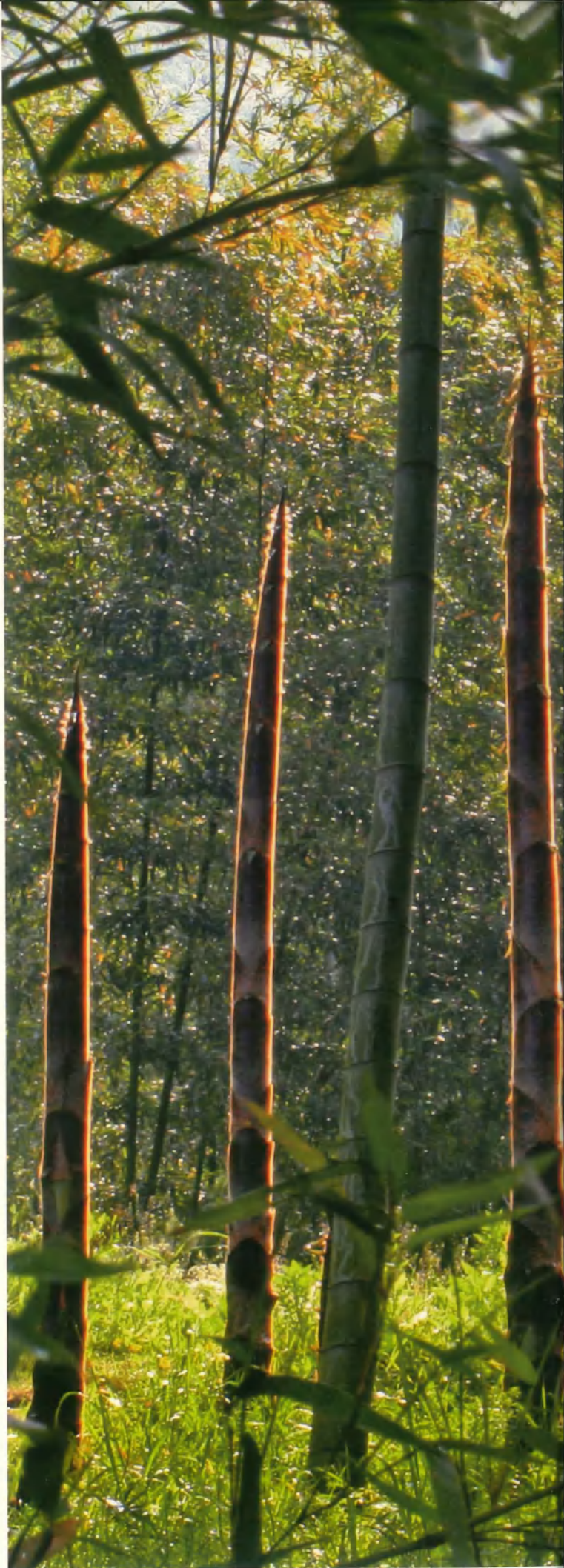






Photo credit: Anji Bamboo Society

Livelihood development

## Sustainable development for the poor

INBAR'S action research projects demonstrate how poor rural people can use bamboo and rattan to earn sustainable incomes. In Ecuador, Ghana, India, the Philippines and Tanzania our projects have fostered the creation of products – mostly using bamboo – with significant markets. As a result, more than 7000 people are now making a new living from using and processing bamboo.

The products and production systems vary. Producers in our project in Tanzania are finding a good market for handicrafts; those in Tripura, in India, produce incense sticks while in Konkan, also in India, they make bamboo buildings and 'Roti' baskets, amongst other items.

In Ghana we have helped people focus on the market for bamboo school furniture, while in Ecuador expensive bamboo furniture sells well and in the Philippines there is a market for innovative furniture designs.

We have trained communities not only in processing but also in business management and factory production techniques so that their projects are both adaptable and sustainable as markets change. INBAR is now linking the more advanced projects to less developed ones, in innovative 'project twinning' arrangements, so that people can share the knowledge they have gained.

In Hainan Province in the south of China, in collaboration with the German Organization for Technical Cooperation (GIZ), we carried out the Production and Utilization of Bamboo and Rattan in Hainan Project under the Sino-German Rehabilitation and Protection of Tropical Forests programme. The project demonstrated how rattan and bamboo can be used to help provide sustainable incomes for poor ethnic minorities. We established more than 1,300 ha of bamboo plantations and 7,000 ha of rattan plantations in existing forests. Crucially, we also established an innovative 'rights policy' allowing poor local farmers to plant rattan in state-owned secondary forests. We trained hundreds of people in bamboo and rattan cultivation and processing, and helped establish the businesses that now provide them with incomes – putting to use their new skills.



