



ANNUAL REPORT 2009 INBAR





Tesfai Teclé
Chair, INBAR Board of Trustees

The global economic downturn of the past couple of years has dropped over 90 million people back into poverty. Bamboo and rattan can make a significant contribution to helping them return to economic health, as well as increasing their resilience to similar events in the future. In order to achieve this INBAR needs to work effectively with its member countries. In 2009 INBAR ran an awareness and training course for its member countries focal points, a regional workshop in West Africa attended by many focal points from nations in the region, and it consulted widely with member countries – more so than before - on membership issues. It also welcomed Bhutan as a new member State. INBAR remains indebted to its member States for the support they provide.

In 2009 INBAR has, once again, pushed back the boundaries of global development with bamboo and rattan. Its modeling work on sequestration of carbon by bamboo provides the basis for involving bamboo in carbon markets and other climate change measures, whilst two major studies published this year demonstrate just how bamboo can be used to help alleviate poverty in the long term and benefit disadvantaged groups, particularly women. INBAR's increasing appearances in the media and at major global conferences are ensuring that its work is better known and understood amongst new development partners and protagonists, the general public and the poor producers and users of bamboo and rattan around the globe.



Jiang Zehui
Co-chair, INBAR Board of Trustees

INBAR's existing partners have continued to provide valuable support – new grants have been provided to INBAR by the International Fund for Agricultural Development (IFAD), the European Commission (EC), and the Common Fund for Commodities (CFC), each building on previous work that enable the experiences gained in those projects to be developed further for long term benefit. In 2009 the Government of China awarded INBAR additional annual principal funding, for which the Board of Trustees is very grateful. INBAR also developed new Public-Private Partnerships in some of its projects that will enable more people to benefit from its expertise in the long term.

INBAR's Board of Trustees in particular thank the Government of Rwanda, current Chair of the INBAR Council, and the Government of Bangladesh, current Vice-Chair, for their contributions, and reiterates its gratitude to the Host State for the excellent facilities and other assistance it provides.

MESSAGE FROM THE DIRECTOR GENERAL

INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN



Coosje Hoogendoorn
Director General

Welcome to INBAR's Annual Report. In 2009 for INBAR, as I think for much of the world's development community, climate change and how to deal with it took centre stage. Early in the year at a pre-COP 15 conference in Copenhagen, Professor John Schellenhuber described climate change as a MAD challenge, encompassing Mitigation, Adaptation and Development, all of which need to be addressed concurrently. This year INBAR has been evaluating the role bamboo might play in meeting that MAD challenge. Our modeling work shows that bamboo groves and forests are better at capturing and holding carbon than equivalent plantation tree species when the bamboos are managed, and the longer lifespans of modern bamboo products will help ensure that sequestered carbon does not return to the atmosphere for decades to come. INBAR is well-experienced at promoting the role of bamboo for development, and at COP 15 in Copenhagen we met a wide range of new partners and colleagues to continue our focus on integrating the role of bamboo in the whole MAD challenge, using old and new avenues to do so.

In 2009 INBAR started new projects with a wide range of donor and implementing partners, including the International Fund for Agricultural Development, the International Development Research Centre, the European Commission, and UNDP. We also started partnering with companies, often as part of their Corporate Social Responsibility portfolio. We improved communication and collaboration with our member countries with a special training and awareness course for our national focal points, and published the first of a series of impact studies, documenting and analyzing the poverty alleviation and environmental effects of our work. These studies clearly demonstrate not only that bamboo is an effective means of pulling people out of poverty, but that it can help breakdown social barriers and increase social cohesion, too.

The theme of this years report is "working regionally". As an intergovernmental organization, one of INBAR's strengths is our ability to take a global view of the bamboo and rattan sectors, and tap and share experiences and innovations with our partners for the good of communities and governments throughout our member countries and beyond. With few exceptions all our projects involve sharing and adapting technologies and experiences developed in one country to other countries, either in the same region, or more widely, across continents. On the centre pages we highlight how our role as an International Commodity Body of the Common Fund for Commodities helps us innovate new ways to do this.

Finally, I would like to thank all our stakeholders with whom we have partnered this year for their contribution to the success of our work at the level of communities, countries, continents and globally. We hope that they and all other readers of this annual report will be inspired to continue to work with INBAR "in partnership for a better world".

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The Council

The Council membership as of December 2009 comprised:

Argentina	Chile	Ghana	Mozambique	Rwanda	Tonga
Bangladesh	China	India	Myanmar	Sierra Leone	Uganda
Benin	Colombia	Indonesia	Nepal	Sri Lanka	Venezuela
Bhutan	Cuba	Kenya	Nigeria	Suriname	Vietnam
Cameroon	Ecuador	Madagascar	Perú	Tanzania	
Canada	Ethiopia	Malaysia	Philippines	Togo	

Board of Trustees

The 13th meeting of the INBAR Board of Trustees was held in October 2009:

Name	Nationality	Board Position
Tesfai Teclé	Eritrea	Chair
Jiang Zehui	China	Co-Chair
Hubert Zandstra	Canada	
Chu Fuxiang	China	
Kazuhiko Takeuchi	Japan	
Maharaj Muthoo	India	
Gerardo Segura Warnholtz	Mexico	
Coosje Hoogendoorn	The Netherlands	Director General

Staff Members (on 31st December 2009)

Executive Management

Coosje Hoogendoorn (Director General)
Wu Zhimin (Deputy Director General)
Judy Zhu Yujian (Treasurer)
Hao Ying
Wang Dong

Environmental Sustainability Programme

Lou Yiping
Giles Henley

Livelihoods and Economic Development Programme

I.V. Ramanuja Rao
Alvaro Cabrera
Bharat Parekh
Bhargavi Motukuri
Carmelita Bersalona
Oliver Frith
Paulina Soria
Selim Reza
Susan Shen

