



**IN PARTNERSHIP
FOR A BETTER WORLD**





携手共创美好世界

IN PARTNERSHIP
FOR A BETTER WORLD



國際



竹 藤 组 织

江泽民



Preface

楊潔篪

H.E. Mr. Yang Jiechi
Minister of Foreign Affairs
People's Republic of China



Whenever bamboo and rattan are mentioned in China, people always think of strength and vitality, and admire their spirit of modesty, generosity and vigor that these plants engender. Bamboos in particular have been immortalized in ancient verse - "Breaking the ground to soar into the sky, it thrives in the fading chilly winter." (Poem "Chant of Bamboo" by Fu Pangru): "Settling down on the eastern peak of the Taishan Mountain, the wise saga with plain bamboo hat and rattan belt welcomes friends from far away." (Poem "The Old Man of Taibai" by Zhang Ji), and these stanzas also well illustrate the history of development of the International Network for Bamboo and Rattan (INBAR). Since its formal launch in Beijing, China on 6 November 1997, INBAR has grown from a groundbreaking shoot to a soaring green bamboo, from a new seedling to a robust climbing rattan. Its wide branches and shading leaves are bringing extensive benefits to the Earth and its people.

Looking back over the past dozen years, images of the initiative to launch INBAR are still fresh in our minds. In the 1990s, the significant roles of bamboo and rattan in the rural socio-economic development of developing countries in Africa, Asia and Latin America became more and more recognizable within the international community, and thus it was commonly agreed that an international organization was needed to address bamboo and rattan-based development. In 1997, the International Development and Research Center of Canada (IDRC), the Chinese Government and the United Nations International Fund for Agricultural Development (IFAD) jointly launched INBAR in response to an initiative of the Canadian and Chinese governments.

As the first independent, non-profit intergovernmental international organisation headquartered in China, INBAR has experienced rapid growth in the years that have passed. Its membership has increased from 9 founding members to 34 member States, with regional offices in Ecuador, India, Ethiopia and Ghana, and more than 130 international partners. Its activities cover all major bamboo and rattan producing and consuming regions in Asia, Africa, Latin America, North America, Europe and Oceania.

In these regions, INBAR has implemented more than 100 projects demonstrating innovative uses of bamboo and rattan to address issues such as poverty alleviation, environment protection, and product manufacturing and trade. INBAR's activities have played essential roles in promoting development, environmental protection, scientific research and sustainable utilization of bamboo and rattan in developing countries, in facilitating income generation, employment of the poor in bamboo and rattan producing regions, and expanding international trade of bamboo and rattan products. In the year 2000, INBAR became the International Commodity Body for bamboo and rattan of the Common Fund for Commodity (CFC).

INBAR makes unremitting efforts and explores innovative ways to achieve its mission through promoting international cooperation, improving the technical capacity of its member States, facilitating sustainable development of the bamboo and rattan sectors, increasing benefits for producers and consumers, and providing bamboo and rattan solutions to improve living conditions and ensure life and food security. Under the framework of the United Nations Millennium Development Goals, INBAR has developed its new Strategy to 2015, which focuses on four major goals: an expanded, highly effective network of committed stakeholders; better ways and means of livelihood development, particularly in rural areas; increased and effective protection of the environment and of biodiversity; and a better and more innovative market environment, providing fair global-to-local and local-to-global trading systems for income generation. The new strategy will contribute particularly to the achievement of MDGs 1 (poverty eradication), 7 (environment protection) and 8 (global partnership) in an integrated and coordinated way.

China is one of the countries in the world with rich bamboo and rattan resources and long history in bamboo and rattan utilization. The Government of China has provided continuous support to guarantee the healthy development of INBAR. It has constructed a new office building for the INBAR Secretariat, established the China-INBAR Inter-ministerial Coordination Leading Group, and set up the International Center for Bamboo and Rattan (ICBR) to provide services for INBAR. In the future, the Government of China will continue to support the development of INBAR in China and the World.

We sincerely wish INBAR a more prosperous and bright future in its sustainable development and hope it will make new and greater contribution to the human course of poverty alleviation, environmental protection and economic development!

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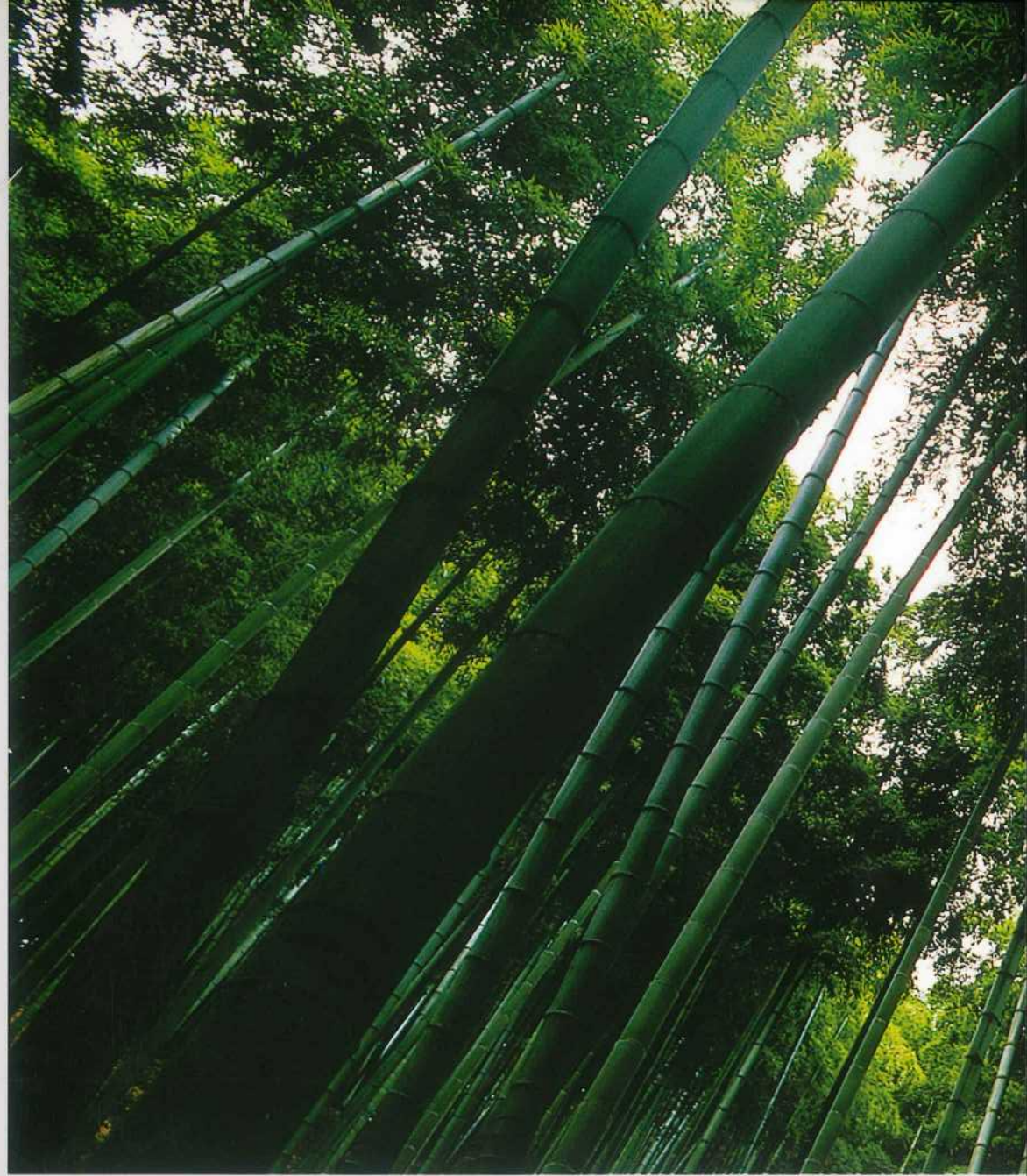




About INBAR

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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 regrow through 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.

Various kinds 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.



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 seldom sustainably managed. 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. For example, collectors in Ghana who send rattan poles to commercial factories earn about US\$45 per month, while furniture makers can earn up to US\$250 per month simply from producing items for local sale.

Product quality and design are two of the most important factors influencing marketability. Export of rattan products can make important contributions to national incomes. China, Indonesia, Malaysia and the Philippines exported an estimated US\$1.68 billion worth of rattan and rattan products in 2004. 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.



Chief Executives of INBAR



Christophe Bazivamo
Chairman, INBAR Council



Hasan Mahmud
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



Introduction to the organization

The International Network for Bamboo and Rattan (INBAR) is an inter-governmental organization established in 1997. Our headquarters is 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. We also have the capacity to undertake development projects involving bamboo and rattan ourselves.

In just twelve 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.

What makes INBAR unique?

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 conserve the environment at the same time.

INBAR exercises innovative leadership by continually researching new ways to use bamboo and rattan to address poverty and envi-

ronmental degradation and by supporting others in the application of new innovations in development programmes.

INBAR is the only independent intergovernmental network that links stakeholders at all levels from producers to consumers, including global trading systems.

INBAR works flexibly with all major stakeholders wherever they are.

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 to draw on.

INBAR's secretariat remains small and efficient, so can continue to evolve and respond effectively to changes in the way global development operates.



Present Board Members



Tesfai Teclé
Eritrea



Jang Zehui
China



Hubert G. Zandstra
Canada



Chu Fuxiang
China



Kazuhiko Takeuchi
Japan



Maharaj Muthoo
India



Gerardo Segura Warnholtz
Mexico



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



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



M. S. Swaminathan
Trustee
India



Seewanti Bhoojedhur
Trustee
Mauritius



Salleh Mohd. Nor
Trustee
Malaysia



Ana Cecilia Chaves
Trustee
Costa Rica



David Hopper
Trustee
Canada



Abdelmajid Slama
Trustee
Tunisia



Ian Hunter
DG, Trustee
United Kingdom



Yoshiko Y. Nakano
Trustee
Japan



Romualdo L. Sta Ana
Trustee
The Philippines



Josefina Takahashi Sato
Trustee
Peru



Pekka Patosaari
Trustee
Finland



Dr. Coosje Hoogendoorn, Director General of INBAR (middle left) and Mr. Wu Zhimin, Deputy Director General (middle right) meeting with staff of the INBAR Secretariat.

