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*Ren Hong*  
Office Administrator



*Judy Zhu*  
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Information



*Tang Xiaoli*  
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*Jin Wei*  
DDG's Assistant



*Wang Dun*  
Network



*Yang Jianwei*  
Assistant Accountant

# Message from the Chair and Co-Chair

In November 1999, Dr Cherla Sastry, the inspiration and founder of INBAR, completed his term as the first Director General of the Network. His contribution has been incalculable -- without Dr Sastry, INBAR would not have been. It is as simple as that.

The Board conducted a careful and lengthy search process to find a successor to Dr Sastry. It found the ideal person in Dr Ian Hunter, former Director of the European Forest Institute. Dr Hunter will arrive in Beijing in January 2000, shortly before the Board meeting. We are delighted to have attracted such a distinguished development scientist and administrator as INBAR's second Director General.

For INBAR, 1999 has been a year of consolidation and growth. We find there is a great and growing interest in INBAR. We began the year with eleven Member States and that number has now grown to nineteen, with more states indicating their intention to join as members.

The vital building of the INBAR network is continuing, as are the efforts to increase the financial support necessary to enable us to expand our work. Without the current generous support of the International Development Research Centre, the International Fund for Agricultural Development and DGIS of the Netherlands, we could not have progressed to the present level of Network activity. We thank all three organizations for their continued support and guidance.

INBAR has shown proven aptitude that it can advise tropical countries and aid agencies on bamboo and rattan cultivation and utilisation

for social, economic and environmental benefits. As a measure of INBAR's increasing reputation for advisory services and technical support in these areas, we are pleased to note that the Government of the State of Mizoram in India has contracted INBAR to assist with its Development Plan and the Deutsche Gesellschaft für Technische Zusammenarbeit GmbH (GTZ) of Germany have contracted INBAR to provide development and training workshops in Hainan and Yunnan.

We would like to thank the staff of INBAR for the contribution that they have made in consolidating the Network in Beijing and in furthering the objectives of INBAR. Dr I. V. Ramanuja Rao and his programme colleagues have played an extraordinary role that we acknowledge. We also wish to acknowledge the contribution that Mr Jim Pfeifer, Executive Director and Secretary, and the finance and administrative staff have made in establishing INBAR as an efficient and smooth-functioning organization.

Finally, we wish again to underline the continuing generosity and support of our Chinese hosts. The contribution of the Chinese Government in general, and more recently its announcement of the construction of a new INBAR Headquarters building, exemplifies the commitment and invaluable support of China.

Dr Gordon Smith    Professor Jiang Zehui  
Chair                      Co-Chair



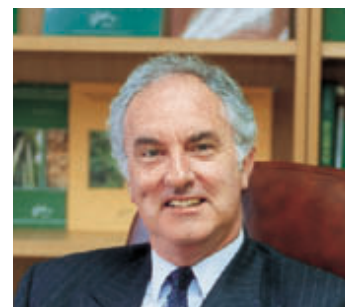
*Dr Gordon Smith, Chair,  
INBAR Board of Trustees*



*Professor Jiang Zehui, Co-Chair,  
INBAR Board of Trustees*



*Dr Cherla Sastry*



*Dr Ian R. Hunter*

# Director General's Overview

The International Network for Bamboo and Rattan is a vehicle for improving the sustainable livelihoods of the rural poor. Bamboo and rattan are natural vehicles for rural development because: rural people generally have adequate access to these crops; they can be grown or harvested in forest margins or agro-forestry situations; they require only a modest capital investment before access is possible; and they generate steady off-farm income.

In many parts of the tropical world, the rural poor are completely dependent on bamboo and rattan for their shelter and for every-day utilities. As a result, they have built up extensive local knowledge of how to utilize these crops. Product development is often very localized and people may have found an ideal solution in one locality that can be used in other places.