## Bamboo and post-disaster reconstruction

Bamboo materials are playing increasingly an important role in post-disaster reconstruction efforts. One example of this is INBAR's work in Sichuan Province, China to rehabilitate livelihoods destroyed by the May 2008 earthquake. In 2009, our project "Development and Demonstration of Prefabricated Bamboo Housing in Earthquake-stricken Areas in Sichuan, China", funded by the Common Fund for Commodities, provided a number of light-weight and earthquake-resistant bamboo houses for victims in Dujiangyan, Sichuan. Building on the momentum, in 2011, the "Development of Bamboo Industry Chain in Sichuan Earthquake-stricken Areas" project funded by the EU won the innovation award of "new ways for world post-disaster reconstruction" in Geneva, Switzerland. The European Council President Herman Van Rompuy visited the project site in Dujiangyan. INBAR's work in Sichuan has helped create new income sources for residents and has contributed to the long-term improvement of the severely degraded ecological environment in disaster areas.





In May 2011, Mr. Herman Van Rompuy, inspected post-disaster reconstruction projects in Sichuan Province, China.



Photo credit: Wu Guangmin



Design: Olav Bruin

## Global Marketing Initiative

INBAR's Global Marketing Initiative (GMI) links Asian, Latin American, African and European producers, consumers, designers and technicians. This network helps poor rural producers meet market demand for innovative, well designed and well made products, by providing design, development and technology expertise and support to rural communities.

For example, the Philippines GMI centre has developed a novel bamboo membrane technology for craft based industrial furniture production. The Technology Development Centre in the Philippines has developed bent laminate bamboo furniture that is not only helping producers earn good incomes but has also been transferred to Ghana.



## Inclusive innovation support systems

INBAR has always attached great importance towards fostering enhanced capital, market, business and policy support for the bamboo and rattan sectors. It works to promote the development of social enterprises operated jointly by the government, private firms and farmers, and to expand the value chain of the bamboo and rattan sectors so that farmers can participate in the projects and, in turn, generate increased income. INBAR has fostered the establishment of national and regional level NGOs and para-statal organizations that act as technical and coordinating hubs for bamboo and rattan based development in their area, including the following: Centre for Indian Bamboo Resources and Technologies (CIBART); Philippine Bamboo Council and Philippine Bamboo Fund; Government of Ghana's Bamboo and Rattan Development Programme (BARADEP); Sacha Urku partnership, Ecuador; ECUABAMBU, Ecuador; Ethiopian Bamboo and Reed Society; Bamboo and Rattan Association of Tanzania; and Mozambambu, Mozambique.

In India, INBAR instigated a shift of thinking in the development of the Konkan region with support for the launch of NATIVE KONBAC. Registered as a for-profit company with a strongly-defined social mandate, NATIVE KONBAC is uniquely "twinned" with the non-profit organization Konkan Bamboo and Cane Development Centre (KONBAC), in partnership with the Centre for Indian Bamboo Resources and Technologies (CIBART). This innovative pairing of a non-profit organization and a for-profit social enterprise, with unified goals is intended to ensure sustainability long after a short-term project period has concluded. Creating public-private partnerships (PPPs) such as this can help maximize the range of services available to producers and investors - the innovative "twinning" allows for the inclusion of community members as shareholders and so they can adopt venture and other commercial capital as a route for financing. This has improved the financial status and livelihoods of the communities who grow bamboo and process it. In May 2011, NATIVE KONBAC was first runner-up in the Sankalp Award 2011 in India, India's largest Social Enterprise Awards.

To spread effective innovation systems, INBAR links local research projects in Asia, Africa and Latin America and establishes sister projects or project based alliances, actively promoting the dissemination, application and sharing of advanced knowledge and successful experience around the world.





Trade development



## International bamboo and rattan trade database

Bamboo and rattan commodities are far more diverse and versatile than commodities such as grain, cacao, coffee or timber. They are traded as furniture, paper, pulp, bamboo shoots, charcoal, fabrics, handicrafts and much more. So keeping a track on the volumes and values of all these products has been a difficult task - they have usually been included in broad-based customs categories that do not specify if products are made of bamboo or rattan. Working with the World Customs Organization, we have published a series of bamboo and rattan-specific product codes which are starting to give us a much better picture of the role bamboos and rattans are playing in international trade.