Organisation 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. Since 2008 the council has held its meetings in the council chair's home country - that year the meeting was held in India, and in 2010 it will be held in Rwanda.

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

The secretariat is the executives 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.

Funding

At present, 90% of INBAR's income is from core and project-related funding from various donors. Key among them are the government of China, the UN International Fund for Agricultural Development (IFAD), the Common Fund for Commodities (CFC) and the European Union (EU). The remaining 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, which represents about one third of the total financial resources, currently standing at approximately US\$6 million per annum, which we can draw on for our work.



Member countries

INBAR's membership is open to all sovereign States under the UN system and to inter-governmental organisations. 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 December 2009, INBAR had 34 member countries:

13 in Africa: Benin, Cameroon, Ethiopia, Ghana, Kenya, Madagascar, Mozambique, Nigeria, Rwanda, Sierra Leone, Tanzania, Togo and Uganda;

11 in Asia: Bangladesh, Bhutan, China, India, Indonesia, Malaysia, Myanmar, Nepal, the Philippines, Sri Lanka and Vietnam;

9 in America: Argentina, Canada, Chile, Colombia, Cuba, Ecuador, Peru, Suriname and Venezuela;

1 in Oceania: Tonga.

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 base through consolidating, coordinating and supporting strategic and adaptive research and development.

Strategic Goals - How INBAR makes its mission a reality

The role of INBAR in economic development, eradicating poverty and conserving the environment, particularly in developing countries, is 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 translated this into four strategic goals which we aim to achieve by 2015:

1. An expanded, highly effective network of committed stakeholders.
2. Better ways and means of livelihood development, particularly in rural areas.
3. Increased and effective protection of the environment and of biodiversity.
4. A better and more innovative market environment, providing fair global-to-local and local-to-global trading systems for income generation.

To do all of this INBAR will need to concentrate firmly on poverty reduction combined with environmental protection while stimulating a global bamboo and rattan industry for the public good. INBAR will seek support from development donors, member countries and industry partners. INBAR's priority is to use public funds to create public goods, although we will also be ready to provide services to commercial partners at full cost.



The birth of INBAR

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Under the leadership of Professor Jiang Zehui, head of the China-INBAR Preparatory Leading Group, all the legal procedures for the establishment of INBAR had been completed by November 1997 after efforts of 20 months. Professor Jiang Zehui (front centre) and the staff of the China-INBAR Preparatory Leading Group.

INBAR evolved out of an informal network of bamboo and rattan researchers, set up in 1984 by the 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 our 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.



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 of the international preparatory team to discuss procedures for establishing INBAR, including the proposal to base its headquarters in China. After the meeting, authorised by the Board of IDRC, Dr. Keith Bezanson, IDRC's then president, wrote to H.E. Mr. Song Jian, the Chinese State Councillor, who replied on behalf of the Government of China welcoming INBAR to China.

In the following March, the China-INBAR Preparatory Leading Group was established, led by the Chinese Ministry of Forestry and headed by H.E. Professor Jiang Zehui, Leading Member of the Ministry of Forestry and President of the Chinese Academy of Forestry with H.E. Mr. Hui Yongzheng, Vice Minister of State Commission of Science and Technology as the Deputy Head, and composed of senior officials from Ministry of Forestry, State Commission of Science and Technology, Ministry of Finance, and Ministry of Foreign Affairs of China. This group was responsible for the international establishment process of INBAR with the Chinese government coordinating activities among all related government agencies, communicat-

ing with relevant international organisations and INBAR signatories and holding bilateral and multilateral negotiations.

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-the basis on which the INBAR Establishment Agreement was jointly drafted. There were crucial top-level negotiations during this stage to ensure international and Chinese legal requirements were met. Meanwhile, the INBAR Headquarters Agreement, drafted by the Ministry of Foreign Affairs of China in accordance with the international practice and with agreement of the international partners, was submitted to the State Council of China for approval.

Altogether it took 20 months to complete all the legal procedures and INBAR was ready to be established in November 1997.



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

Official launching of the first intergovernmental organisation 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.



《国际竹藤组织协议》签字仪式

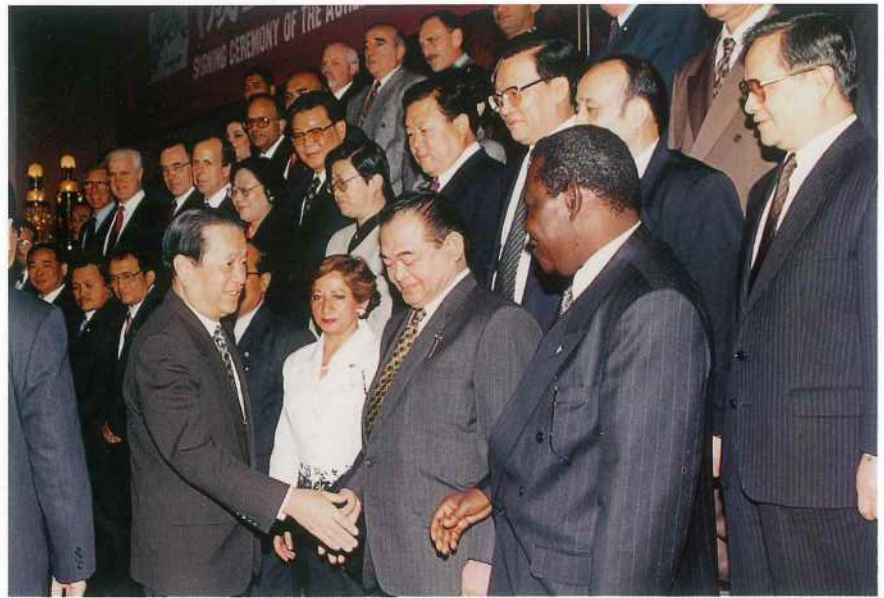
OF THE AGREEMENT ON THE ESTABLISHMENT OF INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN



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.



Great attention and support have been given by State leaders to the establishment of INBAR.

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

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

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



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

The next day a grand Inauguration Ceremony for INBAR was held in the Beijing Friendship Hotel, hosted by the Government of China. H.E. Mr. Bu He, Vice Chairman of the Standing Committee of the National People's Congress and H.E. Mr. Wan Guoquan, Vice Chairman of the Chinese People's Political Consultative Conference unveiled the inscription by President Jiang Zemin. State Councillor Song Jian gave a warm address on behalf of the Government of China. Sixty-six foreign guests and celebrities from INBAR signatories and observing countries, diplomats from foreign embassies in China, members of INBAR Board of Trustees and representatives of 11 United Nations agencies, international donor agencies and well-known overseas universities and international companies, together with 260 Chinese representatives gathered together, envisioning the promising prospects of the future development of bamboo and rattan. Over 40 Chinese news media including Xinhua News Agency, People's Daily, the Central People's Broadcasting Station and China Central Television Station and foreign media from France, Germany, the Netherlands, the USA attended the ceremony. More than 60 news and reports about this event were released. A special presentation was made about INBAR by IDRC and IFAD in the APEC meeting.

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



China's President Jiang Zemin wrote the inscription for INBAR. 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 on November 7, 1997.



Left: The first INBAR Council Session was held in November 1997 in Beijing, China, and formally announced the appointment of INBAR's first Board of Trustees and Director General. **Right:** The first INBAR Board Meeting was held in November 1997 in Beijing, China, the meeting established basic procedures and standards for the new organisation, 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 the Government of China supports INBAR

The Government of China has always supported the development of INBAR. After INBAR was established the Government of China set up the China-INBAR Coordination Leading Group headed by H.E. Professor Jiang Zehui, Leading Member of China's State Forestry Administration, Co-Chair of the INBAR Board of Trustees and President of the Chinese Academy of Forestry, in order to promote INBAR's effective operation and sound development. The Leading Group 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 Municipal Government.

After its establishment, INBAR was provided by the Government of China with a temporary office in Anhui Beili, Chaoyang District, Beijing, as well as furniture, vehicles, communication facilities and salaries of local staff.



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 Bhoosedhur, member of the INBAR Board of Trustees and Mr. Zhang Youcai, Chinese Vice Minister of Finance.



Construction of the International Centre for Bamboo and Rattan formally commenced on January 28, 2000, with the care and support of the Chinese Government. From left second: Professor Jiang Zehui, Co-Chair of the INBAR Board of Trustees; Mr. Guo Aihua, Vice General Manager of the China State Construction Engrg. Corp.; Mr. Wang Guangya, Chinese Vice Minister of Foreign Affairs; Mr. Wang Guangtao, Vice Mayor of Beijing; Mr. Hui Yongzheng, Chinese Vice Minister of Science and Technology; Mr. Wang Zhibao, Administrator of the China State Forestry Administration; Mr. Qian Qichen, Vice Premier of China; Mr. Liu Jiang, Minister of State Planning Commission; Mr. Zhang Youcai, Chinese Vice Minister of Finance; Dr. Gordon Smith, First Chair of the INBAR Board of Trustees; Dr. Ian Hunter, Director General of INBAR and Mr. Li Yucai, Vice Administrator of the China State Forestry Administration.



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.



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.



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 International Bamboo and Rattan Tower (photo: September 2004)



The new 5,000 m² INBAR headquarters provided by the Government of China has been in use since August 2003. In addition to the headquarters building itself, the complex includes the International Bamboo and Rattan Key Open Laboratory and the International Bamboo and Rattan Training Centre which together provide research and development, personnel training and facilities for international conferences.

The Government of China pays a membership fee as well as making an annual financial contribution to INBAR.



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

To assist INBAR in achieving its vision and mission, the Government of China has established the International Centre for Bamboo and Rattan (ICBR), which is a research, management and training institution focusing on bamboo and rattan research and providing services for INBAR. Based in China and open to the outside world, ICBR shoulders such specific responsibilities as: setting up the national open laboratory on bamboo and rattan; undertaking scientific research on and international cooperation in bamboo and rattan; fostering the development of senior professionals in related fields; establishing a modern international bamboo and rattan technological information network to provide related services on technological consultation, information, appraisal and evaluation for domestic and foreign institutions; carrying out training, academic exchange and publicity activities at both international and national levels; providing logistic services for the 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: Collection of Bamboo Species Germplasm by establishing the Bamboo Species Germplasm Conservation Base in Huangshan City, Anhui Province, China; Bamboo Shoot Development Project sponsored by the Common Fund for Commodities (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, a project sponsored by CFC. In addition, INBAR and ICBR have also been cooperating in organizing many international bamboo and rattan training workshops and in facilitating the exchange of bamboo and rattan scholars among INBAR's member countries. These activities strengthened China's exchange with other bamboo and rattan producing and consuming countries in the world, and have provided a new platform for south-south cooperation in bamboo and rattan.



