

Annual Report 2014

FROM RESEARCH TO DEVELOPMENT

Overview of new strategic
approaches and results

International Network for Bamboo and Rattan

INBAR, the International Network for Bamboo and Rattan, is an intergovernmental organization bringing together some 40 countries for the promotion of the ecosystem benefits and values of bamboo and rattan.

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International Network for Bamboo and Rattan (INBAR)

The International Network for Bamboo and Rattan (INBAR) is the multilateral development organisation of 40 Member States for the promotion of bamboo and rattan. INBAR supports its members to include bamboo and rattan in their sustainable development action plans and green economy strategies. It promotes innovative ways of using bamboo and rattan to improve rural livelihoods, protect the environment, address climate change and issues of international bamboo and rattan trade and standards. INBAR connects a global network of partners from government, private and NGO sectors to promote a global agenda for sustainable development using bamboo and rattan.



Argentina, Bangladesh, Benin, Bhutan, Burundi, Cameroon, Canada, Chile, China, Colombia, Cuba, Ecuador, Eritrea, Ethiopia, Ghana, India, Indonesia, Jamaica, Kenya, Madagascar, Malawi, Malaysia, Mozambique, Myanmar, Nepal, Nigeria, Panama, Peru, Rwanda, The Philippines, Senegal, Sierra Leone, Sri Lanka, Suriname, Tanzania, Togo, Tonga, Uganda, Venezuela and Viet Nam.

Message from the Chair and Co-chair

INBAR is a unique organization. Not only is it the only global organization dedicated specifically to development with bamboo and rattan, but it is also the only intergovernmental “network”, and was the first intergovernmental organisation to be headquartered in China. These three factors mean INBAR has a way of contributing unlike any other in the world – by building unique partnerships for trialling bamboo and rattan solutions for sustainable development, and building consensus at the highest levels on contributions partners can make, and on how best to implement them.

Here, at the end of 2014, as the world discusses a new development agenda for the medium-term future, the Trustees intend that INBAR, bamboo and rattan can be granted a more integral place in the mix of options available to help achieve the goals that are agreed. To this end, INBAR’s new strategy 2015 – 2030, developed this year, encapsulates INBAR’s approach to these new and emerging realities. To 2030, INBAR will focus on policy shaping, representation and advocacy, knowledge sharing and learning, and on action research and country support, in order to promote the potential of bamboo and rattan as effective options for a sustainable future. Building new and effective development partnerships, and enhancing existing ones, will be essential to INBAR’s success, and the Trustees will work hard to achieve this.

In 2014, INBAR welcomed its 40th member country, Malawi, the 17th in Africa, which is now the most-represented continent in the INBAR Council, and one where bamboo and rattan can clearly do much good. At the end of the year, the Government of Ethiopia stepped down after two very successful years as Chair of the INBAR Council, culminating in the 9th Council meeting in Addis Ababa in November, which was a great success. The Trustees express their gratitude to Ethiopia for its very hard work and strong support for INBAR during that period – a relationship that can only deepen as time goes on. After the meeting, Jamaica acceded to the Chair, the first Caribbean country to do so.

China, the Host State, continued its significant support to INBAR in 2014, which enabled the organisation to invest in improving its work with its member countries, and build stronger partnerships with them. The Trustees reiterate their considerable thanks to the Government of China for this important support. The support of the Governments of Ecuador, Ghana and India also continues to be essential to enabling INBAR to base its work effectively in its regional offices, and to reach out regionally. The Trustees are also delighted to thank the many donors that INBAR works with and its partner organisations and individuals throughout the globe. Together, we hope to build an even stronger bamboo and rattan network for a greener future.



Maharaj Muthoo
Chair, INBAR Board of Trustees



Jiang Zehui
Co-chair, INBAR Board of Trustees

Message from the Director General

Bamboo and rattan are resources of the Global South that for millennia have provided raw materials for household goods, agriculture and shelter for farms and homes. Today the face of these resources is changing rapidly, as technical and design innovations have sparked a 'bamboo and rattan boom' that is vastly increasing the range of uses of these plants.

Rattan and bamboo products are taking a new place in the global economy – as sophisticated designs and high-tech products for a wealth of new household uses and new industrial applications. These plants also provide important environmental services – for example, for rapid restoration of degraded lands and for their carbon-capturing capacity - a plus for climate change mitigation and adaptation. They also make significant contributions to local, national and regional economic development. Much of this happens through South-South cooperation and knowledge exchange between bamboo and rattan resource countries in Asia, Africa and South America. Partnerships and cooperation between these producer countries play an important role in enabling green growth – a priority for the INBAR Secretariat in our work with Member States.

2014 has been an exciting and productive year for INBAR. We have focused on understanding how we can make bamboo and rattan more relevant, deliver impacts and support our Member States' development goals. We see that the key to achieving this is to link our activities to the Sustainable Development Goals (SDGs). The Board-approved INBAR Strategy 2015-2030 shows how bamboo supports six SDGs (see article page 5). It sets out how INBAR can provide expertise, facilitation and advocacy to our members, to help them include bamboo and rattan in their national sustainable development strategies and green economy action plans.

Guided by the strategy, INBAR now concentrates on four target areas: policy shaping; representation and advocacy; knowledge sharing and learning; and action research country support. As a part of this work we will fill knowledge gaps in bamboo and rattan development and increase activities in capacity building and the South-South sharing of expertise. We are also increasing our engagement with global Conventions and policy-makers on forums on climate change, biodiversity, forestry, sustainable land management and others. We continue our support to Members by providing practical examples and tools that countries can use to use bamboo and rattan for economic development. The goal is to be recognized as the world's 'go-to' source for bamboo and rattan, and to evolve into a knowledge sharing and learning platform that will be used worldwide.