We have also established a state-of-the-art database - in partnership with FAO, and European Forest Institute (EFI) - which allows us to monitor bamboo and rattan trade between countries. It can be searched by products, year, countries and regions and is freely available on the INBAR website. In 2011, this database became fully based on the UN Commodity Trade Database, providing users with the latest data of global bamboo and rattan commodity trade.

## Our International Commodity Body role

In 2000 INBAR became part of the Common Fund for Commodities (CFC) as the International Commodity Body for bamboo and rattan (ICB). The CFC is an intergovernmental development organization which provides support for developing countries to improve and diversify production and trade of commodities. Being an ICB enables us to promote responsible and effective supply chain development throughout the world, strengthening partnerships between consumers and producers. Since 2003 INBAR has run ten projects with the CFC:

- Market Development of Bamboo and Rattan Products with Potential (2003-2011)
- Market-Based Development with Bamboo in Eastern Africa - Employment and Income Generation for Poverty Alleviation (2006-2010)
- Transfer of Technology in Bamboo Shoot Production, Processing and Marketing from China to Bangladesh and Sri Lanka (2007-2010)
- Assessment of the Feasibility of Rattan Processing and Marketing for Sustainable Income Generation in West Africa (2007-2009)
- Enhancing Opportunities for Market-led Bamboo-based Development in West and Central Africa (2009)
- Development and Commoditization of Pre-Fabricated Modular Bamboo Housing in Asia and Africa (2008)
- Development and Demonstration of Prefabricated Modular Bamboo Houses in the Earthquake Affected Area of Sichuan Province in China (2009)
- South-South Cooperation in the Comprehensive Development of the Bamboo Industry in Latin America (2011)
- Ghana's Bamboo Bio-energy Production and Application of Bamboo Charcoal in Water Purification (2011)
- Bhutan's Demonstration Project of Sustainable Bamboo Housing and Rural Value Chain Development (2012)

# INBAR's Global Bamboo Construction Programme

INBAR believes that bamboo housing can improve the quality of life of millions of poor and disadvantaged people. Our Global Bamboo Construction Programme aims to substitute unsustainable building materials with environmentally friendly bamboo, to solve the shortage of proper housing material and establish an industry to provide rural employment by growing and processing bamboo.

The programme is building its network of partners around the world via its website, a Google group, and workshops and seminars. More than 10 partners have already signed agreements with INBAR to work together to promote bamboo housing and the programme has run training courses in Ghana, India, Ecuador, Ethiopia, China, Nepal and Bhutan. We have demonstration buildings in these countries, and have published training packages and manuals to spread the expertise we have developed as widely as possible.

The programme also develops new bamboo building technologies. Our demonstration primary school at Pingbian, in Yunnan province, was the first time that engineered bamboo materials have been used in a building in China.

More recently, we have developed a pre-fabricated bamboo module housing system, with support from the Blue Moon Fund. The system will be commercialized through the private sector to help poor families into their own homes – and there will be benefits for local construction companies and the environment too.

In 2009, the project on development and commercialization of prefabricated bamboo houses in Asia and Africa, funded by the Common Fund for Commodities (CFC), was officially launched. Primary processing and production centers for prefabricated bamboo houses will be established in Nepal and Ethiopia to develop new environment-friendly, durable bamboo building materials based on local bamboo resources and build prefabricated bamboo houses for demonstration, so that the spread and commercialization of bamboo housing technology in Asia and Africa can be facilitated.

In 2011, INBAR built its first stilt-raised demonstration house in Ecuador as part of our World Bank funded project "Flood resistant bamboo houses: Promoting innovative housing resilient to climate-related disasters". The new structure represents a breakthrough in flood-resistant housing design traditionally used in Ecuador, resulting in structures that have a lifespan of 20 years, compared to the 5 year lifespan of traditional houses.





2010 Spain Pavilion in 2010 Shanghai World Expo.



## Bamboo building codes

Hundreds millions of people already live in bamboo houses, which are relatively cheap, environmentally friendly and more earthquake resistant than brick, concrete or timber. But, until recently, professional architects hesitated to use bamboo because there were no bamboo building standards. That meant bank loans, mortgages and insurance were not available for the buildings and architects could be prosecuted and jailed following accidents during natural disasters.

The introduction of the new ISO Bamboo Building Code in 2005 was a major achievement for INBAR and many countries are already developing national standards based on it. As well as leading to an improved supply of affordable housing for some of the world's poorest people, this will open up yet more markets for bamboo as a sustainable raw material. The approved Code is available on the ISO website. In 2012, INBAR and ICBR jointly developed a draft of China bamboo construction standards for engineered bamboo based construction materials.