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



Professor Jiang Zehui meets Ms. 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.



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 meets Dr. Manoel Sobral Filho, Executive Director of the International Tropical Timber Organisation (ITTO).



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



ICBR has built a Bamboo Species Germplasm Conservation and Training Base in Huangshan City, Anhui Province. The picture above shows the start-up ceremony of the construction of the Base.



Study on the micro property parameters of bamboo and rattan with the X Ray Diffractometer.



Study on the microstructure of bamboo and rattan with Field Emission Environment Scanning Electron Microscope.



Bamboo and flowers species germplasm conservation at the the ICBR Taiping Center in Huangshan City, Anhui Province,China.





H.E. Mr. Bu He (centre right), the former Vice Chairman of CPPCC visits the bamboo industry exhibition during the fifth China Bamboo Cultural Festival, accompanied by Professor Jiang Zehui (centre 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 organised by SFA, INBAR and the host province. So far, five such festivals have been held. Activities during the festival include an international workshop, business negotiations, 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.

(Top): Professor Jiang Zehui, Vice Chair of Committee of Population, Resources and Environment of CPPCC and Co-Chair of the INBAR Board of Trustees, gives a speech at the opening ceremony of the 2001 Yibin Bamboo Cultural Festival. (Middle left): Needs Assessment Forum held by INBAR during the Fifth Session of the China Bamboo Cultural Festival. (Middle right): Presentation in the International Workshop on Bamboo Industrial Utilisation during the Fourth Session of the China Bamboo Cultural Festival. (Bottom left): The Bamboo Products Fair during the 2004 Xianning Bamboo Cultural Festival attracted many Chinese and international visitors. (Bottom right): Bamboo gardens were constructed during each Festival to conserve, study and develop bamboo genetic resources.



Timeline

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 rather 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 fully play the role of the expertise of the researchers and practitioners scattered across the globe.

1985 & 1988

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

1993

Formation of INBAR

As bamboo and rattan projects increase, a meeting is organised in New Delhi 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.

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.

But rattan and bamboo specialists realise INBAR's efforts to build partnerships are hampered because it remains a time-limited IDRC project.

1995

INBAR's independence

Group consisting of IFAD, IDRC, the MS Swaminathan Research Foundation (an Indian sustainable development organisation) and the Chinese Government meet in Malaysia 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.

1997

INBAR as an intergovernmental 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 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.

1998-1999

Out into the world

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 priority focal areas and development agenda.

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

The first of INBAR's 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.

2000

International Commodity Body for Bamboo and Rattan

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 2009, eight projects supported by the fund were or had been running in Bangladesh, China, Nepal, Sri Lanka, east and west Africa.

2001

Latin America beckons

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 first 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, SFA and the Sichuan Provincial Government, China, organizes the third China Bamboo Cultural Festival. The International Workshop on Bamboo Cultivation, Processing and Utilization is held during the Festival.

2002

Five years of networking

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

New homes and new directions

INBAR's secretariat moves to permanent headquarters in Beijing provided by the Government of China. INBAR opens its West Africa regional office in Kumasi, Ghana.

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

INBAR works with the World Customs Organisation to release new customs codes that 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, SFA and the Hubei Provincial Government organize the Fourth China Bamboo Cultural Festival. The International Workshop on Bamboo Industrial Utilization was held during the Festival.

2006

In partnership to 2015

INBAR develops and publishes its 'In Partnership for a Better World - INBAR Strategy to the Year 2015', to guide its work and 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.

Open and Distance Learning Programme launched.

INBAR, SFA and the Fujian Provincial Government organize the fifth China Bamboo Cultural Festival in Wuyishan City. The International Bamboo Workshop: Trade, Development and Environment is held during the festival.

2007

Ten Years in Partnership for a Better World

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 11

Africa 13

Latin America 8

North America 1

Oceania: 1

INBAR's 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

2008 - present

Proven success fuels the future

By 2009 there are now regional offices in Ecuador, India, Ghana and Ethiopia, and over 160 affiliates from around the world.

Global Rattan Programme launched, and runs its first project in Ghana.

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.

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.

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

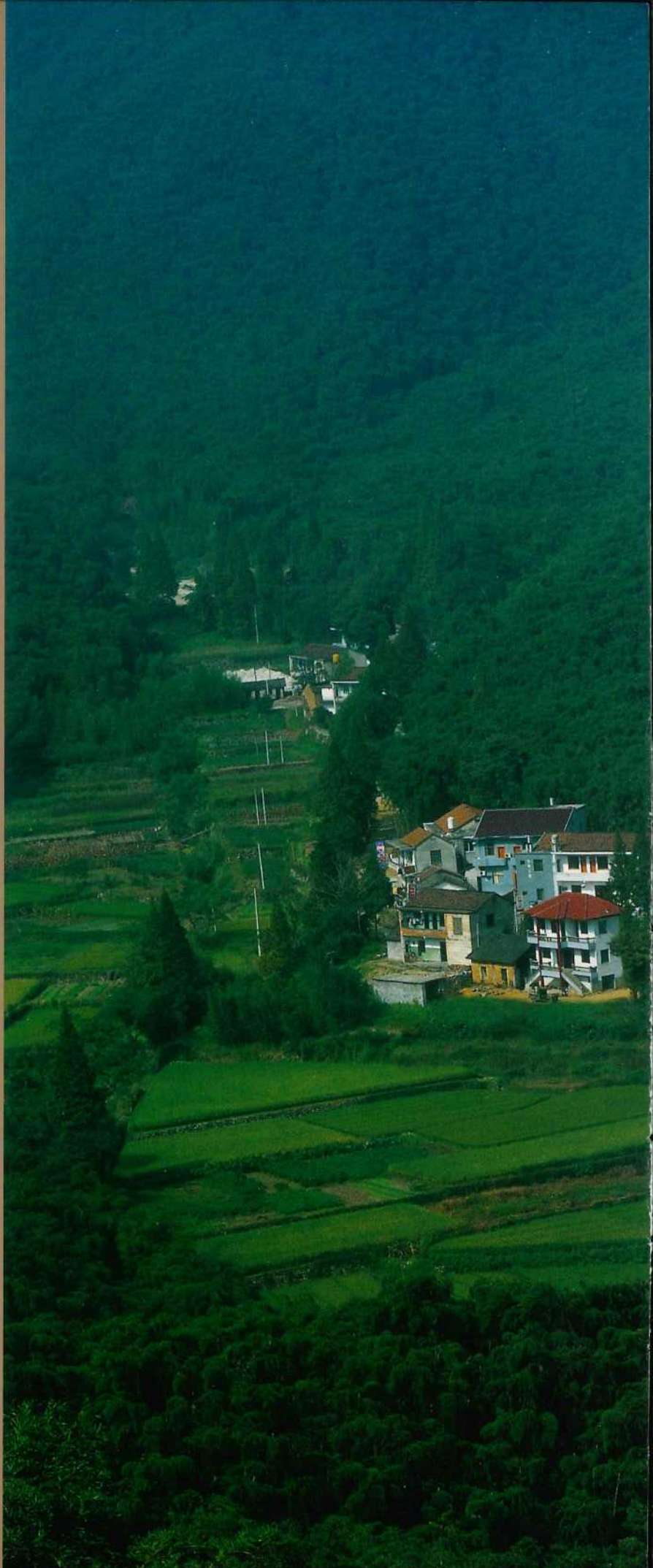
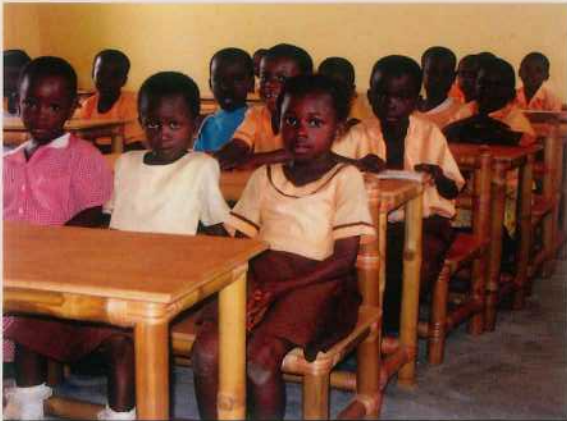


Achievements

IN PARTNERSHIP FOR A BETTER WORLD



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 12 years INBAR has demonstrated how they can be used effectively and sustainably in development projects. We have run projects in more than 20 countries and regions and made links with stakeholders in many more. Here are some of the highlights of our work.







Environmental sustainability



Growing rattans

Helping people grow and use rattans was one of our first programmes, starting back in 1997 when we began investigating rattan species that would grow well in plantations in Cuba. Soon after, we started working with partners in Nepal and some African countries to improve rattan growing methods there.

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.

The best way to conserve natural stands of rattan is often to help local people 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 studied the complete chain from rattan growing or harvesting through processing to the final marketing and uses, that enabled us to make recommendations for improving the chains to alleviate poverty.

Lack of information is often a barrier to making better, more sustainable use of natural resources so 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.



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 find it a very useful tool.