During 2014, my first year as INBAR's Director General, I have had the privilege to meet many bamboo and rattan practitioners and I never cease to be impressed with their dedication and enthusiasm for these special resources. Many other people I have met are surprised by the potential of these remarkable plants, which bring the promise of a better life to millions in the world's rural communities. Our job is to raise the profile of bamboo and rattan, and INBAR.



Hans Friederich
Director General

INBAR Strategy 2015-2030

A new Strategic Direction

This year saw the adoption of the new INBAR Strategy 2015-2030. It marks the evolution of INBAR from a research network on bamboo and rattan into an organization focused on supporting countries to achieve sustainable development objectives. INBAR's priority is now to promote the benefits of bamboo and rattan as 'strategic resources' to raise their visibility globally and demonstrate how countries that have these plants can use them to build green economy action plans.

Rattan in a tropical forest. Eighty percent of the World's rattan grows in Indonesia.

Supporting countries to deliver on the sustainable development goals

INBAR is evolving into a development organization that promotes the benefits of bamboo and rattan in four specific action areas: Policy, Representation and Advocacy, Action Research and Country Support, and Knowledge Sharing and Learning.

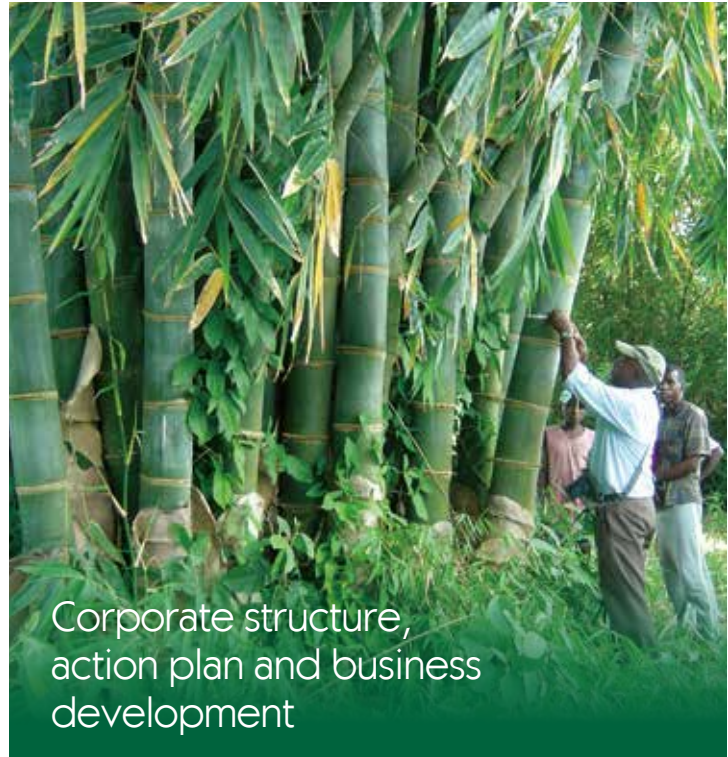
As a strategic partner and advisor to its Member States and international development partners, the INBAR secretariat provides support to the development of national programs, policies, strategies and action plans. INBAR offers expert advice and support to decision makers, technical support for project planning and implementation and is developing a platform for the sharing of practical knowledge and best practices between countries.

At the global level, the organization provides input to the creation of practices and standards on bamboo and rattan use, for example on international trade, in regional and international standards bodies, and in forums such as the UN Conventions on climate change, biodiversity and desertification.

Key result and action areas 2015-2030

INBAR will focus on delivering results in four areas.

- **Policy shaping:** Promote the inclusion of bamboo and rattan in socio-economic and environmental development policies at national, regional and international levels.
- **Representation and advocacy:** Coordinate inputs on bamboo and rattan from a growing global network of members and partners and represent the needs of the network on the global stage.
- **Action research and country support:** Promote adaptive research and innovation by promoting piloting best practices and provide expert support to scaling-up of best practices in INBAR Member States.
- **Knowledge sharing and learning:** Share knowledge and communicate lessons learned, provide training and raise awareness of the relevance of bamboos and rattans as plants and commodities to the relevant Sustainable Development Goals, Aichi Targets, REDD+ and other relevant global, regional or national frameworks.



Corporate structure, action plan and business development

To deliver on the strategy, a new corporate structure was finalized and approved by the Board of Trustees in late 2014. The structure has four departments, each managed by a Director, reporting to the Director General. The Deputy Director General leads host country relations as well as Chinese communication and outreach.

INBAR Departments

Global Programme – responsible for managing all programme activities worldwide, including staff and project leaders in the offices in Ghana, Ethiopia, New Delhi, Quito and projects in these locations. Also manages the proposal and funding processes and pipeline. It is expected that by mid-2015 a portfolio of proposals valued at some \$40 million will be with donor agencies for consideration.

Communication and Outreach – responsible for managing and delivering corporate communication, and website, and for knowledge sharing, information management across the organization, and embedding communication, information management and knowledge sharing in programmes and the project cycle.

Member Services – Manages liaison with all INBAR Member States, the biennial INBAR Council Meeting and supports the Director General's efforts to bring new Member States to INBAR.