Trade Development Programme

Jolanda Jonkhart
Biruk Kebede
Fu Jinhe
John K.G. Amonoo
Lawrence Kwabena Brobbey
Michael Kwaku
Ren Hong
Tsfaye Hunde
Tezera Chernet Teklewold
Wu Junqi

Global Bamboo Housing Programme

Shyam Paudel
Liu Kewei
Nripal Adhikary

Non-Timber Forest Products Global Partnership Programme

Ralf Kwaschik

Regional Coordinators

Alvaro Cabrera
Fu Jinhe
Jolanda Jonkhart
Michael Kwaku
T.P. Subramony

Development and Communications Unit

Violeta González
Jin Wei

Networking and Partnerships Unit

Andrew Benton
Liu Qian
Zhu Zhaohua

Human Resources, Finance and Services Teams

Cui Xiaoxiao
He Jun
Helen He Lin
Kwaku Oppong
Ren Ping
Shimelis Bezabeh Woldegiorgis
Song Ji
Sun Shaohui
Tang Shaoxia
Yang Jianwei

GOAL 1: AN EXPANDED, HIGHLY EFFECTIVE NETWORK OF COMMITTED STAKEHOLDERS

INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN

We welcomed Bhutan as our latest member country; we ran our first member country focal point training course; we trained over 1200 people in our projects; we built demonstration houses in Beijing and north India, and ran a bamboo housing workshop in Peru; we completed a dedicated rattan project in West Africa; we started seven new development projects, three with new investors; we hosted many more interns, particularly from overseas.



Working with our member countries

In 2009 the Kingdom of Bhutan joined INBAR. Bamboo is widespread in the southern parts of the country - many people live in bamboo houses and use bamboo for agricultural implements and household items. Traditional techniques for house construction such as “adobe” are widely used, and INBAR is developing these skills by training and helping build modern, Bhutan-style, earthquake resistant bamboo houses there in response to the earthquake of 2009.

In September INBAR held the first ever awareness course for its member countries focal points (our official contacts in the ministries of our member countries). Funded by a generous grant from China’s Ministry of Commerce, the course helped build mutual understanding with the 48 participants from 29 nations, strengthened relationships, and gave the focal points a chance to get to grips with INBAR’s work. During a field trip to Zhejiang province they also saw how bamboo and rattan might contribute to development in their own countries.



Training and awareness-raising courses

In 2009 INBAR ran its three, now annual, study tours to China - on Non-Timber Forest Products (including mushrooms, bamboo and honey) for decision-makers, on bamboo sector business development for students of the University of Minnesota, and on China’s bamboo businesses and modern technologies for government representatives, investors and researchers. We also trained well over 1200 people in technical subjects ranging from cultivation and propagation, new processing techniques to product design and marketing, as part of our project work in Bangladesh, China, Ethiopia, Ghana, India, Kenya, Myanmar, Peru and the Philippines.



INBAR's new project partners

One of INBAR's major strengths is as a provider of technical and implementation expertise, and we always try to work with new partners to expand the breadth of our impact. This year INBAR started providing project services to three new types of partner:

1. A multinational company's foundation (Citi Foundation),
2. A commercial "green" company (Lavasa - see page 12), and
3. A broad-based multilateral development organization (UNDP's Chittagong Hill Tracts Development Facility in Bangladesh).

INBAR strengthened its relationships with many of our existing partners, including developing new projects / programmes of work with IFAD, the Common Fund for Commodities, the Blue Moon Fund, and the European Commission. INBAR also secured a valuable new core grant from the Government of China that will enable us to strengthen our work on developing innovative solutions to poverty and environmental threats with bamboo and rattan.

Volunteers, interns and affiliates

This year INBAR developed new relationships with four institutions in Beijing that teach foreign students during the "study abroad" parts of their courses, and we were delighted to host interns who worked on our website, policy studies, fair trade, newsletters, and financial modeling for bamboo businesses. We also developed new links to institutions in the USA and the Netherlands, with interns from the Massachusetts Institute of Technology and the Hogeschool in Utrecht, Netherlands, who helped develop our public relations strategy and reviewed our affiliates scheme.



Global Bamboo Housing Programme

A bamboo house or not a bamboo house?

This year INBAR and its partners erected a modern two-storey, 100 sq m bamboo house in Beijing's popular Black Bamboo Park. It has been built using standard North American wood construction systems so it can be built anywhere these guidelines are followed. It looks just like a brick and cement house, but all its major structural parts are made from bamboo, and its lifespan is expected to be similar to that of wood-framed houses. It is insulated to keep it warm in winter and cool in summer, and is used by INBAR and the park authorities as a tea house and for periodic bamboo art and craft exhibitions. Construction was sponsored by the Blue Moon Fund of the USA, and it was designed and built by Advanced Bamboo and Timber Technologies Co., Ltd. of Changsha, Hunan Province, China, both long-term Global Bamboo Housing Programme partners.



INBAR - Working Regionally

Housing training

Colombian architect Juan Carlos trains bamboo house designers in India in Latin-American Bahareque wall design – a good example of cross-regional technology transfer in the global bamboo housing sector, where very different technologies have evolved across the globe down the centuries.

GOAL 1: AN EXPANDED, HIGHLY EFFECTIVE NETWORK OF COMMITTED STAKEHOLDERS

INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN

High quality housing – innovative global training in India

The International Training Workshop on 'Bamboo as a Modern Construction Material' built a top-end bamboo house and trained a wide range of architects and craftsmen in the techniques involved. It was held in Uttarakhand state, India and was supported by the National Mission on Bamboo Applications (NMBA), the Forest Department of Uttarakhand and Uttaranchal Grameen Bank.