Bamboo Species

Bamboo Species Attributes

Type in Latin Name:

Properties	Picture
Natural Distribution and	Picture

Bambusa bambos

- Bambusa blumeana
- Bambusa burmanica
- Bambusa chungii
- Bambusa nutans
- Bambusa oldhamii
- Bambusa pallida
- Bambusa perverieabilis

Legend: ■ Probable natural distribution ■ Potential exotic locations

No.11

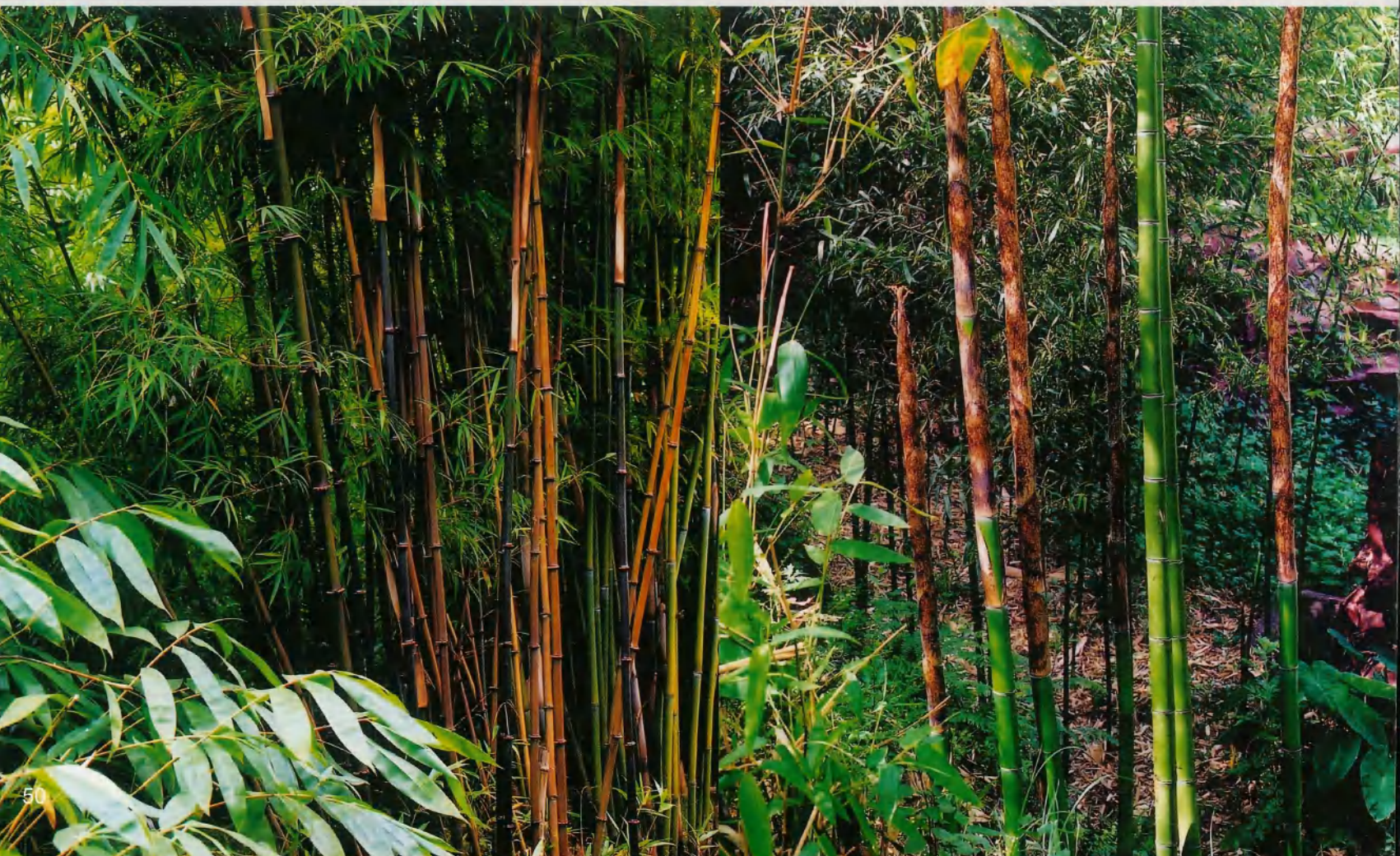
The software interface displays a world map with green shaded areas indicating the probable natural distribution of *Bambusa bambos* in Southeast Asia and parts of East Asia. Red shaded areas indicate potential exotic locations, including the Americas, Europe, and Africa. A dropdown menu lists various bamboo species, with *Bambusa bambos* selected.

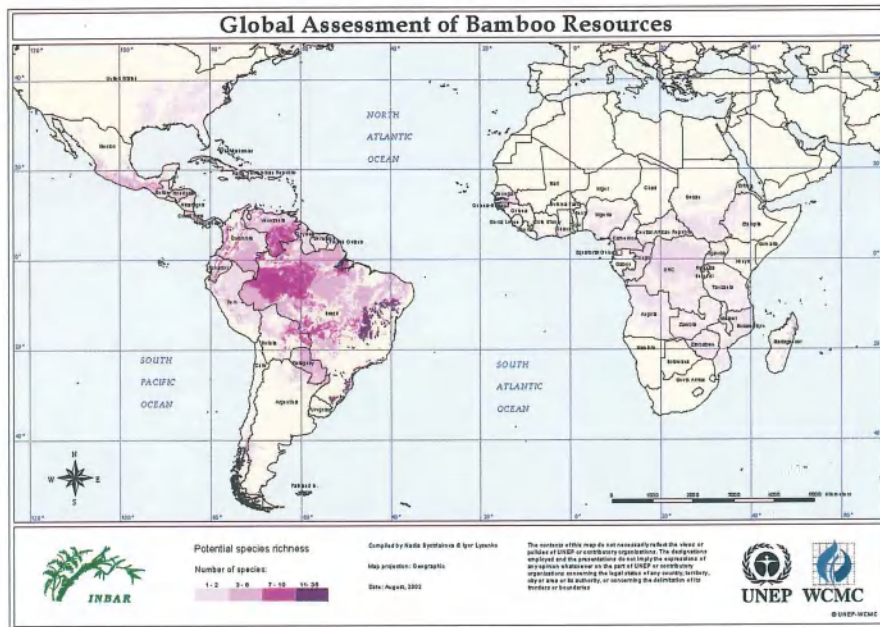


Taking stock of the world's bamboos

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 part of the forest ecosystems to which they belong and are just as threatened from deforestation as many other forest plants.









Bamboo for rehabilitating degraded lands

Since its establishment, INBAR has been working 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 2004 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 recognise 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.









Standards for biodiversity-rich bamboo forest management

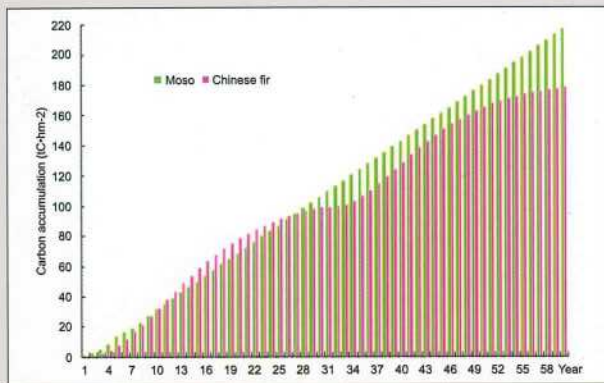
INBAR's Bamboo Forest Biodiversity Protection project developed a set of standards, based on practical trials in endangered bamboo forests, on how to manage them to maximize not only the yields of bamboo poles, but also the biodiversity of the forest ecosystem. We are now using this to develop a community-certification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



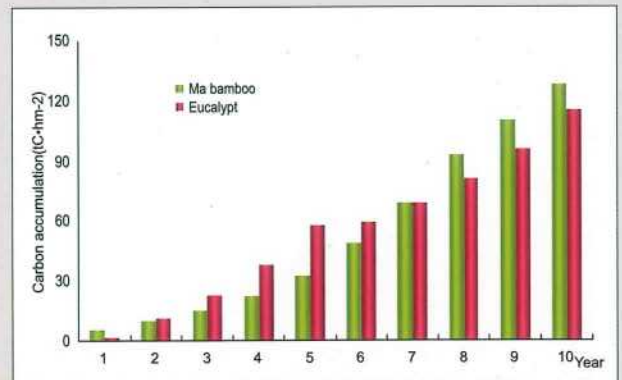


Bamboo and climate change

Bamboo is one of the fastest growing and productive plants on the planet. INBAR ran a 'Bamboo for climate change' workshop at Asia Pacific Forestry Week in Vietnam in 2008, and wanted to evaluate just how bamboo could contribute to reducing and helping us adapt to climate change, so recently we conducted research to evaluate its potential in mitigating and adapting to climate change and presented the data during COP 15 of the UNFCCC in Copenhagen in 2009.



Managed subtropical Moso plantations are predicted to sequester over 20% more carbon than Chinese Fir forest after 60 years.



Over 10 years, managed tropical Ma bamboo is predicted to sequester 25% more carbon than Eucalypt.





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, Ethiopia, Ghana, India, the Philippines and Tanzania our projects have helped people to produce 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 buildings, 'Roti' baskets and sanitary pads from bamboo, 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 helped train 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 as widely as possible.

In Hainan Province in the south of China, in collaboration with the German technical agency GTZ, 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. In the project, we showed how rattan and bamboo could 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 from using their new skills.



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. In India it has developed technology for flattening bamboo that has a wide range of applications.