Finance and Administration – responsible for human resources policies and processes and development, Information Technology and development of the INBAR Green Fund.

The INBAR Strategy 2015-2030 and its results framework directly support six of the new Sustainable Development Goals (SDGs)

SDG1: End poverty in all its forms.

The bamboo and rattan value chain – from forest management through pre-processing to transformation – has the potential to create many new jobs, especially in poor, rural areas. INBAR and its partners have many examples of bamboo and rattan value chains that create new income streams for families and communities.

SDG7: Access to affordable, sustainable and reliable modern energy services.

Bamboo provides new and versatile forms of local energy. It can be burned, processed into chips or pellets and used in biogas systems for local electricity generation. It can also be transformed into charcoal, bringing the potential to greatly reduce deforestation in many parts of the world. INBAR has expertise developing bamboo charcoal - based projects and programs.

SDG11: Access to adequate and affordable housing.

Bamboo has been used for construction for thousands of years in many parts of the world. Examples show how bamboo is used for practical, low-cost housing. It is also known for its flexibility, which withstands natural disasters such as earthquakes. Recent examples from Asia and Latin America show bamboo structures remaining intact after earthquakes, where concrete housing is largely destroyed.

SDG12: Efficient use of natural resources.

Biologically, bamboo species are ‘woody grasses’, not trees. Some species grow at up to one meter per day, and can be harvested without harming the ecosystem, or contributing to deforestation. These properties brings many applications for afforestation, reforestation and sustainable forest management as bamboo has similar properties to many commercial soft woods.

SDG13: Actions to address climate change.

Bamboo brings countries and communities a wealth of practical solutions to climate change for mitigation, adaptation and restoration. Like other plants and trees, bamboo and rattan absorb CO₂. Their rapid growth allows frequent harvesting, increasing resilience to natural disasters, and letting farmers adapt their management practices to respond to changing weather patterns. Bamboo's use for rapid land restoration or for construction also help communities address problems caused by changing climate patterns.

SDG15: Protect and restore terrestrial ecosystems, halt biodiversity loss.

Bamboo plants multiply through extensive root systems; it is said that one clump of bamboo holds in place 6 cubic metres of soil. These properties make bamboo an effective tool to control erosion and maintain slope stability, a fact embraced by countries such as Rwanda, who have specified the use of bamboo to protect river banks and lake shores from erosion. Other examples show how bamboo is used to rapidly restore severely degraded lands into productive use, benefitting rural communities.



INBAR's work with partners in Ecuador and Peru has developed sustainable housing supply chains using native Guadua bamboo.



INBAR's work has shown that maintaining biodiverse bamboo forests increases yields compared to monocultures.

Rattan furniture made in India.
The world's rattan sector is estimated to generate global revenue of \$10 billion annually.

Informing and influencing policy

Informing and influencing policy are key strategies that INBAR uses to increase awareness of the benefits of bamboo and rattan, to accelerate development of these resources for low and middle income countries. In 2014 INBAR intensified its policy efforts with a sharper focus on engaging with global processes, working with countries. The team also produced new types of practical information, designed specifically for use by national and international decision makers. The high-level conference, 'INBAR Summit on Bamboo and Rattan in the Green Economy', held in Ethiopia, was a first for INBAR and for bamboo and rattan. It was held in tandem with the 9th Council meeting of 40 INBAR Member States. INBAR Summits will be convened again periodically to continue this dialogue, aimed at embedding the benefits of bamboo and rattan into national policies and international programmes.



Synthesis: INBAR Summit on Bamboo and Rattan for the Green Economy

The *Summit on Bamboo and Rattan in the Green Economy*, organized by INBAR and hosted by the President of Ethiopia, HE Mulatu Teshome, was attended by some 200 people, including Council Members from most of INBAR's 40 Member States, several Ministers and senior government officials from developing countries, partners, international development agencies, bamboo experts and entrepreneurs.

The format was dynamic round table discussions around three themes:

- Policy approaches for developing bamboo value chains
- The role of the private sector in developing a green bamboo economy
- Bamboo for land restoration – a valuable environmental asset

The INBAR Summit on Bamboo and Rattan for the Green Economy, held in Addis Ababa was a unique event – for bamboo and rattan, for Africa and for INBAR. This is the first time that senior national policy makers, members of the private sector and decision makers from the international community have come together to discuss bamboo and rattan as a development strategy. Many participants discovered the benefits of bamboo for green economy development and livelihoods for the first time.

INBAR Summit on Bamboo and Rattan in the Green Economy, Addis Ababa, Ethiopia

Hosted by: HE Mulatu Teshome, President of the Federal Democratic Republic of Ethiopia.

VIPs:

H.E. Ato Sileshi Getahun, State Minister of Agriculture, Federal Democratic Republic of Ethiopia.

H.E. Nii Osha Mills, Minister for Lands and Natural Resources, Republic of Ghana.

H.E. Koulagna Koutou Denis, Secretary General for Forests and Wildlife, Republic of Cameroon.

Achim Steiner, UN Under-Secretary General and Executive Director of UNEP.

H.E Gary Quince, Ambassador of the European Union to the African Union

Eduardo Rojas-Briales, Assistant Director General, Food and Agriculture Organisation of the United Nations

What is needed to put bamboo in development strategies for Africa's Green Economy?