In just 10 days twenty-one participants learnt how to build a bamboo house - from foundations to roof - including how to select the right bamboo and how to preserve it, relevant storage methods, cleaning, polishing, splitting and straightening techniques, and the design and construction of joints.



Building partnerships in the bamboo housing sector in Peru

Eighty percent of Peru's population lives in earthquake zones. Many public and private sector entities in the country recognize the importance of developing sustainable solutions to such disasters, but have limited opportunities to share relevant national or international experience, nor to discuss future needs. In order to enable this INBAR, the Blue Moon Fund and Peru's Ministry of Housing and Construction ran a two day "National Workshop on Bamboo Housing for Disaster Prevention and Relief in Peru" in October 2009.

The workshop increased awareness of the potential of using local bamboo resources for disaster relief housing in Peru, and of the importance of linking the national bamboo house production value chain to disaster victims and the local communities who grow the bamboo raw materials. It also improved sharing of information and experiences between those involved in the national disaster prevention and relief sector, who are often isolated from other organizations doing similar work. Workshop attendees agreed to work together to develop a bamboo housing pilot project and standards for bamboo housing, and to improve the bamboo housing value chain in the country.

Elevated bamboo housing project wins World Bank competition

In 2009 INBAR was awarded a grant for the project "Elevated Bamboo Houses Designed to Lift Communities Above Flood Zones" through the 2009 World Bank Global Development Marketplace. Flooding in Ecuador's coastal regions often destroys homes, and this project will enable INBAR, the Catholic University of Santiago de Guayaquil and the NGO Viviendas del Hogar de Cristo to build 500 elevated flood-resistant bamboo houses for 500 families, and to link 1,000 farmers and 500 builders into the existing bamboo housing supply chain.



Global Rattan Programme

INBAR and our project partner CIBART from India ran a training workshop on product development for over thirty rattan furniture and crafts producers in Ghana in 2009, in the first-of-its-kind cross-regional technology training that INBAR has run on rattan. Training focused on improved processing methods, design, and natural production techniques (such as colouring with plant extracts) which are a vital part of developing rattan products that meet market demand. The training ended with a design competition, held in conjunction with Kwame Nkrumah University of Science and Technology in Kumasi. The course highlighted some of the pressing constraints hindering development of the rattan sector in Ghana, and as a result, INBAR has been working with the Ministry of Lands and Forestry to develop a rattan facility centre in Kumasi, which will serve as a training and resource centre for all the producers there, and will open in 2010.



Non-Timber Forest Products Global Partnership Programme

This year the programme has focused on building new partnerships and developing long term opportunities. The proceedings of a Charcoal and Communities conference held in Maputo in 2008 were published, and three cross border trade studies were completed, for India – Nepal, Mozambique – South Africa, and Laos – China.



GOAL 2: BETTER WAYS AND MEANS OF LIVELIHOOD DEVELOPMENT, PARTICULARLY IN RURAL AREAS

INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN

We provided bamboo expertise to our partner's development project in the Philippines, sharing our skills across regions; we helped develop four new public-private partnerships that we now work with; we helped increase the incomes of women incense-stick producers in one of our projects in India by 50% in less than one year; we set up new bamboo businesses in the 2008 earthquake-hit part of China with our partners.



INBAR CHARMs the Philippines

As a technical agency for bamboo and rattan, one of the most effective ways that INBAR can help alleviate poverty is by supporting the bamboo and/or rattan components of other, more integrated, development initiatives. INBAR's long term partner organization, the International Fund for Agricultural Development, runs a wide range of loan projects in many countries, and this year INBAR started working in the IFAD, Asian Development Bank and OPEC Fund for International Development's CHARMP (Cordillera Highland Agriculture Resource Management Project II) seven-year project in the Philippines. Bamboo is included in the Participatory Investment Plan for the project and INBAR and its Action Research partner, the NGO In-Hand Abra, have established new sites in Sallapadan in Abra province.

In-Hand Abra and INBAR also took part in IFAD's Knowledge Learning Market in Manila, where our exhibition booth won the prize for the most creative exhibit. It showcased hand-pressed bamboo panels, flooring, lighting diffusers, chairs made from bamboo mats, folding bamboo and canvas chairs, stackable bamboo chairs, and shawls made from bamboo viscose fibre. All these products have been innovated by INBAR and its partners over the last few years, and have demonstrated market potential – potential that will be tapped in the CHARMP project.

New Public-Private Partnerships

New Public-Private Partnership in Ecuador

INBAR is helping the local government of Pichincha in Ecuador promote bamboo plantations to limit tropical forest destruction and restore degraded lands. Enterprises and farmers there grow mostly *Dendrocalamus asper* introduced from Asia, and the Public - Private Partnerships being developed aim to produce a bamboo value chain that includes small farmers as well as medium and large-sized enterprises. Five hundred households have already been linked to commercial enterprises and supporting institutions, and are producing bamboo products.



INBAR and the "REDES consortium"

The REDES consortium was created in nine Latin American countries as a means of linking producers to markets in Italy through one of INBAR's partners, the Italian FairTrade organization Altroumercato. The community-based organizations Del Sur and Aproguadua, both INBAR partners in Ecuador, are part of REDES. In 2009 the consortium participated in two fairs (in Guatemala and Argentina) to promote the brand and its products, including bamboo. INBAR is the recognized partner for bamboo products and bamboo is one of the main products in the 2010 collection.





Building lives, building townships

This year in a new departure, INBAR started working with the Lavasa corporation, a large company that is building from scratch a “green” township near Pune in Maharashtra, India. The township will cover nearly 10,500 hectares out of a total area of 37,500 hectares and the remaining land will be completely forested, with bamboo widely used.