Development by design

Towards sustainable livelihoods & environmental protection in Uttarakhand using bamboo

Project Location

India
Uttarakhand state
Himalayan province

Project schedule
April 2003 - December 2004

Finances
\$ 23,660 funding from INBAR

Present status of the project

Nursery development
Introduction of new species
Craft museum
Linkages with NGOs
Community interaction
Assessment of skills
Market survey
Formation of state bamboo board
Setting up headquarters
Model sites identification
Initiation of resource assessment through GIS

Activities

Bamboo resource development
Inventory of existing resources through GIS
Plantation, nursery development & reproduction of new species
Raw material procurement

Bamboo skills development
Identification, documentation & revival of traditional bamboo (Ringsel) craft skills
Development & refinement of existing skills through introduction of new techniques & processes

Resource application
Expansion of product range
Propagation of bamboo use for earthquake resistant construction & infrastructure development
Plantation for soil protection
Livelihood generation

Capacity building
Awareness generation
Workshops, craft museum, exhibition of innovative products
Establishment of design centres
Developing the design centre as a centre for excellence in bamboo design
Establishment of training centres
Learning ground for tool & machinery development, prototyping & technology introduction for enhancing livelihoods

Institution building
Setting up community based enterprises in identified villages
Setting up Center for Bamboo in Uttarakhand as a non-profit professionally managed organization

Market Access
Identification of existing markets
Development of new markets
Innovative market approaches
Expansion of product range
Test marketing

Need for bamboo based interventions

20% population being schedule caste & economically backward
Resilient on heavy & large scale industry
Lack of livelihood opportunities & subsequent migration
Fragile environment

Housing/ Infrastructure
Disaster Preparedness
Revival of Traditional craft
Environment Protection
Community Enterprises
Sustainable Resources
Socio-economic Upliftment
Training Centre
Design Centre
Better Markets
Revival of Traditional craft

Handmade species
Dendrocalamus Giganteus
Dendrocalamus Strictus (Lassi Bam)
Bambusa Bambusa (Khasi Bam)
Plantation
Ringsel (Decorative use)
Dev Ringsel (A. Fabricator)
Rajm Ringsel (A. Spoolmaker)
Sul Ringsel (A. Furniture)
Khasi Ringsel (A. Churnarasa)
Other locally available materials
Rambans
Shambans
Sul
Shambans
Lambans

Institutional support

Environment and forestry department,
Government of Uttarakhand
Rural development department,
Government of Uttarakhand
Tribal affairs department,
Government of Uttarakhand
Himalayan Environmental Studies & Conservation Organization
Society of People for Development (HESCO)
Society of People for Development (SPD)
International Network of Bamboo & Rattan (INBAR)
Centre for Indian Bamboo Resource & Technology (CIART)

Implementing Agency CEART





Institutional support systems

Almost from the start we realised we needed to work with strong local and national supporting institutions to ensure our bamboo and rattan development projects were sustainable, and to help develop expertise and facilities where the poorest people could benefit from them.

In India, for example, we helped set-up the community-owned Tripura Bamboo and Cane Development Centre (TRIBAC) and its partners in Tamenglong, Manipur, (TAMBAC), and Konkan, Maharashtra, (KONBAC). They have helped their local communities to earn a living from local bamboo populations or plantations. TRIBAC is even becoming a recognisable brand, which has received many prizes and awards. It works with more than 1000

women to produce incense sticks, some of whom have set up their own businesses that work with TRIBAC. They used to live well below the poverty line but now earn between 29 and 89 USD per month, depending on whether they work part or full-time.

Meanwhile TAMBAC exports handicrafts to the UK, and has established 30 bamboo charcoal-making enterprises that bring profits of almost US\$4 per day to the women who own and work in them. It also has a volunteer villager extension system that reaches out to remote areas, and plenty of bamboo nurseries and plantations.

KONBAC's work, while employing nearly 700 artisans who make furniture, crafts, and even sanitary pads from bamboo, has also





helped break down caste barriers. Before the project started the only caste permitted to process bamboo were the Mahar but now members of other castes, such as the Sutar (carpenters), Vani (traders) and Gabit (fisherfolk) all work together in the bamboo industry.

We were also involved in setting up organisations and government programmes that support bamboo- and rattan-based development. These include:

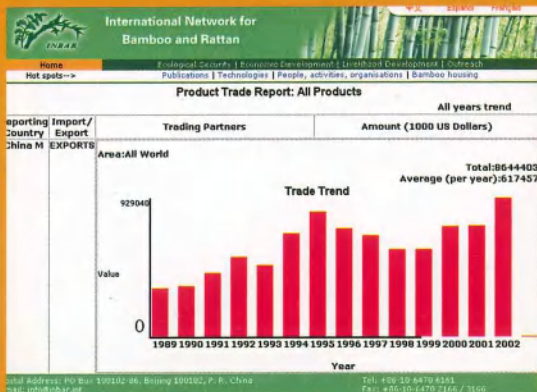
- Bamboo and Rattan Network of Ghana (BARNET)
- Government of Ghana's Bamboo and Rattan Development Programme (BARADEP)
- Centre for Indian Bamboo Resources and Technologies (CIBART)
- The Indian National Mission of Bamboo Applications (NMBA)
- Sacha Urku partnership in Ecuador
- ECUABAMBU in Ecuador
- Ethiopian Bamboo and Reed Society
- Bamboo and Rattan Association of Tanzania
- Mozbambu, Mozambique

International bamboo and rattan trade database

Bamboo and rattan commodities are far more diverse and versatile than commodities such as grain, coca, 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 have now been adopted by some countries and 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, ITTO 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.

Trade Development



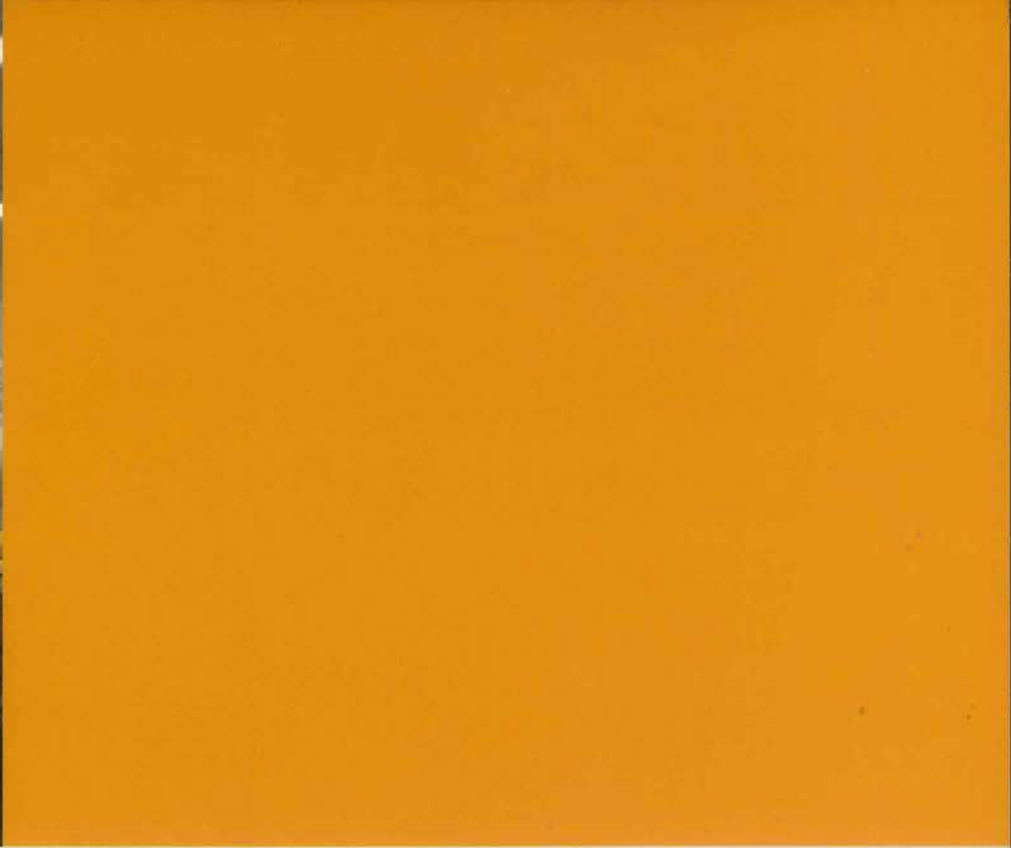
INBAR Database on Bamboo and Rattan Trade

INBAR Database on Bamboo and Rattan Trade is a direct product of cooperation between INBAR, International Tropical Timber Organization (ITTO) and European Forest Institute (EFI). It is based on the UN Statistical Division COMTRADE data, utilizing Harmonized Commodity Description and Coding System (HS) used by World Customs Organization (WCO). For the short introduction of the Database please click here.

- Select the product:
 Raw Materials
 Products
 Vegetables probably including bamboo shoots
 All Products
 Vegetable materials nes, used primarily for plaiting
 Plaits and products of plaiting materials
- Select the year:
 All years trend
- Import Export
- Select the reporting country:
 China M
- Select the trade partner countries: (For multiple selection, please hold down the CTRL or SHIFT key while clicking to select multiple countries)
 Area: All World
 Area: Caribbean
 Area: Central Africa
 Area: Central America

Start Search





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 seven projects with the CFC:

- * Market Development of Bamboo and Rattan Products with Potential
- * Market-Based Development with Bamboo in Eastern Africa -Employment and Income Generation for Poverty Alleviation
- * Transfer of Technology in Bamboo Shoot Production, Processing and Marketing from China to Bangladesh and Sri Lanka
- * Assessment of the feasibility of rattan processing and marketing for sustainable income generation in West Africa
- * Enhancing Opportunities for Market-led Bamboo-based Development in West and Central Africa
- * Development and commoditization of the Pre-Fabricated Modular Bamboo Housing in Asia and Africa
- * Development and demonstration of prefabricated modular bamboo houses in the earthquake affected area of Sichuan Province in China







INBAR believes that bamboo housing can improve the quality of life of millions of poor and disadvantaged people. Our global bamboo housing programme aims to substitute unsustainable building materials with environmentally friendly bamboo, to solve the shortage of proper housing 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. Over a dozen 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 and Nepal. 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.



Bamboo Housing



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.