Much of sub-Saharan Africa has abundant supplies of indigenous bamboo. The continent has ideal conditions for cultivated varieties and their benefits are well documented. Yet despite the advantages that this fast-growing and versatile plant offers for economic development, why is bamboo's potential overlooked by planners and development agencies in many countries? This key question was explored by the 200 policy makers, national planners, researchers and development professionals at the INBAR Summit on Bamboo and Rattan in the Green Economy, in Addis Ababa. The answer, participants concluded, lies in three areas:

Sharing of evidence and practical information

More and clearer information and evidence are needed that document the economic and environmental benefits of bamboo. This is needed to inform decision makers and potential investors in bamboo-driven green economy plans. Much evidence and many tested practices exist that show African leaders what is needed to harness bamboo's potential. Asian countries have a wealth of experience that demonstrates how this plant can be developed for environmental and commercial benefit. This expertise is now being shared between the continents, and being applied by a number of African countries. But more broad action is needed.

Perception

Bamboo has an image problem – both with national policy makers and development partners. Its real potential as a new economic force for boosting income and creating jobs is not well recognized. The strong message needs to come out that bamboo brings real advantages – for economic growth, land restoration and reforestation, and supports several of the Sustainable Development Goals.

National policies and action plans

To drive investment and encourage the wider use of bamboo in national priorities, countries need to put in place enabling policies as the foundations for tomorrow's green economies. At the same time, development partners need to appreciate that bamboo can add value to their programs – for example for climate change, small business development, sustainable energy and forestry or landscape rehabilitation.

Some countries, including Ethiopia, Ghana, Nigeria, the Philippines and Rwanda have enacted legislation or even presidential decrees calling for the use of bamboo in specific cases and economic sectors. Kenya is working toward a national policy. As awareness grows of how bamboo can play a role in national development, more African countries and INBAR Member States are placing this resource in their national policies and investment plans.

This summary is extracted for the INBAR Policy Synthesis Report 2 – Bamboo for Africa, that gives a detailed account of the Addis Summit. Read more at http://www.inbar.int/sites/default/files/INBAR%20Policy%20Synthesis%20Report2_Bamboo%20for%20Africa%20%20%5BWEB%5D.pdf



"My Government believes that bamboo and rattan greatly contribute to environment-friendly accelerated development ... and play a big role in poverty alleviation biodiversity and job creation."

Mulatu Teshome, President of Ethiopia.



"We need to better understand what is holding back the scaling-up of bamboo and rattan to expand consumer demand for products that will provide jobs and link remote communities to global and national markets."

Achim Steiner, UN Under-Secretary General and Executive Director of UNEP.



INBAR and SNV signed an agreement to collaborate during the summit.

Bamboo strips dry in the sun.

Over 7.5 million people in China earn all or part of their livings from the bamboo sector.

Advocacy: raising the profile of bamboo and rattan worldwide

By securing official Observer Status to key international processes and Conventions, INBAR is in a stronger position to make the case for bamboo and rattan benefits for countries and sustainable development actions, and to include key facts and concepts on these two resources in the official texts and policy recommendations. Currently bamboo and rattan are seldom formally mentioned. INBAR has achieved accreditation as an observer to UN Conventions on Climate Change and Biodiversity, placing INBAR and its Members' messages on the official record of High-Level sessions and in final documents. INBAR's status as an observer to the UN is in progress. Two Statements and a range of useful contacts were made in some of these forums this year. Building on this, more ambitious advocacy actions are planned for 2015.

Engaging with UN Conventions for long-term policy shaping

To inform and influence policy on the international stage, INBAR has attended the negotiations of some UN Conventions.

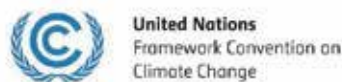
This year, statements were made to the UN Conventions on Climate Change (UNFCCC) and Biodiversity (UNCBD), placing key messages about bamboo and rattan benefits in the Convention official deliberations for the first time.

The key messages for these forums are: *Bamboo and rattan are strategic resources that can help countries and communities combat climate change and desertification, halt land degradation and support biodiversity.*



INBAR will continue to voice these themes in future negotiations to increase the visibility of the benefits of bamboo and rattan in Convention texts – and ideally in final recommendations and action points.

INBAR Statement on Climate Change to UNFCCC COP 20, meeting, Peru.



A call to include bamboo as a strategic resource for countries to reduce the effects of climate change. "Bamboo can bring practical and rapid solutions to countries and millions of rural communities – to combat the negative effects of climate change. But if it is to deliver real impact, this remarkable plant's benefits need to be recognized by decision makers and planners.

We call on governments and international development policy makers to specify bamboo as a strategic resource that effectively fights climate change – in national sustainable development policies, and in the National Adaptation Programmes of Action and the UNFCCC."

Read the full statement:
<http://www.inbar.int/sites/default/files/resources/INBAR-Peru-CC-Statement.pdf>

INBAR Statement on Biodiversity to UNCBD COP 12 meeting, Korea. The potential of bamboo in national biodiversity strategies and action plans



"Bamboo provides practical and rapid action for many of the climate change and land degradation problems faced by many rural communities and countries worldwide. Yet today, its benefits as a strategic resource to safeguard biodiversity and drive sustainable rural development are largely unrecognized and undervalued.

Bamboos are known as habitat and food for a number of species, including Giant Pandas and Mountain Gorillas, Bamboo Lemurs and Bamboo Rats, but the broader contribution of bamboo to biodiversity is relatively unknown. Bamboo has played an important role in China's farmland retirement scheme, involving 124 million farmers."