Bamboo is the major natural plant resource of the area - all the communities used to cut bamboo and sell it and as their income was adequate they didn't need to till the land to produce food crops. Lavasa wants to help develop a better bamboo sector for erosion control, windbreaks, and the production of bamboo articles for sale and construction, all of which would generate livelihoods and income for the local communities. In 2009 INBAR and our partner the Konkani Bamboo and Cane Development Centre (KONBAC) started supporting bamboo producers there both technically, and by enabling their more equitable participation in the developing bamboo sector.



Going NATIVE with bamboo

INBAR has been instrumental in setting up a series of NATIVE (NAtural resources, Technology, InnoVation and Enterprises) social enterprise companies that consist of for-profit companies with community co-holding established in parallel to each successful NGO in our Action Research Sites (ARS). The NATIVE companies act as partners that can access capital and financial services that NGO's and INBAR often cannot, thereby enabling the communities to tap the commercial investment needed for their businesses to expand and prosper.

Two NATIVE companies have been established to work with our partners TRIBAC and KONBAC in India. The KONBAC partner, NATIVE Bamboo Products, has attracted over 200,000 USD in funding from the Indian Government's National Mission on Bamboo Applications and the NGO Friends of Women's World Banking. A third non-profit company, NATIVE Development Services, set up a TRIBAC Micro-Finance Initiative that is already lending to several community members to help them establish or expand their incense stick businesses.



Increasing the economic benefits to women of incense stick production

Producing incense sticks in India involves many stages of production, such as raw bamboo stick making, masala-making, rolling, scenting, perfuming, packaging, transportation and marketing. The value chain is highly fragmented, with women producers often excluded from higher-earning roles – they are often confined to the earlier stages of the production chain. Working with the UK's Overseas Development Institute and with funding from Canada's International Development Research Centre, this INBAR project has nearly doubled the incomes of its 1500 women beneficiaries, partly due to an increase in the quality of the sticks they produce, and partly as a result of increases in their productivity – they have adopted new rolling techniques and new ways of working. In less than one year productivity has increased from 1 kg to 2.5 kg per day, the rejection rate has dropped from 15% to 0-3 % of rolled battis, and the selling price has increased from 12 to 18 Rs (25 US cents to 38 US cents) per kg. The women have also been trained in negotiating with the market, and trading directly using a mobile phone network that brings together buyers and sellers. Some have launched their own brand of sticks that they sell in local markets.



Sustainable Bamboo Enterprise Programme, Sichuan, China

The Sichuan earthquake in May 2008 caused massive loss of life, infrastructure, and livelihoods. In 2009 INBAR and its partners Citi Foundation and the Sichuan Forestry Department set up two bamboo training centres in Dujiangyan, one of the worst affected areas, that provide work for over 100 people, and have trained many more in primary processing. The bamboo production chains in the project now involve over 200 farmer households, and will expand to include many more in the near future.



INBAR – Working Regionally

Adapting ideas

New long-lasting, clean-burning, bamboo charcoal briquettes developed in INBAR's project in Manipur, India with its partner TAMBAC are now being produced by communities in Mozambique and the Philippines. INBAR is helping communities in Ethiopia and Ghana adopt greener charcoal technologies too.

Working Regionally

INBAR became the International Commodity Body (ICB) for Bamboo and Rattan of the Common Fund for Commodities in 2000, and over the years has run a series of effective CFC-funded bamboo and rattan-based development projects in Asia and Africa, either as supervisory body or as implementing agency.

Being an ICB gives INBAR a unique opportunity to spearhead a commodity approach to development. On these pages we present a selection of the work the projects do, and the benefits they are bringing.



<http://www.common-fund.org>

*"The **Common Fund for Commodities** is an intergovernmental financial institution established within the framework of the United Nations. The Fund operates under the novel approach of commodity focus instead of the traditional country focus. Member countries benefit from projects financed by the Fund, whose basic rationale is to enhance socio-economic development of commodity producers; and to contribute to the development of the society as a whole. The Fund finances projects for small-holder farmers, as well as small and medium sized enterprises involved in commodity production, processing and trade in developing and least developed countries."*

Mission of the Fund - "To contribute to poverty alleviation by strengthening the income-generating capacity of commodity producers and mitigating vulnerability to their economic well being."

Vision of the Fund - "To strengthen and diversify the commodity sector in developing countries and transform it to be a major contributor to poverty alleviation and sustained economic growth and development"

Name: Market Development of Bamboo and Rattan Products with Potential
Implementing partners: INBAR; Bangladesh Forestry Research Institute; Department of Forestry, Nepal; Myanmar Forestry Research Institute; Nanjing University, China.
Countries: Bangladesh, Myanmar, Nepal



With our partners we helped set up 12 farmers groups in Bangladesh, provided training in bamboo and rattan cultivation, and distributed 7,000 bamboo and 6,000 rattan plantlets to develop the resource base in the long term. In Nepal we distributed 30,000 bamboo and rattan plantlets to the project beneficiary partners, where we also helped form community groups to work on bamboo and rattan. In Myanmar our partners ran a training course on bamboo and rattan processing, plantation establishment and management that trained 25 persons. We also started improving capacity to produce marketable products - in Bangladesh we trained 110 artisans on production of bamboo panels, and opened two display-sales centres.



Name: Market-Based Development with Bamboo in Eastern Africa -Employment and Income Generation for Poverty Alleviation
Implementing partners: UNIDO; Kenya Forestry Research Institute, Federal Medium and Small Enterprises Agency, (FeMSEDA - Ethiopia)
Countries: Ethiopia, Kenya



The East Africa Bamboo Project (EABP) is implemented by UNIDO in partnership with the Kenya Forest Research Institute and FeMSEDA, Ethiopia. The project has established a wide range of supply-chain based bamboo businesses that provide new

livelihoods to rural and urban dwellers, with skills and experiences shared between both countries, and further afield in the region. It is often featured on Kenyan and Ethiopian television, and one of the bamboo businesses it established was even featured on Reuters television. Find out more at www.eabp.org.et.