The economic rates of return of spreading knowledge about these crops are very high. For example, the export income of China from bamboo products has increased seven-fold in the last ten years owing to emphasis on research and development. As a result, farmers of small plots in South-east China can earn \$15,000 per hectare per year from their bam-

boo crops. The trade in rattan furniture from some tropical countries is approaching 50% of their trade in tropical wood. New products, like bamboo panelling and flooring, have recently been developed and have found ready acceptance on global markets.

Yet, in recent years, bamboo and rattan have been "orphan crops." New information generation has been 5 to 15 times higher for some individual tree crops (such as pine and spruce) as it has been for bamboo; and for bamboo, it has been nearly ten times greater than for rattan.

The capacity for new knowledge generation in these crops exists but is currently limited and isolated. INBAR assists in concentrating the existing knowledge, facilitates South-South communication, disseminates knowledge about successful solutions and raises the profile of these crops. INBAR can assist in capacity development in National Research Centres. For example, this report records that INBAR has organized 44 individual project leaders in 22 countries, working with them on new knowledge generation.

In so doing, INBAR can help reduce poverty by increasing the number of income-generating options for the rural poor. It can

assist in disaster alleviation by developing and promoting more disaster-resistant bamboo houses and by disseminating bio-engineering solutions using bamboos for slope stabilization. INBAR can also help protect the environment and biodiversity by increasing taxonomic knowledge and maintaining a watching brief on endangered species.

As INBAR outputs are targeted towards assisting rural poor people who typically cannot afford to pay for information and technology, INBAR primarily operates in the area of international public goods research. A portion of INBAR's programme is directed towards commercial opportunities to retrieve an income from its knowledge generation.

INBAR's role is to market the newly generated knowledge regionally and globally to benefit principally the rural poor including empowerment of women, without threatening the ecological security of their surrounding environment. INBAR is emerging as a new international organisation with the comparative advantage of serving as a clearing house for information on bamboo and rattan

cultivation, utilisation and manufacture. INBAR's function is to both catalyse and coordinate activities in national programmes and to provide advice to States, Agencies and NGO's.

## **Institutional Growth**

From 1979 to 1997 INBAR was a programme conducted by the International Development Research Centre, Canada. In November 1997, INBAR was established as an international organization headquartered in Beijing, China. The change to independent status necessitated initial focus on creating administrative systems. In late 1999, a review team of Klaas Kuiper and Kamla Chowdry visited INBAR. Their review concluded that INBAR has shown most effectively that bamboo and rattan can be plants of hope in the new millennium. INBAR, they felt, had aroused the interest of the international community in the potentialities of bamboo and rattan for alleviating poverty, improving livelihoods and the empowerment of women. Inter alia, they pointed out that INBAR's organizational

structure would benefit from simplification and concentration.

During 1999, INBAR developed its personnel, operating and accounting procedures; undertook programme restructuring; developed technology transfer models; developed its information dissemination database; held international training workshops and provided training opportunities.

## **Programme Restructuring**

INBAR has re-structured itself around four programme areas:

- Ecological Security
- Livelihood Development
- Economic Development
- Outreach

Existing activities were re-grouped into these programme areas during 1999, and this annual report will therefore report programme activities according to this new structure. In order to strengthen the institutional structure of INBAR itself, four staff members have assumed the role of programme managers for the programme areas. The divisions between the programmes are not rigid; on the

contrary, INBAR has a high degree of cross programme activities.

## **International Meetings and Workshops**

In April 1999, INBAR held an international workshop on bamboo and rattan biodiversity, conservation, utilization and technology exchange in Beijing. Representatives from 12 bamboo and rattan-producing countries (drawn from Member States and from among our regional consultative groups) presented papers for their country, covering resources, management, utilization, markets, policy issues and institutional capacity, aimed at identifying needs across all four programmes. A fuller description is provided under the outreach programme.

## **Information Development**

During 1999, INBAR led a cross-programme project aimed at improving technology transfer of bamboo and rattan products. The project - called TOTEM (transfer of technology models) - spanned all four programme areas in building up a database of 24 technologies that can be transferred to rural people.