Read the full statement:
<http://www.inbar.int/sites/default/files/resources/INBAR-Statement-Convention-on-Biodiversity.pdf>

INBAR Members in the Bonn Challenge

INBAR has encouraged its Member States to contribute to the Bonn Challenge, the global effort launched by Germany to restore 150 million hectares of the world's degraded and deforested lands by 2020. The INBAR Members have collectively pledged to restore 5 million hectares of using bamboo by 2020, a target that was agreed at the 9th INBAR Council Meeting in Addis Ababa.



A number of INBAR projects, such as the planned Sustainable Land Management II (SLMP II) initiative of the Government of Ethiopia supported by INBAR, will have a big land restoration target. Likewise, a number of countries in Africa and Asia are planning planting campaigns and forest improvement drives that will steadily increase the number of hectares of bamboo worldwide.

More people should know that bamboo is a good for land restoration

Some have called bamboo a 'secret weapon' in the on-going fight against land degradation – for its fast growing properties that can bring severely degraded ecosystems back to life in a short timeframe.

A review of the continuing impact of INBAR's past work using of bamboo for land degradation reveals that a partnership, with the local NGO Utthan in Allahabad, in India which restored some 100 Ha of degraded land with bamboo, has progressed by several orders of magnitude. For the past decade, restoration efforts that began in the INBAR partnership have continued by the local community and NGO Utthan. Today they report remarkable results: some 4000 hectares of land devastated by brick mining have been restored to productive use, using bamboo to rebuild a diverse livelihood and ecosystem in Allahabad, and the livelihoods of some 800,000 people in nearly 80 villages have been improved. This has been expanded by Utthan and other NGO initiatives in the region to restore some 85,000 hectares.

Watch the documentary video, Greening Red Earth:
<https://www.youtube.com/watch?v=6UU0ahKBj6Q>



Bamboo provides an average of about 10% of the total annual incomes of the farmers in the Utthan project sites.



Sundeep from Makanpur village earns some 200,000 rupees a year from his bamboo, grown on formerly degraded land. Fifteen years ago the land was utterly barren.

Bamboo poles ready for processing.

Bamboo is increasingly popular for modern, sustainable housing in Latin America and other regions.

Action research and country support

As a number of projects end this year, and some continue for a next phase, INBAR is looking at results achieved and the potential to leave a lasting impact with partners and communities. These activities were supported by donors including IFAD, the European Commission, the Common Fund for Commodities, the CITI Foundation in China, and others. They demonstrate how bamboo can generate new income streams and a better quality of life for rural people. Most of these activities are unique. Few other organisations demonstrate, very practically, how bamboo and rattan can improve livelihoods.

Here is an overview of findings emerging from an informal review done this year of some of INBAR's past work.

A first look at emerging long-term results

Over the past 15 years, INBAR and its partners have put in place local business development and livelihoods solutions, mainly using bamboo, with dozens of communities in rural India, the Philippines, Ethiopia, Ghana, Mozambique, Madagascar, Tanzania, and Ecuador. These ‘action research’ and project sites have tested models for local livelihoods improvement, and created some 50 rural collectives and enterprises that are operating today, and bamboo can be used to benefit many more countries. Past work has been largely bamboo livelihoods projects for community enterprise. Energy, with bamboo charcoal value chains, and bamboo use for land restoration have also been targeted.

A number of enterprises created in projects are operating today at various levels. They produce household items and furniture, toothpicks, incense sticks, bamboo and household charcoal and construction materials for low-cost housing. Some pilot projects are testing electricity generation using small-scale gasifiers that burn a combination of bamboo and other agri-waste and biomass materials. The approach shows potential but more work is needed on technical, resource supply and organizational aspects before these approaches are ripe for scaling-up and local commercial use. The activities of a group of past projects in India, Africa and Latin America have seeded the creation of an estimated 250,000¹ jobs in rural areas, mainly near the project sites. While this figure is small compared to what is needed to bring 2.2 billion people out of poverty – as specified under the new Sustainable Development Goals – the good news is that these bamboo development examples show a solid proof of concept of innovative ways to use bamboo to bring new income to rural communities. These approaches can work in many bamboo resource countries.



Working through INBAR Members, these projects are partnerships between INBAR with community based organisations and NGOs. Working with communities, they have piloted business cases that use bamboo and rattan to create small businesses, social enterprises, or women's and community groups. Some activities have ended when the project closed, or shortly after. Others continue on their own, as income generating activities, now run by communities involved in the projects.

Some action research sites were also created in projects and are still operating in Asia, South Asia, Africa and Latin America. The sites continue to promote bamboo-based approaches to communities – through research, awareness raising, capacity building and demonstration activities. INBAR is working to further document this learning in tools and products that countries, development agencies and community based organisations can use. This is the first step toward the wider scaling up of some of the project's achievements.

Taking innovations to scale - building on past experience and transferring expertise

INBAR country action	Targeted outcomes	
Policy support for countries	<ul style="list-style-type: none"> • Policy makers in target countries learn from others. • Investment plan attracts national, donor, private sector funds. 	<ul style="list-style-type: none"> • National policies created. • Link policy to action plan.
Support countries to select and scale-up business models and value chains	<ul style="list-style-type: none"> • Technology transfer between countries. • Review options, select value chains. 	<ul style="list-style-type: none"> • Scaling-up action plan. • Creation of many new rural enterprises.
Testing new innovations	<ul style="list-style-type: none"> • New research evidence produced with partner countries. • New markets assessed. 	<ul style="list-style-type: none"> • New investment opportunities
Knowledge exchange, South-South learning and dialogues	<ul style="list-style-type: none"> • New knowledge and learning products and services created and widely used as development tool. 	<ul style="list-style-type: none"> • Capacity building with countries. • On-line learning network active.