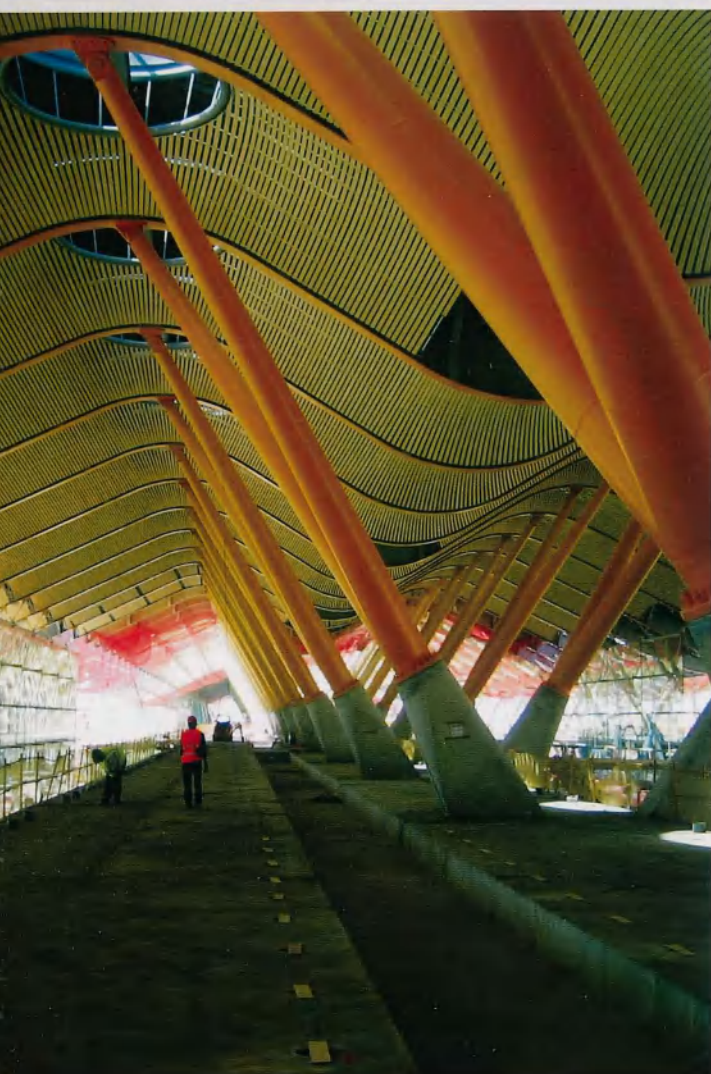
Recently we have developed a pre-fabricated bamboo module housing system, with support from the Blue Moon Fund in America, and in collaboration with ICBR and Hunan University in China. The system will be commercialized through the private sector to help poor families into their own homes - and there will be benefits for local construction companies and the environment too. We and our partners have even built a demonstration two-storey house using the technology in Beijing's Black Bamboo Garden.



Bamboo building codes

Hundreds of 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.

So the introduction of the new ISO Bamboo Building Code in 2005 was a major achievement for INBAR. The code can be used by national governments to develop national standards based on it: once these standards are enshrined in law, the legality of bamboo house construction will be assured, and people will be more willing to invest. 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, and we are vigorously promoting the development of national standards.



Non Timber Forest Products

Think of forest products, you may immediately think of timber. But there are many other products derived from forests- including bamboos and rattans. Most are gathered rather than cultivated and although they are not usually worth much in their raw state they are a significant source of cash for poor rural communities. Put them all together, though, and their total cash and subsistence value is likely to be well over US\$100 billion a year.

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

Membership of the Partnership has grown from 10 at its inception (including the governments of Ecuador, India and Mozambique) to 24 by the end of 2009 and includes governments, commercial companies, Non-Governmental Organisations, National and International Agricultural Research Centres and Inter-governmental Organisations - from all regions of the developing world as well as Europe.





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 and 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. We regularly run training courses on NTFPs, and are part of the NTFP working group in Ecuador, which developed the first NTFP regulations there under the National Forest Policy.



INBAR in the regions

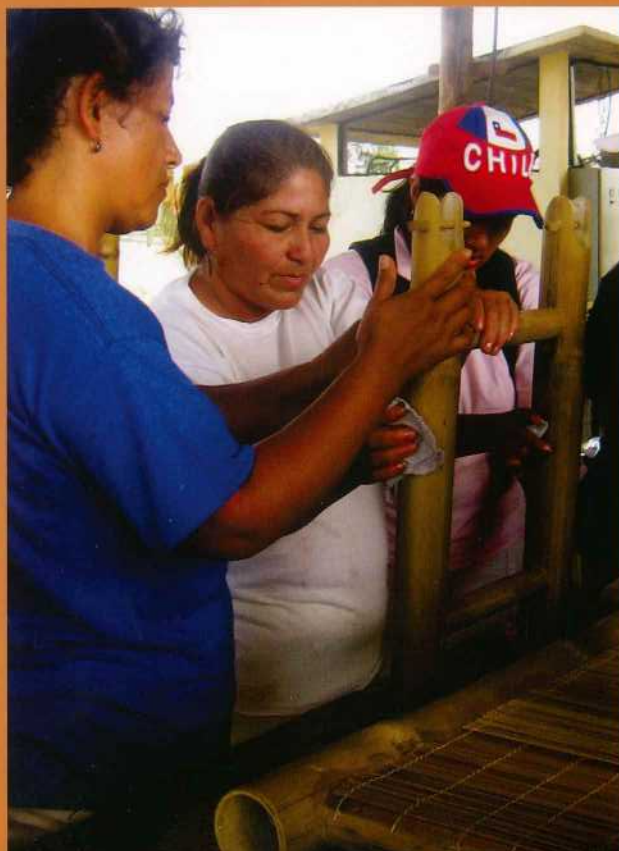
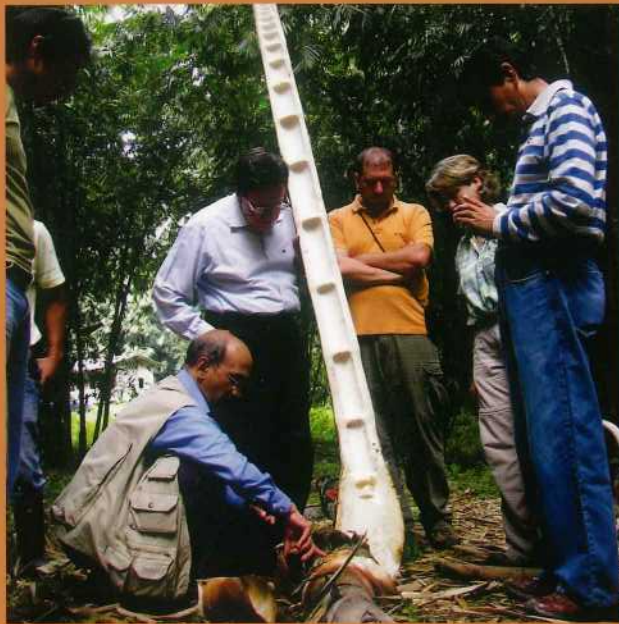
One of INBAR's advantages as an international organization is its ability to link partners across national and regional boundaries. Key to this are our regional offices - in India (South Asia), Ecuador (Latin America and the Caribbean), Ghana (West Africa), Beijing (East and Southeast Asia Office) and Ethiopia (East Africa). 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, and many cultures in which they play an essential part. 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 involved helping improve 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 on helping develop new policies and regulations for including bamboo in national laws and strategies.

One of the 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, most of it supplied by partners in the region, and helps keep Latin America's bamboo community connected.

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 recently ran a course to train rattan furniture and crafts producers in Ghana in design and natural production techniques (such as coloring with plant extracts) - the training was popular, and we have been asked to run more such courses.

Forest harvesting for fuel wood and charcoal is damaging ecosystems in many areas in the region, so we are also helping develop alternative bamboo charcoal production systems in both West and East Africa.





East and Southeast Asia Office Part of INBAR HQ, 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 China, and we help use these as models for international standards, so they can be adapted and adopted by other countries. We also work to foster innovation here - our bamboo flat-pack furniture projects developed new uses for bamboo products, and our work in the Philippines on new hand-produced laminates is being shared across the globe.

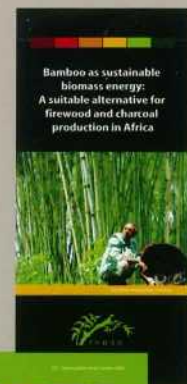


East Africa Office Addis Ababa, Ethiopia

As with West Africa, bamboo has not received much attention from development agencies or businesses in East Africa. But 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. Our projects in Ethiopia and Kenya have shown that bamboo can not only be a very effective source of income but can help to protect the environment and fight deforestation in East Africa. We have run many training courses that have helped build government awareness of the potential of bamboo, resulting in strong support for the projects, and moves to develop new, supportive policies for bamboo producers.



Networking and Partnership Development





Caption: H. E. Mr. Ahmed Nasir, the State Minister of Ministry of Agriculture and Rural Development, Mr. Wang Chao, the Assistant Minister of Ministry of Commerce of China visit the furniture products of Ethiopian trainees in the Workshop for Promoting Ethiopian Bamboo Sustainable Development held in Addis Ababa, Ethiopia.

Training and awareness

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. A decade 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. Our regular partners for training are the Chinese Ministry of Commerce, Ministry of Science and Technology, the International Centre for Bamboo and Rattan, the Chinese Acad-

emy of Forestry, the Forestry Bureaus of Lin'an and Anji in Zhejiang Province, Lin'an Modern Forestry Science and Technology Service Centre, and China Bamboo Weaving Art City in Sichuan Province.

The influence our workshops have goes all the way to government level. For example, outcomes have included the establishment of the Philippine Bamboo Committee; establishment of a Bamboo and Rattan Products Development Centre and of the Bamboo and Rattan Development Programme of the Government of Ghana; development of regulations for harvesting and of quality control criteria for bamboo products in Colombia; establishment of new non-governmental organisations, agencies and enterprises; and the launch of new development and research projects, publications and further training schemes, including direct contacts with local farmers.

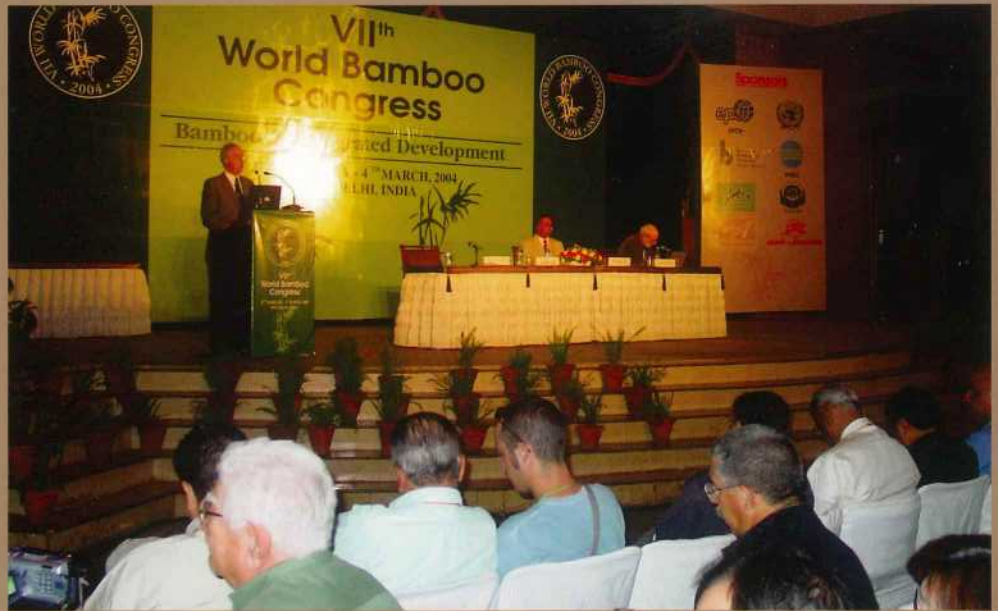


Global and regional workshops

INBAR has co-organised dozens of global workshops on bamboo and rattan over the past twelve years.