# Programme I: Ecological Security



Lou Yiping

This programme aims to improve knowledge of bamboo and rattan resources and their contribution to rural development, environmental benefits and disaster avoidance.

## **Staff:**

Mr Lou Yiping, Acting Programme Manager

## **INBAR Project Collaborators:**

Dr Eric Boa (United Kingdom)

Mr Andrew Benton (United Kingdom)

Mr Pradeepmani Dixit (Nepal)

Dr John Dransfield (United Kingdom)

Eng. Miguel Álvarez González (Cuba)

Prof. Zhang Guangchu (China)

Dr D. N. Tewari (India)

Dr Eng. Roberto Mora Velasco (Mexico)

Dr J. Trevor Williams (United Kingdom)

Prof. Alfinetta B. Zamora (Philippines)

## **Project Highlights:**

There were altogether 8 projects in this research area: 3 projects related to rattan germplasm introduction and evaluation, taxonomy, ecology and ethnobotany in Africa, Asia, Latin America; 2 projects related to genetic enhancement and flowering, and improving planting supply systems for bamboo in Africa and Asia; 2 projects related to managing and increasing productivity of natural stands and plantations of bamboo in Latin America and other areas; and 1 project related to eco-rehabilitation of degraded land through bamboo plantations undertaken in Asia.

*The Rattan Germplasm Introduction and Evaluation* brought four Cuban scientists to

Asia for comprehensive training on propagation and management of rattan forests. Some rattan species, such as genera *Calamus* and *Daemonorops*, were introduced to Cuba. A regional workshop on rattan was held in Cuba in March 1999 to disseminate techniques for working with rattan to participants from other Latin American countries, such as Chile, Costa Rica, Guatemala, Mexico and Panama.

In the *Identification, Validation and Development of Conservation Management Methods of Rattan* project in Nepal, initiated in 1998, ecological status, genetic erosion, marketing and management methods of rattan in Nepal were studied. The report shows that the estimated habitat of rattan is about 600 hectares, containing 9 species. Though there are about 40 rattan processing factories and retailers in Nepal, about 90% of Nepalese rattan is exported unprocessed to India, indicating potential for more processing and utilization within the country.

*A Study of Taxonomy, Ecology and Ethnobotany of African Rattans, a comprehensive survey*, was conducted in Africa. As a result, a monograph on the rattans of Africa is in preparation and the taxonomic revision will be published soon.

*The Potential Role of Eco-rehabilitation of Degraded Lands through Bamboo Plantations* had three objectives. The first objective was to test and transfer an appropriate bamboo plantation model for the sustainable rehabilitation of degraded farm and community land. The project included 60 hectares of mined area and 12 hectares of community lands. It achieved: 1) satisfactory soil and moisture conservation and greening of the area; 2) in-

creased production of grasses, bamboo, timber, pulses, vegetables and livestock husbandry in the area; 3) a micro climate that checked the problems of cyclonic dust storms, which were polluting and damaging the city; and 4) improved environmental conditions in the area.

The second objective aimed to upgrade the skills for making bamboo crafts and other utility items by disadvantaged communities, especially women. Four workshops and exposure visits were organized to upgrade the skills of local women, artisans and carpenters. They are now making bamboo and grass handicrafts and furniture for sale and self-consumption.

The third objective was to develop the capacity of community-based institutions to manage and sustain community initiatives for bamboo resource development, management and utilization for economic advancement and to attain social/gender equity. The formation of a Village Development Council (VDC), Milk Cooperative, Women's Cooperative, and involvement of Panchayat (elected village council) have strengthened the socio-economic fabric of the villages. Integrated watershed development, institution building and enterprise promotion have improved the economy and ecology of the area.



### **Seminars and Workshops in 1999 included:**

*International Workshop on Technologies for Bamboo Cultivation, Processing and Utilization, Yiyang, Hunan Province, China*

Was held in collaboration with China Bamboo Research and Development Center, Hangzhou, China. The objectives of the workshop were to overview and exchange the existing knowledge and technology on bamboo, to discuss and identify the research and developmental gaps, and to facilitate the technology transfer on bamboo cultivation, processing and utilization of bamboo between the countries in Africa, Asia and Latin America.