¹ (1) An estimated 250,000 jobs directly created by the projects and indirectly by follow-on activities by partners and organisations continuing after project closure (compiled from donor and project reports).

Some Examples:

For women - 150,000 jobs and five-fold wage increases.

In Tripura, India, a small investment of US\$10,000 to support women self-help group to organize and produce higher value added incense stick products has grown to create some 150,000 jobs. The strategy was to evolve this women's enterprise from a low-skill bamboo cutting activity, to integrate product creation, branding/packaging and marketing for local and national markets. The initial income of one group of women has risen from \$17/day to five times higher for many of the participating women. Today the incense stick enterprises in Tripura generate a 17-fold revenue increase over a three-year period.

Shikha Rani is one of the many women to have benefitted from INBAR's work in Tripura - she now manages her own bamboo incense stick enterprise.



New income for 5000 women in rural areas.

In Tanzania, bamboo has improved the lives of several thousand people and is also being used by these communities to reverse land degradation. Probably the best example of this rural livelihoods investment is the creation of 100 bamboo nurseries, with 1000 people trained in a Bamboo Training Center, and micro-enterprises set up. These activities created new income streams in several rural areas, where communities today produce crafts and desks for local schools. An activity that produces and sells charcoal briquettes employs 5,000 women, many of them single mothers, who now have stable incomes. To improve women's access to other types of jobs, the processes for bamboo furniture and construction materials were modified to accommodate their needs.

Bamboo construction – 2000 jobs for affordable housing.

In Ecuador, INBAR partnerships have sparked a number of public-private partnerships that make furniture, flooring, crafts and construction products. These models have now also been shared with neighbouring regions in Northern Peru, with some 2000 people now employed in value chains and enterprises that produce housing that is affordable and resistant to earthquakes and floods. This housing reduces risks to climate change and transforms coastal and peri-urban areas with better quality homes for low-income communities.

Over 1000 people have been trained in the project, and many are now using their skills as bamboo processors. National standards for bamboo housing have been introduced in Peru and are under development in Ecuador.



Biogas for local electricity and charcoal – \$50,000 revenue per year.

In India, an INBAR project created a joint enterprise owned by an NGO, with 70% shareholding by women's groups, with technical partners that run a bamboo/biomass unit producing electricity for the village and bamboo charcoal for use and sale. Yearly cash revenue totals some \$50,000 for combined production, with other benefits such as power for irrigation pumping.

Linking national policy to value-added bamboo production – an institutional market for 1.16 million school desks.

INBAR was instrumental in facilitating and informing the policy dialogue that resulted in Executive Order E0879 that requires 25% of all school desks in the Philippines to be made from bamboo. This was made possible by a new process pioneered by INBAR's project partner 'InHand-Abra' for producing laminate bamboo, a material that allow production of sturdy, low-cost furniture that can be made in a small workshop without specialised machines – ideal for community producers across the country.



Hand-made bamboo school chair and desk in a village enterprise in Abra, northern Philippines.

Long term sustainable development in China.

INBAR's work with local organizations and communities in China to rehabilitate areas devastated by the 2008 earthquake in Sichuan showed a number of promising results in 2014. This five-year initiative developed 240 demonstration community-based small enterprises and some 50,000 people, who gained from technical upgrades and production improvements. Average incomes of people involved in these activities were increased by 30%. The most recent phase up-scaled previous work, helping 7000 people, trained 100 trainers, and built and equipped a training centre in Changning, a leading bamboo production area.



Cultivating bamboo mushrooms in a bamboo forest provides additional income.

Knowledge sharing & learning

Putting in place new activities and an action plan for knowledge sharing and learning at INBAR were started in late 2014, with defining of an action plan to be rolled out starting 2015. The approach targets three areas all aiming to better embed the learning and capturing of knowledge as a part of all INBAR activities, in work with partners – and strategies for sharing it broadly.

First steps toward GABAR – the Global Assessment of Bamboo and Rattan

Strategic Communication

How INBAR will identify and engage with specific user groups worldwide to inform and influence them based on INBAR and partners' evidence, expertise, and examples.

Knowledge Sharing

Activities and services by INBAR that capture and synthesise expertise, learning and new concepts from projects and activities. And engaging with partners and countries to encourage them to share their expertise. The wider potential of knowledge sharing was shaped by INBAR management in 2014 in discussions about an inventory of bamboo and rattan. This has grown into GABAR - the Global Assessment of Bamboo and Rattan that will become a platform for resource inventory and assessment, to increase the sharing of all knowledge on bamboo and rattan, gap analysis and the commissioning of new studies. This is a long-term multi-partner initiative, hosted by INBAR that starts in 2015.

Information Management

How INBAR can improve the organisation of the information it generates in project and programmes, and in the future linking to country activities and information to bring together a global body of material on bamboo and rattan. Part of this activity is a partnership between INBAR and the FAO Office of Partnerships and Capacity, the group responsible for setting and building capacity on agricultural information standards. INBAR's links to this group and its use of the information standards will open the INBAR's information to many thousands of new users worldwide, give them easy access to INBAR material.