Name: Development and Commoditization of the Pre-fabricated Modular Bamboo Housing in Asia and Africa

Implementing partners: International Centre for Bamboo and Rattan (ICBR), China; FeMSEDA, Ethiopia; Agro Enterprise Centre, Federation of Nepalese Chambers of Commerce and Industry, Nepal.

Countries: China Ethiopia, Nepal



The main goal of this recently-started project is to promote bamboo for environmentally friendly housing by commercializing modern bamboo panel-based housing systems in Ethiopia and Nepal, establishing pre-fabricated bamboo housing industries and marketing to build awareness of their potential at national level. These are similar to those used for emergency shelters that INBAR and ICBR built in Sichuan province in 2008 after the earthquake, also funded by CFC. The project started in 2009 with a feasibility study, the results of which provide a solid foundation for the project, and include recommendations to build according to existing wood frame technologies used in North America, finding a good "selling name" for the houses, and even using plybamboo panels as fill-in in concrete buildings, which opens up new market possibilities.

Name: Transfer of Technology in Bamboo Shoot Production, Processing and Marketing from China to Bangladesh and Sri Lanka

Implementing partner: International Centre for Bamboo and Rattan, China; Bangladesh Forest Research Institute; Industrial Technology Institute, Sri Lanka

Countries: Bangladesh, China, Sri Lanka



The shoots of some bamboos are widely cultivated as a vegetable, and the industry is worth many dozens of millions of dollars each year. The aim of this project is to develop the bamboo shoots subsectors in Bangladesh and Sri Lanka with a focus on high value processed shoots that can be exported - presently bamboo shoots are only sold fresh in each country. The project is based on sharing China's experience of its bamboo shoots subsector, and uses the existing bamboo species in Bangladesh and Sri Lanka to develop bamboo shoot processing businesses, but also helps improve the resource base by introducing, cultivating and promoting the use of top-quality bamboo shoot species from other countries in the region. So far, locally-collected seeds of *Melocanna baccifera* have been used to establish over 340 hectares of plantations in Bangladesh, and seedlings are being trialed in Sri Lanka. Some of the main Southeast Asian species grown for shoots, including *Dendrocalamus latiflorus*, have also been introduced and the project has established tissue culture facilities for long term mass propagation in both countries. Over one hundred project partners have been trained in shoot processing technologies, and small-scale demonstration, commercial bamboo shoot processing plants are operating in both nations.



GOAL 3: INCREASED AND MORE EFFECTIVE CONSERVATION OF THE ENVIRONMENT AND BIODIVERSITY

INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN

We showed that managed bamboo can capture and hold more carbon than equivalent plantation trees; we launched new reviews of bamboo in voluntary carbon markets at COP-15 with our partners; we produced the world's first certification standard for sustainably managed monopoial bamboo forests.



Bamboo and Climate Change

Dealing with climate change has been described as a MAD challenge – one that needs to address the three integrated challenges of Mitigation, Adaptation and Development. INBAR has shown that bamboo is excellent for Development and Adaptation, but its role in Mitigation has always been less clear. In 2009, INBAR took steps to clarify this.

Carbon sequestration by bamboo

Surprisingly, there have been very few comparative studies of the carbon capturing and holding capacities of bamboos. This year INBAR staff conducted a comprehensive carbon modeling study on bamboo that used existing data to demonstrate that managed bamboo can be an effective carbon sink, and is better than Chinese Fir and Eucalypt growing under similar conditions. Managing bamboo involves the annual, sustainable and selective harvesting of stems that are turned into products that can hold carbon for many years. The increasing popularity of durable bamboo products ensures that for the foreseeable future, bamboo can be considered a carbon sink. A summary of the results are contained in an INBAR factsheet, and a full report will be published in 2010.

INBAR at COP 15

In Copenhagen we ran a joint exhibition stand with the Centre for International Forestry Research (CIFOR) which generated a great deal of interest in both INBAR's and CIFOR's work, and we attended many of the sessions and discussions. We distributed a new brochure "The Climate Change Challenge and Bamboo" and our factsheet "Capturing Carbon with Bamboo," and launched a joint INBAR/FAO publication "The Poor Man's Carbon Sink" that reviews policy and other aspects of including bamboo in voluntary carbon trading markets. Attendance at the event enabled INBAR not only to reach out to like-minded organizations and develop new partnerships, but also helped inform us of how best we can fit bamboo into work to address the MAD challenge in the future with our partners, and develop a good strategy for bamboo to address it.





Bamboo forest certification standard

In 2009 INBAR and its partners in China developed the world's first certification standard for managing monopodial bamboo forests (*Phyllostachys pubescens*) and the first one focusing on management of bamboos for enhanced biodiversity. The standard is presently being field-tested, and has been recommended to the Chinese authorities for adoption at national level. Possibilities for international adoption are being considered with the Forest Stewardship Council.



INBAR - Working Regionally

Bamboo forest biodiversity project

Our EC-funded bamboo forest biodiversity project in China continued apace in 2009, with the production of a training manual on bamboo forest biodiversity management, a workshop proceedings on sustainable bamboo forest management and climate change, and technical and policy reports on bamboo forest biodiversity management. The field-tested biodiversity conservation management practices developed last year were adopted by more farmers, and the project started an online bamboo forum (presently only in Chinese), which is an active place for discussion with nearly 200 members.

We also started monitoring biodiversity indicators at the project's field sites. The nematode populations in the soil of previously unmanaged, wild bamboo forests remained unchanged, which indicates that the biodiversity-friendly management practices being trialled are working. Bird populations were much more varied in these bamboo forests (35 species compared to 15 in standard bamboo stands) as they provide a wider variety of habitats and foods. Insect populations were also higher in the biodiversity-friendly managed forests although longer term studies of the biodiversity impacts will be needed as the project sites have only been in place for two years.