Reaching out



## Training and awareness-raising

One of INBAR's most urgent early tasks was to make government officials, scientists and entrepreneurs more aware of the potential of bamboo and rattan in development projects – including environmental protection, reducing timber consumption and helping people out of poverty. Fifteen years on, raising awareness is still part of our core function as a global knowledge centre.



For example, we run training workshops that include not only lectures but also opportunities to visit high-yielding plantations, manufacturers, markets, villages and farm households. Since 2003 these workshops have emphasized training in specialised technologies and, to meet the needs of member countries, we started to hold independent training workshops on specific topics in 2005. Participants include government officials, researchers and entrepreneurs.

When a bamboo utilization workshop was offered by the Chinese Ministry of Commerce in 2005, Mr. Solomon Shenkut from Ethiopia jumped at the opportunity to participate. Mr. Shenkut opened a bamboo workshop that same year, employing 24 people (mostly women). No longer a poor man at a salary of 500 Birr/month, his annual profit in 2011 was 50,000.00 to 70,000.00 Birr, providing job opportunities and incomes to his employees.

Bamboo and rattan workshops exert profound impact on INBAR member states, who have taken actions in different areas with the knowledge acquired from these workshops. Many member states have established new non-government organizations and agencies, to carry out new development and research projects, published books to promote bamboo and rattan technologies, formulated domestic policies on bamboo and rattan training, introduced better varieties, advanced machinery and technologies, and carried out field study and demonstration. In particular, Colombia developed regulations for harvesting and of quality control criteria for *Guadua* products; Vietnam designed a national development strategy for bamboo sector. Many countries invited INBAR and Chinese experts to carry out onsite inspections and provide strategy consultancy and technical guidance. They also send delegations from domestic regions rich with bamboo resources to China and other regions with developed bamboo sectors for inspections. As such, international exchanges on bamboo and rattan science and technology have been promoted.





## Global and regional workshops

INBAR has co-organised many global workshops on bamboo and rattan over the past fifteen years. We co-organized the 6th and 7th World Bamboo Congresses in Costa Rica in 1998 and India in 2004, respectively; we participated in the 8th and 9th World Bamboo Congresses in Thailand in 2009 and Belgium in 2012, respectively. We held sessions at various other international meetings, including Asia Pacific Forestry Weeks in Vietnam and China, and the World Forestry Congress in Argentina. We have run or sponsored regional or national workshops in Cameroon, Colombia, Ecuador, Ethiopia, Ghana, India, Kenya, Mozambique, Nepal, Peru, the Philippines, Sri Lanka and Tanzania, and have organized two bamboo and rattan trade fairs in China.

## Global Partnership Programme on Non Timber Forest Products (NTFP-GPP)

In 2006, INBAR and the Global Forum on Agricultural Research launched a Global Partnership Programme on Non-Timber Forest Products. It links global, regional, and national organizations which conserve and manage these resources in Africa, East and Southeast Asia, Latin America, and South Asia.

In 2007 work began on the first Partnership project, co-funded by the International Fund for Agricultural Development, to develop sustainable charcoal production in sub-Saharan Africa. We produced two supply chain analyses in Ethiopia and Mozambique, a State-of-the-Art review in Mozambique, Malawi, Tanzania and Zambia, and held a conference that set out recommendations for improving the sector in sub-Saharan Africa. Membership of the Partnership includes governments, commercial companies, non-governmental organizations, national and international agricultural research centres, intergovernmental organizations and UN agencies from all regions of the developing world as well as Europe.





INBAR in the regions

## INBAR in the regions

One of INBAR's advantages as an international organization is its ability to link partners across national and regional boundaries. Key to this are our regional offices – in Ecuador (Latin America and the Caribbean), Ethiopia (East Africa), Ghana (West Africa) and India (South Asia). Our regional offices coordinate and link with national and regional partners at all levels, and act as the first point of contact. Across all our regions, raising awareness of bamboo and rattan, and bringing stakeholders together to share experiences are of great importance. But each region is different, and so our work is often tailored to address the specific conditions in each region.

### South Asia Regional Office, New Delhi, India

South Asia has plentiful bamboo and rattan resources and the resources have important cultural significance in the region. INBAR's work there focuses mainly on improving the existing resource base, helping develop and share the many new bamboo and rattan technologies and techniques invented in South Asia, and developing effective small and medium sized "model" businesses that show real improvements in the lives of those who work with them – especially women – ready for replication and adaptation throughout the region, and sometimes further afield.