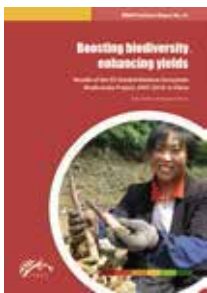
Publications 2014



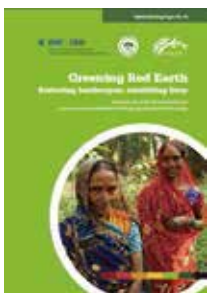
- INBAR Annual Report 2013 - INBAR's work and achievements in 2013.
- INBAR Annual Report 2013 (Chinese language version)
- From Research to Development: INBAR Strategy 2015 – 2030 (full version) – presenting INBAR's intended contribution to global development and how we expect to achieve it.
- From Research to Development: INBAR Strategy 2015 – 2030 (summary version)



- Vulnerability of bamboo to climate change – a review of the potential of bamboo under the influence of climate change in Latin America.
- Vulnerability of bamboo housing to Climate Change in Ecuador - a review of the potential of bamboo housing under the influence of climate change in Ecuador.



- Vulnerability of bamboo housing to Climate Change in Peru - a review of the potential of bamboo housing under the influence of climate change in Peru.
- China Sustainable Bamboo Enterprises; celebrating five years support from Citi Foundation – the impressive results of five years' work in Sichuan.



- The Environmental Impact of Industrial Bamboo Products: Life Cycle Assessment and Carbon Sequestration - first edition of a summary of groundbreaking LCA work.
- International Trade in Bamboo and Rattan 2012 – INBAR's first comprehensive annual review of international trade in bamboo and rattan.
- Boosting biodiversity, enhancing yields – showing how managing bamboo plantations for biodiversity boosts both the environment and incomes.
- Greening Red Earth II – showing how bamboo pioneered the rehabilitation of 4000ha of degraded lands in Allahabad, India.



- Developing Environmentally-friendly Bamboo Industry Chains - A report on EU-funded Project – Revival of Livelihoods in Post-disaster Wenchuan, Sichuan Province.
- In Partnership for Inclusive and Green Development (brochure in Chinese).
- Policy Synthesis Report 1: Bamboo: A strategic resource for countries to reduce the effects of climate change.

Policy Synthesis series

The new INBAR Policy Synthesis series was created this year to provide a new type of practical information, to inform and influence decision makers in government and development agencies. The reports provide a high-level-synthesis of past INBAR technical work, presented in a way that decision makers can easily grasp new concepts and practical examples of how bamboo rattan can be used for sustainable development. This is a tool showing how a country and its planners can include bamboo and rattan in their strategies and action plans for sustainable development. Report 1 covers bamboo for climate change. Report 2 synthesizes the results of the Summit on Bamboo and Rattan in the Green Economy, under the theme 'Bamboo for Africa'. The series will be the basis of meetings, advocacy activities and an opportunity to for INBAR to engage with stakeholders on substantive issues.

Training

INBAR-organised and co-organised workshops

INBAR, Ministry of Commerce, International Center for Bamboo and Rattan workshops in China

Courses for government officials from Bahamas, Brazil, Cuba, Colombia, Cambodia, Ecuador, Fiji, Guyana, Indonesia, Jamaica, Laos, Malaysia, Myanmar, Nepal, Thailand, Panama, Philippines, Suriname, Samoa and Tonga.

Non-Timber Forest Products workshop

29 participants, including government delegations from India and Kenya, and joined the ninth annual incarnation of this popular course.

8th China Bamboo Cultural Festival, Huangshan, China

INBAR organized the International Seminar on Green Growth and Innovation-driven Bamboo Industry at this event attended by over 200 people.

Two national workshops in Colombia

These workshops focused on development using bamboo in the coffee-growing regions of Colombia, and on development of a national bamboo research agenda.

Regional Policy Workshop, New Delhi

This workshop brought together government stakeholders from across the region to produce a set of policy recommendations for South-Asia –wide bamboo-based development.

INBAR International Summit on Bamboo and Rattan in the Green Economy, Addis Ababa, Ethiopia.

Global meeting of political leaders, policy makers development partners and technical experts from Africa, Europe and Asia. (see page 7).