Introducing species

Over the past decade and more, INBAR has worked with its partners to introduce and trial different economically-valuable bamboos from China and India to many countries. In 2009, INBAR and its partners INFOR in Chile and the Government of China, started introducing 28 commercial bamboo species to Chile. Trial plots in different locations around the country are helping define the best species for production, management and industrialization.

GOAL 4: A BETTER AND MORE INNOVATIVE MARKET ENVIRONMENT

INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN

We ran five Common Fund for Commodities - funded projects in Africa and Asia that help producers in 14 countries; we hosted the annual CFC meeting and ran a workshop on commodity certification; we started a new project on bamboo biomass fuel in Africa; we started analyzing world bamboo and rattan trade using new customs codes.



INBAR as an International Commodity Body

INBAR's work as the International Commodity Body (ICB) for bamboo and rattan of the Common Fund for Commodities (CFC) deepened in 2009, with INBAR hosting the annual CFC – ICBs meeting that brought together heads of each of the ICBs to review implementation of the CFC's 2008 – 2012 action plan, and to discuss plans and collaboration for the year ahead. This was followed in August by a regional roundtable meeting that defined new opportunities for the ICB's work in Asia-Pacific – both events helped strengthen INBAR's links with the other ICBs so we can work together more in the future.

Central to INBAR's work as an ICB are the CFC-funded development projects, that demonstrate the benefits of bamboo and rattan from a commodity perspective. These often involve transfer, adoption and adaptation of bamboo and rattan technologies and methods developed in one country to other nations, and are excellent examples of how INBAR as an intergovernmental organization can foster international and regional exchange of ideas and technologies that help reduce poverty. You can read more about some of the highlights of these projects in 2009 on the centre pages (pages 14 - 15).

Workshop on the Advantages and Disadvantages of Certification for Commodities

At the same time as the CFC annual ICB's meeting, INBAR and CFC ran a workshop on the Advantages and Disadvantages of Certification for Commodities that brought together commodity bodies to define and discuss major issues related to certification. Although widely different in nature, some issues were common to many commodities, particularly the wide variety of standards and certification schemes that make it difficult for small producers to tap their benefits, the high costs of getting certified - with schemes requiring major changes in the way producers work, often at great cost to themselves - and the fact that individual smallholders can't benefit from economies of scale that large consortia can. Surprisingly it was also noted that little was known of whether certification brought real financial benefits to the producers as no proper cost-benefit analyses seem to have been done - and the consensus was that small holders receive inadequate premiums for their products.

The workshop also recommended trying to harmonize standards so it's simpler for producers to adhere to them, and develop simple and adoptable practices that are common across commodity sectors.

Use of new customs codes improve trade statistics accuracy

INBAR has been working on improving international reporting on trade in bamboo and rattan for many years. More countries now report their trade using the latest Harmonized System (HS) 2007 custom codes that INBAR developed with the support of FAO, the International Tropical Timber Organisation, the European Forestry Institute and the Chinese government-China Customs Administration, and submitted to the World Customs Organization in 2003. The codes contain new bamboo and/or rattan-specific codes, which improves greatly the accuracy of the trade statistics. In 2009 INBAR reviewed the latest-available trade data. Although some of INBAR's member countries still use the old codes, others have adopted the new codes and report accordingly.

Global exports of bamboo and rattan for 2007 were worth just over two billion USD. China, which uses the new codes, topped the list of exporters with 46% of exports (986 million USD), whilst the EU, which also uses the codes, led the list of importers with 27% (570 million USD, not including trade between EU member countries) of imports. Bamboo and rattan furniture and seats (separate codes for each) were the most traded products, accounting for 650 million USD of international exports – approximately one third. International export of bamboo paper, however, was only 3 million USD. These much more accurate figures are an important step forward that enables INBAR to provide a better analysis of global trade in bamboo and rattan, and to take steps to make it fairer and more equitable for all involved, work that will be a priority for INBAR over the next few years.

INBAR - Working Regionally



Sharing technologies

The government of the province of Buenos Aires, in partnership with a commercial enterprise and local communities, uses INBAR's "MINCA" training packages, which were developed by some of Latin America's top experts, to provide the backbone of technology transfer work in its bamboo development project in the Delta region of Argentina.

Bamboo as sustainable biomass energy

In 2009 INBAR and its partners started a new project that aims to demonstrate bamboo charcoal as an alternative to timber charcoal and firewood as a means of reducing deforestation in Africa. The project, entitled "Bamboo as sustainable biomass energy: A suitable alternative for firewood and charcoal production in Africa" is funded by the European Commission, and works with Rural Energy Development and Promotion Centre (EREDPC) and the Federal Micro and Small Enterprises Agency (FeMSEDA) both in Ethiopia; Nanjing Forestry University (NFU) in China; and Ghana's Forestry Research Institute (FORIG) and Bamboo and Rattan Development Programme (BARADEP).

The project is developing small-scale private bamboo firewood and charcoal sectors in both Ghana and Ethiopia, using technologies developed in China, and in 2009 started by establishing pilot sites in both countries, training partners in cultivation and charcoal processing, and setting up Micro and Small Enterprise associations for bamboo charcoal producers. The project also held national policy consultations in each country that highlighted the need for more supportive legislative infrastructures to aid the substitution of wood charcoal by bamboo – one of the project's major focuses in the years to come.



We networked at three major international workshops, and at many national ones; we published two studies of the impact of our work in India, two new workshop proceedings, and the first editions of our South Asia newsletter; our work was featured in more of the world's media.



Publicity

Telling our current and potential future partners about what we do helps us improve our partnerships and increase our impact. In 2009 we attended, helped organise and/or held sessions at major international events as varied as the World Forestry Congress (Argentina), World Agroforestry Congress (Kenya), and the World Bamboo Congress (Thailand), as well as national events such as Panelexpo in India. Three project launching ceremonies – for our post-earthquake rehabilitation project in Sichuan, China, our charcoal project in Ghana and Ethiopia, and our bamboo house in Beijing – attracted significant press coverage.