### Latin America and the Caribbean Regional Office, Quito, Ecuador

The cultures that grew up with indigenous bamboo – the Guadua – are synonymous with Latin America and a vital starting point for INBAR's work there. Rattan does not grow naturally in the region, and the bamboo resource base is less well developed than in Asia, so much of INBAR's earlier work there revolved around improving bamboo management to supply quality poles to processors. Now, as well as running trial demonstration projects to show how bamboo can be used for poverty alleviation and commercial purposes, we also work to develop new policies and regulations for including bamboo in national laws and strategies.

One of the Latin America and the Caribbean Regional Office's greatest successes is its regional newsletter which is produced in Spanish and is the foremost source of information on bamboo in the region, being sent to over 12, 000 people and read by many more. It is full of useful information on the management, utilization and development of bamboo and rattan resources, and helps keep Latin America's bamboo community connected.

### East Africa Office, Addis Ababa, Ethiopia

As with West Africa, bamboo had not received much attention from development agencies or governments in East Africa. INBAR has worked with local partners to demonstrate the suitability of both indigenous and introduced bamboos to help people earn a living and escape poverty. The East Africa Bamboo Project, which we ran through our partner the United Nations Industrial Development Organization (UNIDO) and with the financial support from the CFC, contributed to a reduction of poverty in rural areas, whilst preventing further deforestation. Workshops held by INBAR in East Africa raised government agencies' awareness of the potential of bamboos, attracted great support from governments for bamboo and rattan projects and contributed to the formulation of policies favorable for the bamboo sector.

### East and Southeast Asia Office Based at INBAR Headquarters, Beijing

Some of the most advanced ideas in bamboo and rattan can be found in East and Southeast Asia. China is a world leader in bamboo-based development, while Indonesia and the Philippines are foremost in the rattan sector. The region is often a source of expertise for our work throughout the world and we regularly call on the skills of its experts in our other projects – Chinese and Philippino trainers often work in our African and South Asian projects.

Many of the world's standards for bamboo management and products originate from East and Southeast Asia, and we help to get these used as models for international standards, so they can be adapted and adopted by other countries. Work in this region also included the promotion of innovative development of bamboo and rattan technology. China's bamboo flat-pack (removable) furniture project has expanded the use of bamboo products, and the Philippines' technology of handmade glue-laminated bamboo furniture has spread around the world.

### West Africa Regional Office Kumasi, Ghana

Rattan is of great importance in West Africa - many tens of thousands of harvesters and processors earn their living from making furniture and handicrafts from it. Bamboo is less well used, so sharing skills and raising awareness of it is an important part of our West Africa Regional Office's work. Rattan is not forgotten, though, as people still need help to build on existing skills and opportunities. We have ran courses to train rattan furniture and crafts producers in Ghana in design and natural production techniques (such as coloring with plant extracts), which were well received by our partners. Deforestation for firewood and wood charcoal has damaged the ecosystem of West Africa. INBAR's Bamboo Charcoal Production System Programme in East and West Africa supports the commercial development of bamboo charcoal in Ghana to replace wood charcoal.

## Member countries

As of the end of June 2012, INBAR expanded its membership to 38 member countries from 9 sponsor countries when it was established. A majority of them are developing countries from Africa (15), Asia (11), Latin America (11) and Oceania (1). Canada, as one of INBAR's sponsor countries, is currently the only developed country among the member countries. The joining process of countries such as Brazil, South Africa, Mexico and Thailand is moving forward steadily.

To make being an INBAR member country even more attractive, we will further broaden the range of services, organize campaigns and invite member countries to participate in the development activities of member countries.

As INBAR member countries make regular membership fee payments, they enjoy preferential treatment from INBAR such as technical support, information services and project funding. INBAR member country services include, but are not limited to the following:



**Improve the development policy and strategy of member countries' bamboo and rattan industry through capacity building.** This is achieved by activities such as assisting member countries in the preparation of a national development policy and implementation programme for the bamboo and rattan industry; carrying out trainings on sustainable management, development and utilization of bamboo and rattan resources for government, academics and technical staff; and organizing visits to countries with advanced bamboo and rattan industries for study and exchange.

**Narrow the gap in bamboo and rattan development levels between member countries through the transfer of technology.** This is achieved by activities such as determining the appropriate technology required by the member countries; developing technology transfer modes; implementing and coordinating technology transfer projects; and being the bridge between both sides of technology transfer.

**Cooperate with the member countries to strive for funding support and implement bamboo and rattan projects.** This is achieved by activities such as making work plans; determining target funding agencies; preparing project proposals; providing technical assistance; and fulfilling the project supervisory responsibilities.