### **Information Dissemination in 1999 included:**

*Inventory Techniques and Assessment of Rattan and Bamboo in Tropical Forests*

INBAR Technical Report No.11. 96 pages. ISBN 81-86247-22-X

Editors: J. T. Williams, Nur Supardi Md. Noor and I. V. Ramanuja Rao

Bamboo and rattan stocks have not been inventoried in most countries where they grow, leading to their virtual exclusion from national resources planning exercises. To address this important issue, INBAR joined hands with the Forest Research Institute Malaysia and Department for International Development (formerly UK-ODA) to organize an international expert's meeting. The publication consists of 12 papers presented at the meeting.



# Programme II: Livelihood Development



*I.V.Ramanuja Rao*



*Wang Junli*

This programme aims to improve the socio-economic benefits of bamboo and rattan in order to reduce poverty, and secure incomes and well being of the poor.

## **Staff:**

Dr I.V. Ramanuja Rao, Senior Programme Manager

Ms Jun-Li Wang

## **INBAR Project Collaborators:**

Mr N.S. Adkoli (India)

Mr A.K. Bansal (India)

Ms Carmelita Bersalona (The Philippines)

Mr J.F. Osoto Esugu (Uganda)

Dr Magdalena Giron (Philippines)

Dr Ensermu Kelbessa (Ethiopia)

Mr Bernard Kigomo (Kenya)

Dr Satish Kumar (India)

Dr Nouhou Ndam (Cameroon)

Mr Olugbenga Olubanjo (Nigeria)

Dr A.A. Oteng-Amoako (Ghana)

Mr Pei Shengji (China)

Ms A. Ulate Quirós (Costa Rica)

Dr K.S. Rao (India)

Mr William Reidhead (USA)

Dr M.A. Sattar (Bangladesh)

Ing. Antonio Morizaki Taura (Peru)

Mr Jorge Morán Ubidia (Ecuador)

## **Project Highlights:**

In 1999, INBAR expanded its programme to include countries in Africa and Latin America. Ten studies were initiated in 1999 (seven in Africa, one in Asia and two in Latin America) to understand local constraints and

opportunities, and identify potential bamboo and rattan-based development interventions for the improvement of livelihoods. The latter is expected to require enhanced technology transfer and training, an aspect given due emphasis at a technical meeting of INBAR Member States to finalize Strategy 2000-2005. One of the primary objectives of the above-mentioned studies is to identify technological needs to improve the existing production and utilization systems in the study countries. Once these needs are identified, the next step will be to match them with well-established and time-tested technologies that are available in Asian countries and elsewhere.

Towards this end, 24 Transfer of Technology Models (TOTEMs) were commissioned. Each TOTEM focuses on a key bamboo or rattan technology, and consists of a Technology Advisory Note (TAN), a video tape, CD and a PowerPoint presentation for use with different audiences, and a poster and detailed documentation showing input-output values, gender-disaggregated labour and cash-flow analyses.

At the same time, policy considerations are paramount. A study of the role of policy interventions in China in boosting the bamboo sector was made, and a comparative policy analysis of the situation in India was initiated, to determine any parallel and recommend appropriate policy plans to the Government of India.

INBAR also participated in a national workshop of the Government of India to develop a strategic plan for development based on bamboo resources, and assisted Ecuador with

the establishment of an organization, Ecuabambú, for the development of the bamboo sector in the country. Assistance was also provided to INBAR-Nepal for the development of a proposal that addresses the recommendations of a socio-economic study in the country by INBAR; an approach that will be followed to develop the bamboo and rattan sectors in other countries in Africa, Asia and Latin America.