We co-organized or sponsored the 6th, 7th and 8th World Bamboo Congresses in Costa Rica in 1998, India in 2004 and Thailand in 2009, and held sessions at various others, including Asia Pacific Forestry Week in Vietnam, 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.

INBAR hold international seminars and workshops during the China Bamboo Cultural Festival every two years, these includes an international workshop on bamboo cultivation, processing and utilization during the Third China Bamboo Cultural Festival in Yibin, Sichuan Province of China in October 2001; the International Workshop on Bamboo Industrial Utilization during the Fourth China Bamboo Cultural Festival in Xianning, Hubei Province in 2003; and the International Bamboo Workshop: Trade, Development and Environment during the Fifth China Bamboo Cultural Festival in Wuyishan, Fujian Province in 2006.









Outlook

IN PARTNERSHIP FOR A BETTER WORLD



In 2006, INBAR's network members and partners helped us identify four key challenges over the next 10 years, which we described in "In Partnership for a Better World - INBAR Strategy to the Year 2015". It puts us in a unique position to make a significant contribution to improving people's livelihoods and their environment. As an International Commodity Body, we are in a strong position to contribute to the success of the global 'Aid for Trade' initiative by strengthening the institutions and policies within developing countries for increased participation in global trade. The strategy identified four major goals for the middle and long-term development of INBAR in the future.









INBAR's strategic goals

Goal 1. An expanded, highly effective network of committed stakeholders.

Our stakeholder survey confirmed that INBAR's members, partners and supporters expect a lot from us. We will need to strengthen our links with our stakeholders even more and use those links to raise the resources and carry out the projects needed to fulfil the promise bamboo and rattan hold for development and the environment.

INBAR will:

Enlarge our membership to around 50 countries by 2015, including countries that are important consumer markets.

INBAR member countries enjoy privileged access to INBAR data, services and project funds. We will demonstrate bamboo and rattan's potential for prospective member countries, make membership more attractive by increasing our range of services, organize public awareness events each year, and involve existing member countries in our membership development activities. As a priority we will approach those consumer countries where bamboo and rattan are already important for trade and industry.

Invest strategic funding to build, develop and maintain innovative partnerships with key stakeholders to strengthen and multiply the effectiveness and impact of our network.

We will seek to increase the number of project partners within our member countries; and focus more on producer organisations and on industry and trade organisations, from the local to the global level. We will make full use of innovations in information and communication technologies and knowledge sharing to reach out to partners and complete a global bamboo and rattan information system by 2011.

Seek to significantly increase our income. Within the next five years we aim to at least double both the direct and indirect financial resources available for our work with our partners - currently standing at approximately US\$6 million per annum - and to continue growing afterwards.

We will consolidate our existing donor base and develop strategic and sustainable relations with new donors whose goals and missions are compatible with ours. We will work closely with our partners in the network to increase funding for their bamboo and rattan projects. We will develop and maintain innovative public relations, focusing on the comparative advantages of the INBAR network, for the benefit of all our partners.

Goal 2. Better ways and means of livelihood development, in particular in rural areas.

We need to continue to innovate, trial, adapt and spread ways of using bamboo and rattan to eliminate poverty, to take people beyond subsistence and enable them to avoid falling back into it. We will need to promote product innovation and marketing systems that will provide sustainable livelihoods for poor people. We will need to work closely with partners in field-based projects and programmes to produce adaptable models for sustainable development, learning lessons from them that can be applied elsewhere. We will need to take as wide a view of this as possible, to demonstrate the potential and practice of development with bamboo and rattan at all stages of the production system in our field sites.

INBAR will:

Develop self-sustaining model development sites with bamboo and rattan in producer countries.

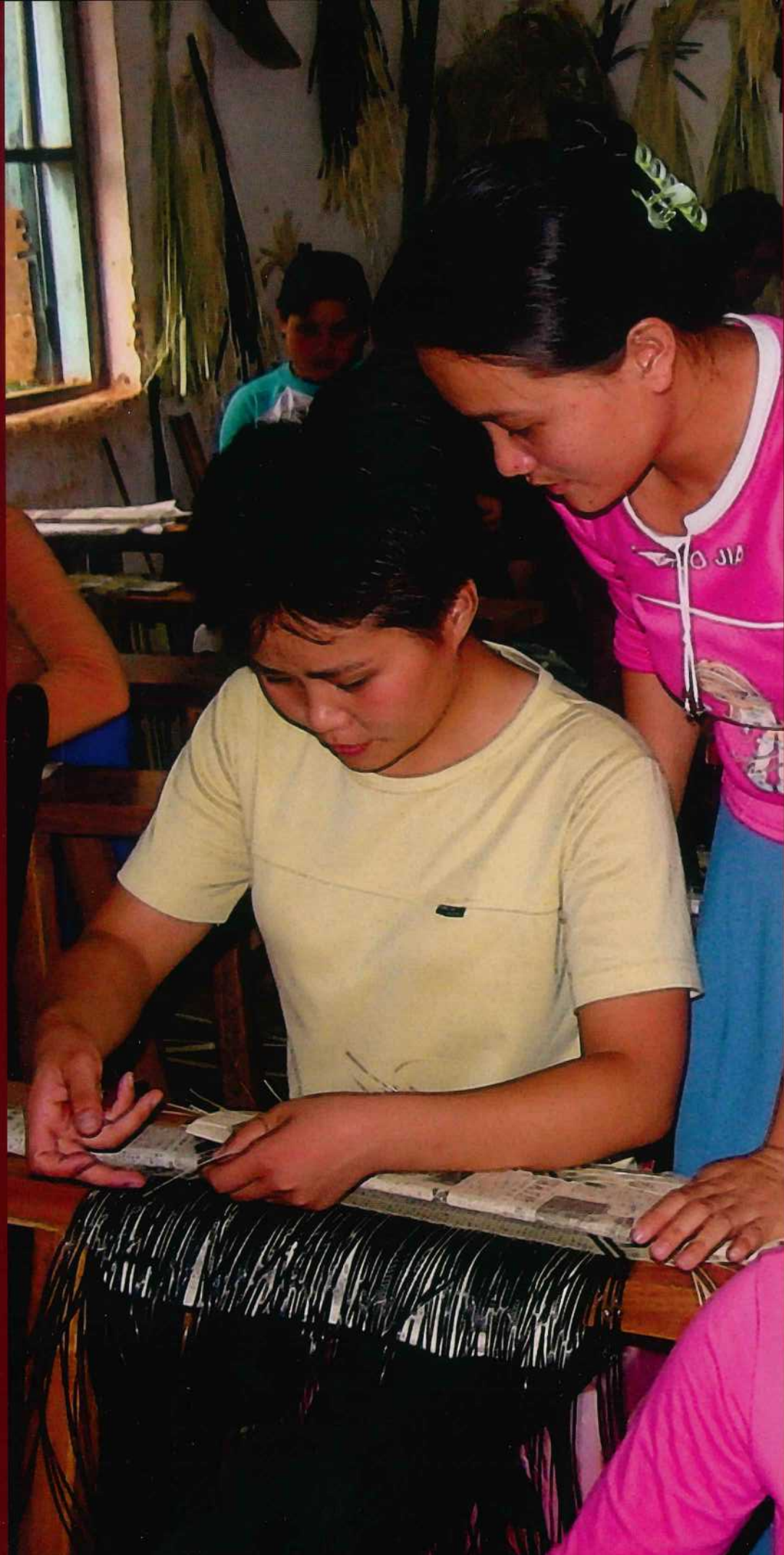
We will develop six new community sites by 2011 based on experiences from our current project sites, where we will adapt, develop and demonstrate the value of technologies, production systems and enterprise models for development. These community sites will also allow us to work with local people to develop new kinds of supporting services. We aim to develop at least five demonstration and training centres by 2011 with associated training and publicity materials, and to provide technical advice for replication and scaling up in at least five large scale development projects run by partners.

Develop pilot local-to-global and global-to-local institutional support systems and partnerships.

By tailoring our support to the level of development in a specific site, we will aim for at least one end-to-end system in each of three developing regions - Asia, Africa and Latin America - by 2015. We aim to develop at least five operational Public-Private Partnerships linked to rural communities as examples for replication; and at least five commercial rural production-to-market system examples backed by arrangements between organisations in producing and consuming countries.

Stimulate the development and marketing of innovative technologies and products, especially those that create new sustainable business opportunities for rural areas.

We aim to ensure networks of product designers, architects and engineers are working with local communities in the three developing regions by 2011. By then, national and export marketing networks linked to chambers of commerce will also be up and running, while production chains for at least three new highly innovative products (at least one of which will be rattan-based) with large potential markets will be in place.





Goal 3. Increased and more effective conservation of the environment and of biodiversity.

We need to put more effort into work on environmental sustainability combined with poverty reduction. Bamboo in particular offers excellent opportunities for this combination. There are worrying indications that the world's rattan resources are dwindling, but the state of the world's bamboo resources also needs careful monitoring. Bamboo and rattan are also key components of the habitats of many threatened animal species.

INBAR will:

Demonstrate and document the benefits of bamboo and rattan for environmental conservation and how they can be used to help put international agreements into practice.

Our work will contribute to fulfilling the aims of the UN Convention on Biological Diversity (CBD), the UN Convention to Combat Desertification (UNCCD) and the UN Framework Convention on Climate Change (UNFCCC). We aim to have at least three demonstration projects under way in the three regions by 2011, in which best practices for soil, water and biodiversity conservation, rehabilitation of degraded lands and carbon sequestration will be demonstrated and documented.

Undertake or contribute to projects that conserve bamboo and rattan species and populations.