**Promote the bamboo and rattan production and consumption market of member countries.** This is achieved by activities such as precisely evaluating the conditions, potential, technology, markets and marketing strategies of bamboo and rattan resources in member countries; supporting the establishment of production and marketing chains; promoting the development of bamboo and rattan standards, codes and certification system; and supporting the creation of a fair and transparent trading environment.

**Benefit from INBAR's role as a global bamboo and rattan information center that promotes exchange and dissemination of information on bamboo and rattan in the world.** This is achieved by activities such as providing global resource distribution data, product trade data, germplasm resource information, technology transfer models, publications and reference material on product standards for bamboo and rattan for member countries; providing opportunities for participating in international and regional conferences, trainings and trade exhibitions; and developing distance education courses.



## Public activities and advocacy

One of INBAR's key activities is to establish an extensive network and partnership with the media, project partners, bamboo and rattan academia and sponsors; to jointly promote INBAR's project activities in protecting the environment, supporting rural development, and promoting South-South, South-North, and North-South cooperation. The network aims to increase public awareness of the importance of bamboo and rattan in the areas of livelihoods development and environmental sustainability.

In recent years, through various means such as publications, organizing and participating in conferences and workshops, and through its network, INBAR has cooperated with both local and international media in multiple languages to actively disseminate knowledge, projects and latest research achievements. This has brought public attention to the environmental and social benefits of bamboo and rattan. By attracting public attention to the green development of bamboo and rattan, INBAR's efforts are creating more responsible consumers, producers, investors and supporters of inclusive and green development.

In 2010, INBAR made full use of the Shanghai World Expo as a platform to showcase innovative applications and high-tech products of bamboo and rattan for urban consumers. INBAR organized a series of bamboo and rattan activities at the Expo which garnered global attention. In 2011, INBAR's International Bamboo and Rattan Garden at the Xian International Horticultural Exposition showed the diversity of world bamboo resources and innovative bamboo and rattan products.



In 2011 INBAR, SFA and ICBR jointly organized the planting of bamboo at the Black Bamboo Park in Beijing on the occasion of Earth Day, highlighting the role of bamboo in low carbon emission, environmental protection and poverty alleviation. In the same year, the project "Sustainable Revival of Livelihoods in Post-Disaster Sichuan" funded by the European Union was one of the three winners in the World Reconstruction Conference Innovation Competition and European Council President Herman Van Rompuy visited the project site in Sichuan. INBAR also participated in the UN Climate Change Conferences in Copenhagen, Denmark; Cancun, Mexico; and Durban, South Africa to publicize bamboo's unique function in addressing climate change. These events have expanded public awareness of bamboo and rattan for environmental protection, low carbon emission and green development, and have improved INBAR's international exposure.



# THE WAY FORWARD



Today, the work of INBAR lies at the nexus of poverty alleviation, environmental sustainability and partners for development. Building on INBAR's strategy released in 2006, a set of goals for 2015 have been identified to address the new global realities, knowledge, challenges and opportunities that shape sustainable development, resulting in a new approach we call 'inclusive and green development'.



Photo credit: Fu Shuxiang

## INBAR Roadmap to 2015

### Goal 1: An expanded, highly effective, network of committed stakeholders

#### *By 2015 INBAR aims to have:*

- Ensured that additional Least Developed Countries (LDCs), emerging economies and developed countries have joined INBAR, contributing to a more robust, balanced and effective membership of 45 or more member countries.
- Further optimized the benefits of INBAR membership, supporting member states in their quest to achieve their sustainable development goals, from meeting global sustainable development goals to coping with and combating climate change; whether through national development or through participating in South-South, South-North and South-North collaborations.
- Enhanced strategic global partnerships that address a variety of specific issues, including, rattan, construction with bamboo, and climate change. These efforts will draw on the experience and wide reach of the two global partnership programme established since 2006: Non-Timber Forrest Products and Bamboo Construction. A critical tool to achieve this will be an online networking system that will link INBAR stakeholders and better enable them to more effectively develop informal exchanges and formal strategic partnerships.
- Increased both the diversity of its financial resource base and the amount of direct financial resources available. In four years time, INBAR aims to increase the \$5.5 million per annum available today to at least \$7 million per annum. This will be further supplemented by clearly identifying and mobilizing new indirect sources of funding.