Selected Publications

We produced a wide range of new publications, brochures and factsheets in 2009, and all are available in electronic form from our online Publications Centre:

TR 30 – Bamboo, a Sustainable Solution for Western Europe - Design Cases, LCAs and Land-use

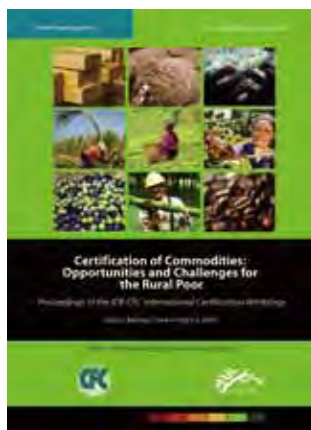
This INBAR Technical Report provides in-depth analysis of the environmental sustainability of various bamboo materials based on Life Cycle Assessment methodology and annual yield predictions, and is a part of the doctoral study of Pablo van der Lugt at Delft University, the Netherlands.

PR 17 – Certification of commodities: Opportunities and Challenges for the rural Poor

In recent years increased consumer interest in corporate social accountability and environmental standards has encouraged the development of certification schemes for commodities. This publication presents the proceedings of an INBAR – CFC workshop in 2009 at which the CFC, many of its ICBs, and certification organizations, shared their views and knowledge on certification, and the role it plays in their sectors. It includes recommendations for further action.

PR 16 – Proceedings of the INBAR Bamboo Forum

The INBAR 2009 Forum on Bamboo Forest Ecology and Management was held in Zhejiang province, China, in order to focus attention on the need to pay greater attention to the environmental aspects of productive bamboo forests in southern China, and to share information on recent developments that enable greater environmental benefits from them. In Chinese with English abstracts.



WP 56 – A Pathway out of Poverty

WP 57 – Breaking Barriers and Creating Capital

These reports present the findings of impact studies of INBAR’s long-running Action Research Sites in Tripura and Konkan, India. They explain how growing bamboo and producing bamboo products have enabled many of the most disadvantaged people, particularly women, gain a foothold in the market economy and prosper (see pages 22 - 23).

South Asia Regional Newsletter

In 2009 we launched the second of our regional electronic newsletters, this one for South Asia. Packed with topical announcements and interesting reports, the newsletters are presently sent to over 300 people, and have met with an enthusiastic reception.



Talking your language
 INBAR’s Spanish-language newsletter for Latin America and the Caribbean is the foremost source of information on what’s happening in the bamboo sector throughout the region. It is sent to over 12,000 people.

Brochures and leaflets (all available from the INBAR website)

- Proyecto comercialización asociativa de bambú
- Bamboo as sustainable biomass energy: A suitable alternative for firewood and charcoal production in Africa
- The Climate Change Challenge and Bamboo
- Sichuan Sustainable Bamboo Enterprise Programme
- Bamboo – Improving the environment, developing livelihoods
- Capturing Carbon with Bamboo: Fast and Effective in Managed Stands

INBAR - Working Regionally





A pathway out of poverty

Tripura has been the bamboo incense sticks capital of India for decades, once producing 90% of the nation's sticks, but mass bamboo flowering and death in the early 2000s has reduced the availability of bamboo resources, and encouraged some farmers to use land that once grew bamboo for other purposes. As the resource base now regenerates, there is a unique opportunity to bring communities back to bamboo production and improve the benefits they get from their involvement.

In 2005 INBAR and its partner TRIBAC started helping communities, particularly the women members, to add more value to the bamboo sticks produced locally. We trained them in rolling raw bamboo sticks with masala (a mixture of sticky bark sap from the jigat tree, and charcoal powder) to produce battis to increase the value they get from their work. Later, we supported them to add more value by scenting, packaging and marketing the rolled sticks, which resulted in their monthly incomes increasing from 0 – 0.56 USD per month to 29 – 89 USD. for full time workers. However many women prefer to work part-time, fitting it in with their home and farm duties, and therefore earning a proportionally lower wage. The introduction of batti – rolling added more components to the local value chain, with an amazing 11 new jobs created for each existing job in stick production. Production of rolled batti increased from 170 kg in 2005 at its first introduction, to 33.3 tonnes in 2007 and 51 tonnes by the end of 2008, and 1387 women had found steady first time employment in organized agarbatti-producing groups. This project is an excellent example of how bamboo enables people to pull themselves out of poverty, and do so on a long- term basis.





Breaking barriers, creating capital

The project in Konkan is slightly different from the one in Tripura, in that it is closer to larger and more affluent markets. The products produced are more varied, but the effects have been no less impressive.

The Konkan region of Maharashtra suffers from migration to nearby towns and cities, particularly Mumbai, and women now make up 2/3 of the working population. Bamboo offered an opportunity to provide employment to those who stayed behind, and to encourage others not to follow their neighbours to the cities. The project started by producing bamboo furniture, for which the nearby coastal resorts provided a ready market for high quality goods, and gradually diversified as market opportunities developed – into crafts, bamboo buildings and even sanitary pads. Incomes of producers have gone from zero to over 60 USD per month, and the institutional system KONBAC (the project implementer) has developed links to 130 villages and 3000 households in the production chains, all of which benefit.

Bamboo has been shown to be a more stable source of income than the horticultural crops people were traditionally working with, and provides full-time livelihoods for nearly 500 women and just over 200 men, with thousands more working part time. The project has also created stronger social cohesion, because it has helped break down caste barriers. Before the project, only the Mahar cast (the bamboo weavers) were working in the bamboo sector, but now people from the Sutar (carpenters), Vani (traders) and Gabit (fisherfolk) castes are also working together in the sector. The project has also provided local incomes for men who would otherwise have migrated to the cities for work – a total of 189 so far.