Participation in external workshops and events

World Agroforestry Congress, New Delhi, India	<i>INBAR held wide ranging discussions with many attendees, particularly those from India.</i>
INBAR garden at the Qingdao Horticulture Expo, Qingdao, China	<i>The opening ceremony was attended by China's Minister for Agriculture, the Secretary-General of International Horticultural Association the Ambassadors of Madagascar and Cameroon to China and many other dignitaries. Visitors during the year included China's vice premier Wang Yang, as well as many of the 1.6 million members of the general public who visited the Expo as a whole. See back page.</i>
China Sustainable Bamboo Enterprises: INBAR/Citi Foundation celebration, Sichuan, China	<i>INBAR raised awareness of bamboo and the project amongst southern Sichuan stakeholders, and opened a joint INBAR/Citi bamboo training centre in Changning County. see back page.</i>
ICRAF/FAO/IUFRO Water and Forest meeting, Kunming, China	<i>As a result of attendance, INBAR will take part in FAO's forthcoming Forests and Water initiative, with an event at IUFRO in October and again at the World Forestry Congress in 2015 when the initiative is expected to launch.</i>
UN World Habitat Forum, Medellin, Colombia	<i>The Global Sustainable Housing Network was activated at this event, with INBAR as a founding member. INBAR held a training event on bamboo construction and a side event that was attended by over 100 participants.</i>
PES Forum, San José Costa Rica	<i>The forum included discussions with Costa Rica officials, and with FAO on INBAR's COFO attendance.</i>
National Bamboo Forum, Kingston, Jamaica	<i>At one of the first bamboo meetings ever held in Jamaica, INBAR was asked to support the development of a Jamaica National Bamboo Strategy.</i>
Bamboo Summit, Ho Chi Minh City, Viet Nam	<i>Recommendations produced included the need for standards for preservation and global funding for bamboo SMEs startup. SNV asked INBAR to help develop a provincial strategy for Thanh Hoa province.</i>
Bamboo construction value chain workshop, Bhutan	<i>Thirty participants discussed bamboo cultivation, walling and truss systems.</i>
CIFOR Forest Asia Summit, Jakarta, Indonesia	<i>The summit included a well-attended INBAR session on NTFPs.</i>
7th Future Environmental Trends Conference: Ecosystems, economy and society, Washington DC, USA	<i>INBAR held a brown bag session on bamboo.</i>
Asia-Pacific Roundtable on Sustainable Consumption and Production, Bangkok	<i>INBAR presented its China bamboo shoots project during the food security session.</i>
COFO 22, FAO, Rome, Italy	<i>INBAR organized a formal side event attended by FAO's ADG of Forestry, ministers, ambassadors and other high-level dignitaries. INBAR also hosted two informal lunchtime meetings.</i>
Second Biennial Conference of the Global Research Forum on Sustainable Production and Consumption (GRF-SPAC), Shanghai, China	<i>INBAR presented the work work of its well-regarded livelihoods development projects in Sichuan province, China.</i>
ASEAN Forestry meeting, Siem Reap, Cambodia	<i>ASEAN's Forest Product Group formally agreed to collaborate with INBAR on bamboo, and is considering INBAR's ASEAN-wide rattan programme proposal.</i>
EU Biomass Exhibition, Hamburg, Germany	<i>INBAR showcased bamboo for biomass energy at this Europe-wide exhibition.</i>
Eco-global forum, Guiyang, China	<i>INBAR organised a high-level dialogue with two INBAR member country ambassadors and the ex- Secretary General of RAMSAR.</i>
Consultation on establishment of a bamboo construction task force Coventry, UK	<i>INBAR was joined by Moso International, Cambridge Architectural Research Ltd, TRADA, and Arup to promote international standards under ISO TC 165.</i>
IUFRO conference, Salt Lake City, USA	<i>INBAR raised awareness of bamboo at this pioneering event, particularly its bamboo charcoal work in Ghana and Ethiopia.</i>

Board of Trustees at the 18th meeting in Beijing in October 2014

Name	Nationality	Board position
Dr. Maharaj Krishen Muthoo	Indian	Chair
Prof. Jiang Zehui	China	Co-chair
Dr. Tachrir Fathoni	Indonesia	
Dr. Andrew John Bennett	United Kingdom	
Dr. Wu Zhimin	China	
Prof. Francisco Jaime Tilak Viegas	Portugal	
Ms. Jan Louise Church McAlpine	United States of America	
Mr. Sileshi Getahun Hailu	Ethiopia	
Dr. Hans Friederich	Netherlands	Director General

Staff, Consultants and Advisors on 31st December 2014

Executive Management

Hans Friederich Li Zhiyong Li Ting Wang Dong

Senior Advisors

Fu Jinhe I.V.Ramanuja Rao

Global Programme

Oliver Frith Jin Wei Li Yanxia Bedilu Kifle
Donald Dickson Kibhuti Grace Emmanuel Luvanda
Rajaonarison Andrianjaka Hanitrinala Bharat Parekh

Communication and Outreach

Michael Devlin Andrew Benton Wu Junqi
Liu Kewei Liu Bo

Global Representation

Tesfaye Hunde Biruk Kebede Michael Kwaku
George Aidoo Alvaro Cabrera Paulina Soria
Doris Cangas T.P.Subramony
Werner Kosemund S.Anand

Membership Unit

Hao Ying Pi Meiling Xie Yi

Corporate Services

Judy Zhu Helen He Li Xin Liu Qian Yang Jianwei
Song Ji Ren Ping Tang Shaoxia Cao Yang
Tong Wensheng He Jun

INBAR garden at Qingdao Horticultural Expo

INBAR won a Grand Award for its garden at the Qingdao International Horticultural exposition 2014



VIPs including Mme Jiang Zehui, Co-chair of INBAR's board of trustees, Hans Friederich, INBAR's Director General, ambassadors of nine INBAR member nations, and who VIPs from China at the bamboo and rattan day celebrations.

The INBAR garden was located in the international garden area and covered 2480 sqm. The garden was established to showcase green living and sustainability through bamboo and rattan, advocate low-carbon living, and enhance international cooperation and exchange, demonstrating the role and potential of bamboo and rattan not only in landscapes, ecological tourism and biodiversity protection, but also in improving people's livelihoods and economic development, as well as bamboo culture. Horticulturists from all over the world visited, as well as representatives from INBAR's member country representatives, the State Forestry Administration, and other Chinese government officials to celebrate bamboo's role in greening our urban and rural environments and bamboo and rattan's role in sustainable development. China's vice-premier, Wang Yang, also paid a special visit.



Wang Ying, Vice premier of China, visited the garden in May

After the Expo closed, the garden remains as a tourist site at Qingdao horticultural park and continues to serve its function of disseminating culture of bamboo and rattan and philosophy of low-carbon life style. INBAR has been invited to build a garden at the 2016 International horticulture exposition in Antalya, Turkey.