### **Seminars and Workshops in 1999 included:**

*African Project Development Workshops, Limbe, Cameroon, and Dar es Salaam, Tanzania*

Within the Africa Projects Development Workshops Series, two workshops were held in Cameroon and Tanzania. The Cameroon workshop included representatives from Cameroon, Ghana and Nigeria, while the Tanzanian workshop included representatives from Ethiopia, Kenya, Tanzania and Uganda. Project proposals for studying the

production-to-consumption systems (PCSs) in each country were developed and later funded.

### **Information Dissemination in 1999 included:**

*The Bamboo and Rattan Sectors in Asia: an Analysis of Production-to-Consumption Systems*

INBAR Working Paper No. 22. 84 pages. ISBN 81-86247-38-6

Brian M. Belcher

A series of case studies and database studies covering production-to-consumption aspects were undertaken, focusing on Asian countries. This Working Paper provides an overview and synthesis of the 11 case studies and 5 database studies. It also summarises the overall approach that these studies adopted, compiles their major findings and highlights the information gaps that need to be addressed.



*Socio-economic Issues and Constraints in the Bamboo and Rattan Sectors: INBAR's Assessment*

INBAR Working Paper No. 23. 28 pages. ISBN 81-86247-43-2

This Working Paper summarises INBAR's assessment of the socio-economic issues involved in the bamboo and rattan sectors, blending case-specific information derived from a series of socio-economic case studies covering the production-to-consumption chains that exist in Asia with regional trends in cultivation, processing and trade.



# Programme III: Economic Development



Maxim Lobovikov



Guo Jianping

The programme aims to enhance the role of bamboo and rattan as materials for industrial development and economic growth to promote sustainable development.

## Staff:

Dr Maxim Lobovikov, Programme Manager  
Prof. Guo Jianping

## INBAR Project Collaborators:

Prof. S.L. Chan (Hong Kong)  
Dr P.M. Ganapathy (India)  
Mr V.N. Gore (India)  
Dr Jorge Gutiérrez (Costa Rica)  
Dr Jules Janssen (The Netherlands)  
Ms Ximena Londoño (Colombia)  
Prof. Lu Feng (China)  
Mr K.S. Subba Rao (India)  
Dr K.J. Rawat (India)  
Mr Zhang Minxin (China)

## Project Highlights:

During 1999, the Economic Development Programme dealt with 11 ongoing and 3 new projects in Asia, Latin America and Africa.

## **Bamboo in Construction**

Bamboo is a structurally efficient material with excellent weight-to-strength ratio, and is used in a diverse range of structural applications. The primary use is in housing and high-rise scaffolding, despite the lack of international building codes. With the proper recognition and codes, bamboo has the potential to be more widely, and safely, used

in construction. In 1999, INBAR commissioned projects to: scientifically evaluate and validate existing structural applications; disseminate existing knowledge on bamboo scaffolding and develop modular bamboo scaffolding; design prototype earthquake-resistant, modern, low-income homes; and initiate the process of codifying bamboo use in engineered and structural applications.

## **Trade in Bamboo**

INBAR has an ongoing project with the China Centre for Economic Research at Beijing University to analyse international trade in bamboo products. The preliminary analysis of export trade from China reveals some interesting information:

- Bamboo exports are worth nearly US\$500 million to the Chinese economy.
- The value of exports has increased seven times since the mid-1980s.
- The greatest increase has been in canned edible bamboo shoots, which comprises nearly 40% of all exports. Products woven from bamboo constitute another 35% of exports.
- Japan is the largest recipient of Chinese exports -- importing between 50 to 60% of the total Chinese bamboo exports.
- Other significant recipients include Belgium, France, Germany, Italy, the Netherlands, U.K., and USA.

## **Seminars and Workshops in 1999 included:**

*INBAR Workshop on Building Codes for Bamboo Housing, Los Baños, Laguna, the Philippines*

INBAR initiated a collaborative effort to develop ISO standards for bamboo, to transfer knowledge on engineered bamboo housing from the laboratories to the field by establishing a model for national bamboo building codes. In October 1999, representatives from national standards institutions in 13 countries and 10 referees reached a consensus on bamboo codes that will ultimately allow for bamboo to be used as an internationally recognized building and engineering material.