We will identify threatened bamboo and rattan species and take actions to foster their conservation; with our partners we will run at least one field project site that explores and demonstrates new ways to reverse the depletion of the world's rattan resources by 2011, develop germplasm conservation methods - such as seedbanks or tissue culture collections - and promote the integration of conservation principles and practices into field projects on bamboo and rattan habitats of endangered animals by 2011.

Demonstrate the role of bamboo and rattan in plantations and sustainably managed forests in providing economically viable environmental services.

We will develop bamboo and rattan resource inventory methods and publish the technical manuals. We aim to train at least 150 people, mainly those who will go on to train others, in sustainable management by 2011.





Goal 4. A better and more innovative market environment, providing fair global-to-local and local-to-global trading systems for income generation.

Both bamboo and rattan are valuable world products. Virtually all of them are produced in developing countries. Consumption of low-value-added products is concentrated in developing countries while high-value-added products have their main markets in the developed world. This needs to change if we are to make full use of the potential of bamboo and rattan.

INBAR will:

Help member countries to undertake projects on better and more innovative bamboo and rattan supply chains and to shift from low-tech to high-tech products and production systems.

We will work with our partners to develop projects and programmes that improve supply chains, particularly for partnering with the Common Fund for Commodities with at least one new project or programme launched per year. We aim to include in particular new high-value-added technologies and improved trade mechanisms in these projects and programmes.

Improve global, regional and local bamboo and rattan trade and market support systems including better standards and statistics.





We aim to strengthen our position as a recognized global leader in standards and codes even further and will continue to initiate and coordinate international standardization work to harmonize trade and cooperation between countries, submitting at least three new international bamboo and rattan standards to the International Organisation for Standardization by 2011. We will collate and publish trade statistics and provide business and consulting services to member states, agencies and companies. We will link into Fair Trade systems where appropriate as part of our aim of promoting fair global trading systems.

Create a more favourable business environment and market development policies that will improve the lives of the poorest people.

We will increase our work on policy development with at least two member States each year, for example to achieve effective export and import regulations for rattan, and raise awareness with major private stakeholders of the benefits of bamboo and rattan industrialization and trade. We will start working with at least two new major partners every year on policy, and will form and strengthen strategic partnerships with development organisations, banks, civil society organisations and the private sector to coordinate efforts to develop bamboo and rattan businesses worldwide.

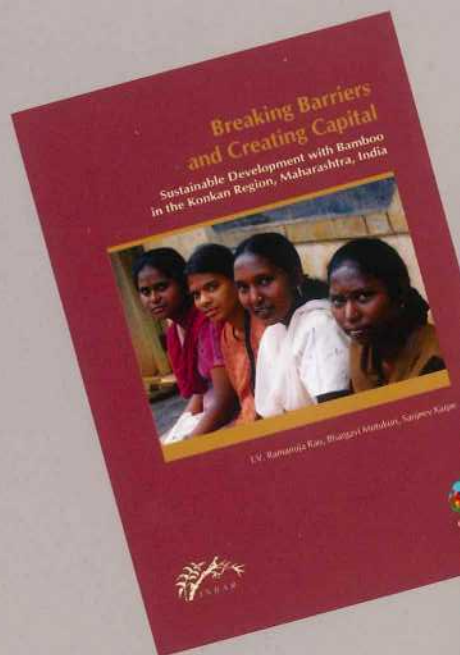
ACHIEVING MAXIMUM IMPACT

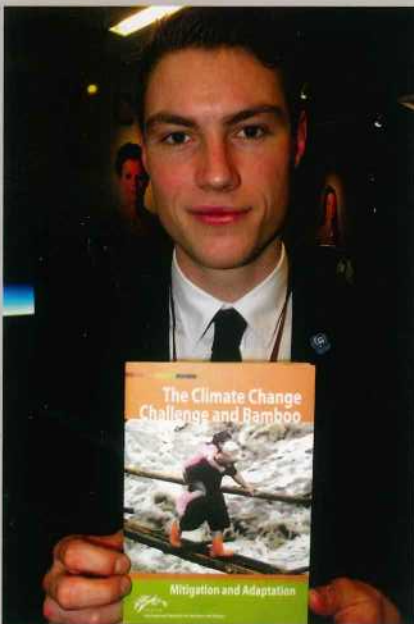
To achieve the greatest uptake and impact of its four goals, INBAR will:

Work with member countries to strengthen the role of bamboo and rattan within national and regional poverty reduction strategies. We will develop effective regional partnership networks of key stakeholders, work with local groups to identify needs and opportunities, promote at least one innovative activity per year in each region to increase awareness of bamboo and rattan, and work with member countries to help us become more effective within them.

Spread the results of our work as widely as possible for maximum impact and uptake. We will develop annual training schemes, help to produce open and distance learning materials and courses and produce publications and an informative website. We will also develop innovative approaches to communication between different languages and to providing information for the benefit of member states.

Assess and analyse the outcomes and the impact of our projects and other activities so that we can improve our contribution - and that of the bamboo and rattan sector in general - to development and environmental sustainability. We will collect, assess and document baseline performance and impact data at project and institutional levels, produce impact reports, and carry out annual impact reviews to adjust project design and implementation.







INBAR'S NEW STRATEGY AND THE MILLENNIUM DEVELOPMENT GOALS

The eight United Nations Millennium Development Goals (MDGs) set targets for reducing poverty and improving the lives of the world's most disadvantaged people. Implementing our new strategy will enable us to play a significant part in fulfilling them, particularly Goals 1, 7 and 8:

Millennium Development Goal 1: Eradicate extreme poverty and hunger.

Target 1: "Reduce by half the proportion of people living on less than US\$1 per day."

There is a clear opportunity to generate employment, increase income and reduce rural and urban poverty through the development of bamboo and rattan industries and more innovative and high quality-assurance bamboo and rattan products - especially as these resources are complementary to wood, which is a threatened resource. Low capital cost industries can be developed quickly to employ many rural people, especially women, in a way that fits in with their farming systems.

In poor countries people and entire communities are continually moving into and out of extreme poverty. The challenge of poverty reduction is not merely raising per capita income levels above US\$1 per day, but that gains should be sustainable so that people do not fall back into extreme poverty. Bamboo businesses have already been shown to be highly effective at keeping people out of poverty because the canes can be sustainably harvested every year and because each stage of the production chain adds value.

The potential bamboo and rattan offer in the creation of low-capital, women-oriented small industries in rural areas also help us to contribute specifically to Millennium Development Goal 3: Promote gender equality and empower women. Bamboo and rattan industries already employ many women, and this provides a solid basis for us to help promote the sustainable empowerment of women in businesses and gender equality at all levels of the production chain.



Millennium Development Goal 7: Ensure environmental sustainability.

Target 9: "Integrate the principles of sustainable development into country policies and programmes; reverse the loss of environmental resources."

The beneficial effects of bamboo on afforestation, biomass generation, carbon sequestration, erosion prevention, watershed protection and rehabilitation of degraded forest lands are well documented. We need to stop depleting rattan resources and start replanting, or at least managing natural regeneration more sustainably. The potential depletion of bamboo resources needs to be carefully monitored, though this is less urgent. We need to work with our partners to find ways of using bamboo to address the climate change challenge.

Target 11: "Achieve significant improvement in the lives of at least 100 million slum dwellers by 2020."

High quality, earthquake resistant eco-friendly bamboo housing is an excellent way to improve the living conditions of slum-dwellers and refugees. We will develop a strong and innovative bamboo housing partnership programme.





Millennium Development Goal 8: Develop a global partnership for development.

Target 12: "Develop further an open trading and financial system that is rule-based, predictable and non-discriminatory, includes a commitment to good governance, development and poverty reduction - nationally and internationally."

Improving systems of trade in bamboo and rattan materials, and their products, has the potential to help improve the livelihoods of everyone involved in the global bamboo and rattan sectors, to keep people out of poverty. Our role as the International Commodity Body for bamboo and rattan puts INBAR in a unique position to promote improved trading systems designed to benefit the poor. Trade is about people, and bamboo and rattan are excellent resources with which to develop partnerships for poverty reduction.





THE WAY AHEAD FOR INBAR

Our new strategy complements those of many other development organizations. Up to 1.5 billion people could benefit in terms of income and environmental improvement from advances in the way the bamboo and rattan resource is managed and traded. Taken together with the broader global environmental and socio-economic benefits derived from increased use of bamboo and rattan, that puts us in a unique position to make a significant contribution to a better, fairer world.

Bamboo and rattan are ideal resources to address development that integrates poverty reduction and environmental sustainability, and we are ideally placed to foster sustainability through a global partnership for development. As an International Commodity Body, we are strongly positioned to contribute to successful applications of the global 'Aid for Trade' initiative by strengthening the institutions and policies for increased participation in global trade within developing countries.

The Millennium Development Goals have focused global development activities in a hitherto unparalleled, positive manner. INBAR aims to make a significant, measurable contribution to reaching them.

Bamboo and climate change

With climate change such a hot topic into the foreseeable future, INBAR has been exploring the ways that bamboo might help with climate change Mitigation, Adaptation, and Development, the so-called "MAD challenge".

INBAR has found that bamboo has a lot of potential to address the problems and hardships that may come with climate change. Bamboo can absorb more carbon if managed than if left in its natural state, and more than comparable fast-growing tropical and sub-tropical trees. The longer lifespans of modern bamboo products will help ensure that the absorbed carbon remains.

Increasing the cultivation and use of bamboo will help improve the resilience of rural and some urban populations to events brought on by climate change, such as extreme weather. Bamboo is easy to grow and maintain, and can provide additional food, energy and income security to the rural poor, as well as a range of environmental services and uses - both while it is growing and in the products made from it.

The MAD challenge is perhaps the most significant opportunity we have to influence the future of the planet. Ensuring that bamboo can take its rightful place in addressing climate change will require research, development and application in areas hitherto unaddressed by bamboo - mitigation and adaptation - and INBAR is working to achieve this.

International Bamboo and Rattan Tower (photo: September 2004)



Photographs by INBAR except:
Middle photo on P47, photo on P107 (Brian Belcher, CIFOR); photos on P60, P101 and
P110- P111 (People's Government of Anji County, Zhejiang Province, China).