Principal Donors 2009



BALANCE SHEET

AS OF 31 DECEMBER 2009
(In US dollars)

	31 DECEMBER 2009	31 DECEMBER 2008
ASSETS		
Non-current assets		
Fixed assets-Cost	358,610	352,726
Less: Accumulated depreciation	291,298	269,680
Fixed assets-Net	67,312	83,046
Recoverable deposits	5,470	5,470
Current assets		
Accounts receivable	1,019,313	722,004
Cash and cash equivalents	1,951,217	1,573,247
Total current assets	2,970,530	2,295,251
TOTAL ASSETS	3,043,312	2,383,767
NET ASSETS AND LIABILITIES		
Current liabilities		
Accounts payable and accrued liabilities	1,593,940	844,935
Total current liabilities	1,593,940	844,935
Net assets		
Restricted	597,685	544,311
Unrestricted	851,687	994,521
Total net assets	1,449,372	1,538,832
TOTAL NET ASSETS AND LIABILITIES	3,043,312	2,383,767

INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN

STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED 31 DECEMBER 2009
(In US dollars)

	PRC	IFAD	Membership Fee	EC	CFC	IDRC	CITI	BMF	Others	2009	2008
Revenue											
Grants:											
Restricted		441,247		635,249	296,571	271,200	272,000	142,470	183,722	2,242,459	1,219,540
Unrestricted	290,942		533,063							824,005	899,301
Contribution in-kind	918,705									918,705	918,705
Interest income									9,264	9,264	21,650
Publication sales									4,873	4,873	6,594
INBAR Affiliate and Yellow page									1,591	1,591	1,841
Others									22,529	22,529	23,432
Sub Total	1,209,647	441,247	533,063	635,249	296,571	271,200	272,000	142,470	221,979	4,023,426	3,091,063
Program activities											
Environmental Sustainability	48,117		34,505	225,927					4,192	312,741	353,265
Trade Development Programme	37,081		25,219	418,444	352,534				4,987	838,265	176,025
Livelihood and Economic Development		477,346	15,715		2,977	62,938	199,915		38,850	797,741	645,885
Networking and Partnership	87,382		94,296	35	19,007	144,090		174,893	62,950	582,653	499,050
Sub Total	172,580	477,346	169,735	644,406	374,518	207,028	199,915	174,893	110,979	2,531,400	1,674,225
Management and administration											
Secretariat expense	169,707		339,155							508,862	508,626
Board of trustees expense			44,104							44,104	83,603
Sub Total	169,707		383,259							552,966	592,229
In-kind expenses	918,705									918,705	918,705
Total Restricted amount		(36,099)		(9,157)	(77,947)	64,172	72,085	(32,423)	72,743	53,374	(72,809)
Total unrestricted amount	(51,345)		(19,931)						38,257	(33,019)	(21,287)
Excess revenue over/(under) expenditure	(51,345)	(36,099)	(19,931)	(9,157)	(77,947)	64,172	72,085	(32,423)	111,000	20,355	(94,096)

INTERNATIONAL NETWORK FOR BAMBOO AND RATTAN
CONTRIBUTIONS FROM PROJECT PARTNERS FOR INBAR PROJECTS
FOR THE YEAR ENDED 31 DECEMBER 2009
in USD

Some of the program activities recorded in the statement of activities for the period from January 1 2009 to December 31 2009 are jointly carried out by INBAR and its project partners. Besides INBAR's funding, such program activities are also funded by project partners. According to signed contract, project partners' committed contribution to those programme activities are set out below:

	2009	2008
Common Fund for Commodities	1,151,328	918,226
United Nations Industrial Development Organization		27,905
Kenya Forestry Research Institute		61,928
FeMSEDA, Ethiopia		41,185
Government of Sri Lanka	62,273	78,465
Government of Bangladesh	62,273	78,465
International Centre for Bamboo and Rattan, China	107,557	101,025
Hunan Forestry Technology Extension Center, China	38,300	52,950
Sichuan Provincial Management Centre for Converting Slope Farming Lands into Forest	36,300	57,450
Management office for Natural Forest Resource Management, Yunnan, China	38,300	59,950
Research Institute of Subtropical Forestry, CAF	67,300	61,400
World Agroforestry Center (ICRAF)		22,500
Forest Research Institute of Ghana		26,000
Government of India		10,883
Agro Enterprise Centre, Federation of Nepalese Chambers of Commerce and Industry	147,169	
GTZ/PSP, Nepal and HBP Ltd., Nepal		40,353
Government of Ethiopia	147,169	40,353
Forest Department of Sichuan Government, China		44,120
Qingshen Yunhua Bamboo Corporation, China		630
Sichuan Lin He Yi Bamboo Company, China	41,636	
Beichuan Xuri Bamboo Company, China	49,688	
Sichuan Agricultural University, China	572	
Ministry of Commerce, China	125,665	
Total	2,075,530	1,723,788

The full contents of the Audited Financial Statements for the year 2009 and the Auditors Report are available in electronic form on INBAR's website (www.inbar.int)



INBAR'S OFFICES AND MEMBER COUNTRIES



ANNUAL REPORT 2009

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The International Network for Bamboo and Rattan (INBAR) is an intergovernmental organization established in 1997. INBAR is dedicated to improving the social, economic, and environmental benefits of bamboo and rattan.

INBAR plays a unique role in finding and demonstrating innovative ways of using bamboo and rattan to protect environments and biodiversity, alleviate poverty, and facilitates fairer pro-poor trade. INBAR connects a global network of partners from the government, private, and not-for-profit sectors in over 50 countries to define and implement a global agenda for sustainable development through bamboo and rattan.

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