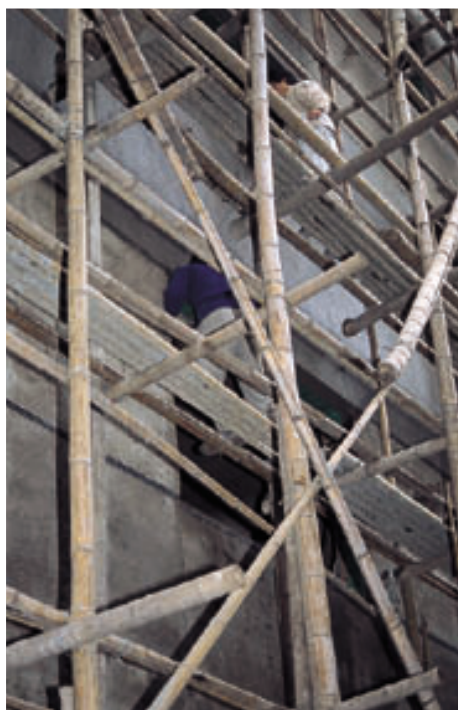
## **Information Dissemination in 1999 included:**

*Bamboo Panel Boards - A State-of-the-Art Review*

INBAR Technical Report No. 12. 145 pages.  
ISBN 81-86247-28-9

P.M. Ganapathy, Zhu Huan-Ming, S.S. Zoolagud, D. Turcke, Z.B. Espiloy

In the search for timber substitutes, bamboo has emerged to stake a claim. Bamboo panels have proved their merit as ideal replacement for wood in several applications. This publication reviews the bamboo panel boards that are currently available, or hold commercial promise, in countries such as China, India, Malaysia and Canada. Besides providing an overview, it also makes an appraisal of the various panel board technologies that have been developed or are under development. Profiles of selected bamboo panels are provided in an appendix, as are some related national standards of China and India.



# Programme IV: Outreach



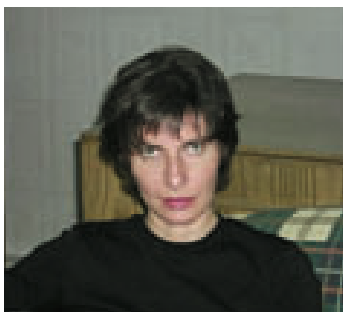
Cai Mantang



Liu Qian



Francisco Pérez



Nadia Bystriakova

The programme aims to promote information flow in bamboo and rattan sectors as an efficient approach to improving income generation at both community and industrial levels.

## Staff:

Mr Cai Mantang-Acting Programme Manager

Mr Francisco Pérez - Network Advisor

Ms Nadia Bystriakova

Ms Liu Qian

Mr T.P. Subramony (India)

Mr Wang Dun

Ms Zhang Yihua

## INBAR Project Collaborators:

Mr Arun Kumar (India)

Mr Fu Maoyi (China)

Dr K.K.S. Nair (India)

Mr Shankara Pillai (India)

Dato Dr H.J. Abdul Razak Bin Mohd. Ali (Malaysia)

Dr K.K. Seethalakshmi (India)

Ms Yong Jia-cho (South Korea)

Mr Zhang Qisheng (China)

Ms Zhang Xinping (China)

## Project Highlights:

As a decentralized network serving global bamboo and rattan sectors, the Outreach Programme focused on two in-house projects namely network development, needs assessment and, secondly, establishment of an information system in 1999.

## **Network Development and Needs Assessment**

By the end of 1999, the INBAR family expanded to 19 member states. In order to provide better services to our member states as well as non-member partners, an improved networking mechanism for efficient information dissemination was commenced. As a first step, national contact points were nominated by the governments of member countries. With the help of the national contact points, INBAR is updating its mailing lists, and an affiliates membership approach is being used to link national programmes, institutions, individuals and all other groups of people in bamboo and rattan sectors.