### Goal 2: Enhanced contribution of bamboo and rattan to environmental sustainability, particularly ecosystem services and coping with and combating climate change

#### *By 2015 INBAR aims to have:*

- Further analyzed and demonstrated bamboo's global role in climate change mitigation and adaptation through research partnerships and pilot projects; disseminated the findings, and advocated for the proper inclusion of bamboo in international climate change mechanisms.
- Demonstrated best practices for bamboo and/or rattan germplasm and biodiversity protection, through the development of criteria for sustainable management.
- Secured the inclusion of bamboo- and rattan-based approaches in global biodiversity related initiatives such as Satoyama and Globally Important Agricultural Heritage Sites (GIAHS)
- Contributed to progress with the recognition of bamboo and rattan for ecosystem services, including the development of policies for payments through research and reports on the following:
  - Bamboo in integrated watershed management for east Africa;
  - Systems of certification for sustainable bamboo and rattan management, along with a plan for out scaling;
  - Bamboo in ecologically responsible tourism.





Photographer unknown

### **Goal 3: Better ways and means of inclusive livelihood development, particularly in rural areas**

#### ***By 2015 INBAR aims to have:***

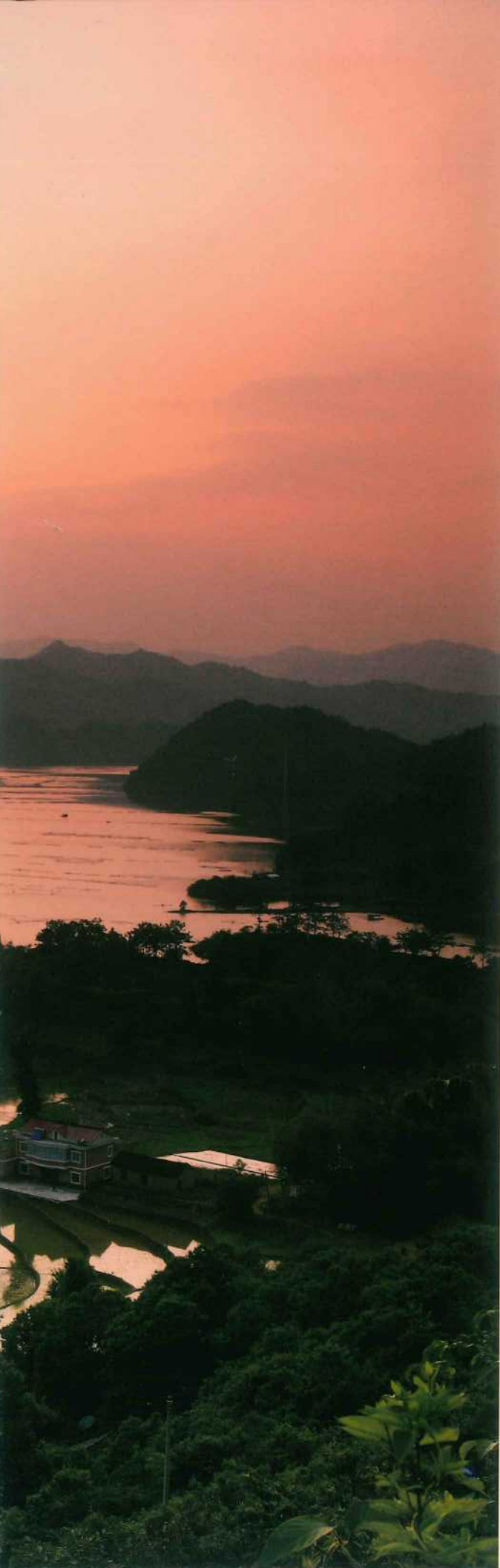
- Enhanced pro-poor development results, outcomes and impact as a result of experience sharing among our network of self-sustaining action research sites in Africa, Asia, and Latin America.
- Advanced innovative and effective institutional development systems, combining NGOs, marketing, and community finance and enterprise approaches, to enable the growth and expansion of rural bamboo and rattan enterprises.
- Expanded the range of model resource production and processing and supply chains, in particular for bamboo food, construction and energy products, for robust and large-scale rural employment generation. Analyzed the role of land tenure in relation to bamboo and rattan in rural areas; provided recommendations for approaches to optimize the inclusive development of the bamboo and rattan sector.

### **Goal 4: Enhanced, more innovative and sustainable market environments**

#### ***By 2015 INBAR aims to have:***

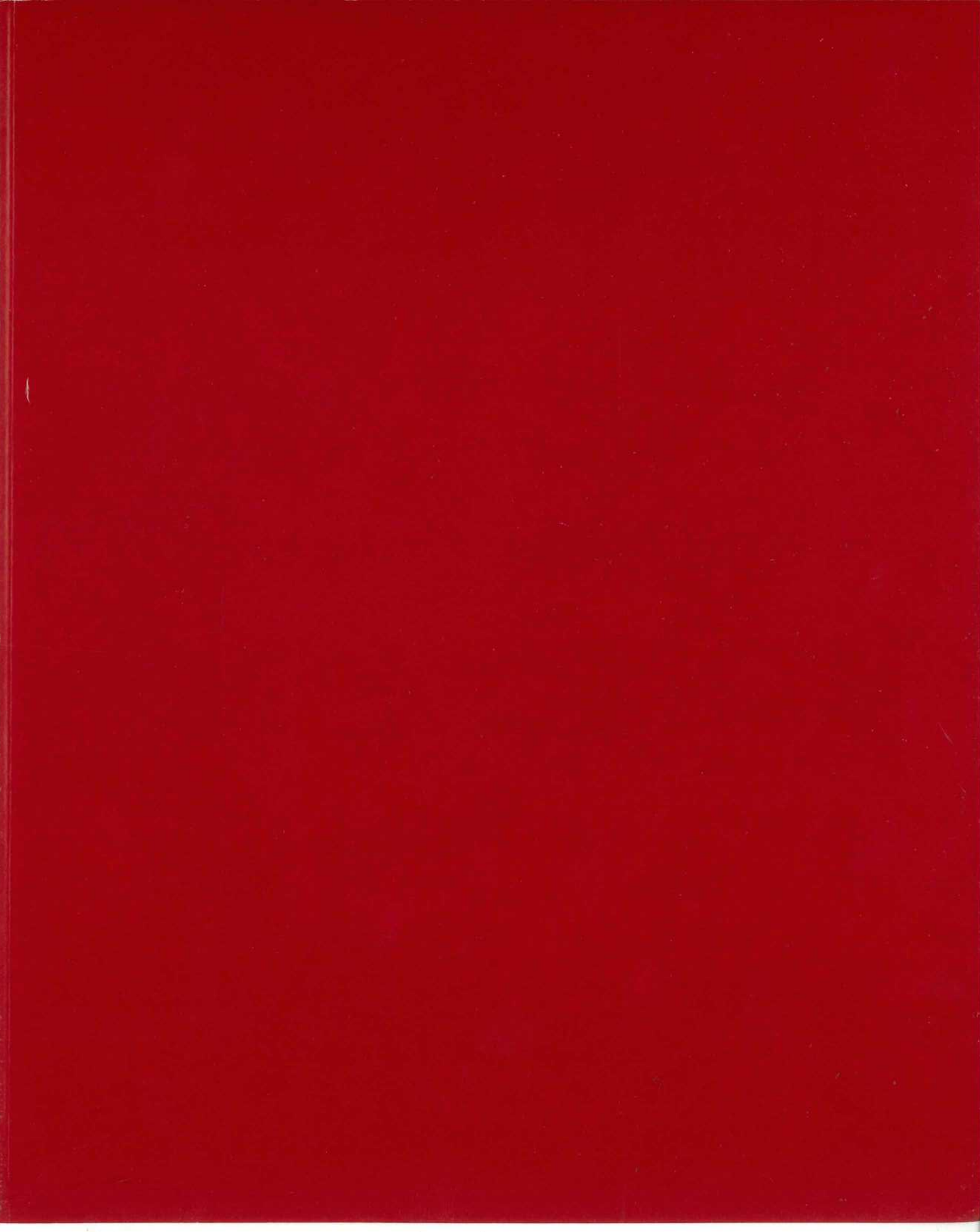
- Used its role as an International Commodity Body to establish a wide ranging portfolio of national level value chain projects, such as on construction in Bhutan, bamboo shoots in NE India, and bamboo charcoal in West Africa;
- Fostered the development of national and international bamboo and rattan standards, for construction materials, shoots, and bamboo plywood in countries such as China, India, Indonesia and the Philippines;
- Further improved the way in which up-to-date global trade data on bamboo and rattan are collected and made available, and analyse the links, trade-offs and synergies between national and international trade in member countries;
- Provided policy and market recommendations for sector development, as well as relevant recommendations for trade policies, like FLEGT or the Lacey Act, to member countries.

In these ways, INBAR will continue to make significant, measurable contributions to global sustainable development goals, mitigation of and adaptation to climate change, and inclusive and green development.





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China INBAR Coordination Leading Group  
The International Network for Bamboo and Rattan

**International Network for Bamboo and Rattan (INBAR)**

P. O. Box 100102-86  
Beijing 100102, P. R. China

Tel: 00 86 10 64706161  
Fax: 00 86 10 64702166  
Email: [info@inbar.int](mailto:info@inbar.int)  
[http:// www.inbar.int](http://www.inbar.int)

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