## **International Bamboo and Rattan Information Services (INBARIS)**

INBARIS, INBAR's primary outreach mechanism, was established and developed over the last two years, with support from DGIS. In 1999, main project activities focused on the establishment of INBARIS' central hub at INBAR Headquarters, including improved hardware and software supports, construction of a website, creation of major databases, and expending multimedia information dissemination.

## **Seminars and Workshops in 1999 included:**

*INBAR Needs Assessment Workshops, Beijing, China.*

INBAR member countries are at different

levels of bamboo and rattan development, thus their needs are different. During 1999, a comprehensive needs assessment process determined the diverse development needs of different members. The assessment began with an expert consultation, including presentations on key bamboo and rattan development areas. A panel of six international experts representing INBAR's major programme themes and regions worked closely together with INBAR's key professional staff during the consultation meeting, and produced a draft strategy document in which four development thrusts were identified:

- 1) Use of integrated, sustainable production, processing and utilization systems, for varied end products of bamboo and rattan, as model demonstrations;
- 2) Emphasis on information services by assessing, packaging, and disseminating demand-driven data and information focused on all levels of the bamboo and rattan sectors;
- 3) A continued, but more sharply-focused, strategic research agenda which addresses gaps in research but explores new frontiers



- for integrated resource management; and
- 4) The offer of assistance to national programmes to facilitate the development of sector plans for bamboo and rattan to ensure, where possible, that these accord with wider relevant sectoral planning in forestry and agriculture, and national and global agenda of sustainable development.

The draft strategy document was then endorsed in a member country workshop including representatives from 11 member countries, and observers from long-term INBAR collaborators, International Tropical Timber Organisation (ITTO), the Food and Agriculture Organisation (FAO) of the

United Nations, the International Plant Genetic Resources Institute (IPGRI), and the Centre for International Forestry Research (CIFOR). Based on the draft strategy document, detailed discussions were conducted on priority needs for bamboo and rattan sector development, and the members requested that INBAR play an important role in the following aspects:

- 1) To provide technical training;
- 2) To promote germplasm and technical exchanges;
- 3) To update technical information and publications;
- 4) To build databases and improve information dissemination; and
- 5) To provide technical services for bamboo and rattan sectoral development.

The participants also strongly recommended that INBAR should use South-South co-operation as its key technology transfer strategy.



# Appendix I: The Council

The Council is responsible for giving guidance to the Board of Trustees on general policy and strategy, and comprises all Member States who are parties to the Agreement on the Establishment of the International Network for Bamboo and Rattan. All sovereign states, which are members of the United Nations, are eligible to accede to this Treaty, which remained open for signature until 6 November 1999. After 6 November 1999, the Agreement is open for accession by any state with the approval of the Council. No contribution is required nor are any additional stipulations made other than those that are in agreement with the purposes and aims of INBAR. The Council met for the first time during the launch of INBAR in November 1997 in Beijing, and will meet again at its Second Session in Beijing on 26 January 2000. The Council membership as of December 1999 included:

<b>Country</b>	<b>Official Name</b>
Bangladesh	The People's Republic of Bangladesh
Benin	The Republic of Benin
Bolivia	The Republic of Bolivia
Canada	Canada
Chile	The Republic of Chile
China	The People's Republic of China
Colombia	The Republic of Colombia
Cuba	The Republic of Cuba
Ecuador	The Republic of Ecuador
Ghana	The Republic of Ghana
India	The Republic of India
Indonesia	The Republic of Indonesia
Malaysia	Malaysia
Myanmar	The Union of Myanmar
Nepal	The Kingdom of Nepal
Peru	The Republic of Peru
The Philippines	The Republic of the Philippines
Tanzania	The United Republic of Tanzania
Vietnam	The Socialist Republic of Vietnam

# Appendix II: Council Representatives

Organizations and individuals who act as formal technical representatives for Member Countries are as listed below:

<b>Country</b>	<b>Individual</b>	<b>Organization</b>
Bangladesh	Anwarul Huq	Ministry of Environment and Forests
Benin		Ministère des Affaires Etrangères et de la Coopération
Canada	Marilyn Collette	Embassy of Canada in China
Chile	Jorge Campos	INTEC-CHILE
China	Qu Guilin	State Forestry Administration
Cuba	Eng. Miguel Álvarez González	Forest Research Institute
Ecuador	Luis Narv ez R.	Embassy of Ecuador in China
India	D.C. Khanduri	Ministry of Environment and Forests
Indonesia		Ministry of Forestry
Malaysia	Secretary General	Ministry of Primary Industry
Myanmar	U Win Kyi	Ministry of Land Rehabilitation and Social Forestry
Nepal	R.B. Joshi	Ministry of Forestry and Soil Conservation
Peru	Antonio Morizaki	Instituto Nacional de Recursos Naturales
The Philippines	Celso P. Díaz	Ecosystem Research Development Bureau
Tanzania	Permanent Secy.	Ministry of Natural Resources & Tourism
Vietnam		Ministry of Agriculture and Rural Development

## Appendix III: Board of Trustees

The Board of Trustees met in November 1998 in Hangzhou, China, and the 1999 meeting was called for 25 January 2000, to be held in conjunction with the Second Session of the INBAR Council of Member States on 26 January 2000.



### Board of Trustees

From left to right:

Keith Bezanson, Salleh Mohd. Nor, Ana Cecilia Chaves, Cherla Sastry, Jiang Zehui, Gordon Smith, Abdelmajid Slama, M.S. Swaminathan, David Hopper, Seewant Bhoojedhur

### Name

Gordon Smith, Canada  
 Jiang Zehui, P.R. China  
 David Hopper, Canada  
 Salleh Mohd. Nor, Malaysia  
 Keith Bezanson, Canada  
  
 Seewant Bhoojedhur, Mauritius  
 Ana Cecilia Chaves, Costa Rica  
 Cherla Sastry,\*Canada  
 Abdelmajid Slama, Tunisia  
 M.S. Swaminathan, India

### Board Position

Chair  
 Co-Chair  
 Chair, Finance Committee  
 Chair, Programme Committee  
 Convener, Corporate Development Task Force

\*(Term ended 6th November 1999)

## Appendix IV: Secretariat and Administration

INBAR secretariat staffing as at 31st December 1999 includes:

Cherla Sastry	Director General (Term ended 6th November 1999)
Zhu Zhaohua	Deputy Director General
James Pfeifer	Executive Director and Secretary, Acting Director General, (7th November - 31st December 1999)
Roger Finan	Treasurer
Cindy Liu	Senior Financial Officer
Hao Ying	Secretariat/Programme Documentation
Jin Wei	DDG's Assistant
Ren Hong	Office Administrator
Tang Xiaoli	Events Organiser
Yang Feng'e	Publications
Yang Jianwei	Assistant Accountant
Elsie Yang	External Relations
Zhang Yihua	Information Officer
Zhang Zhongtian	Contracts Officer
Judy Zhu	Accountant
He Jun	Driver
Ren Ping	Driver
Sun Shaohui	Driver



Zhu Zhaohua



James Pfeifer

# Appendix IV: Auditors' Report and Financial Statements



**Mailing Address:**

18th Floor Beijing Kerry Centre 1  
Guang Hua Lu  
Chao Yang District  
Beijing 100020  
People's Republic of China  
Telephone +86 (10) 6561 2233  
Facsimile +86 (10) 8529 9000

## AUDITORS' REPORT

To the Board of Trustees of the International Network for Bamboo and Rattan

We have audited the accompanying balance sheet of The International Network for Bamboo and Rattan ('INBAR') as of December 31, 1999, and the related statements of activities, net funds and cash flow for the year then ended. These financial statements are the responsibility of INBAR's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with International Standards on Auditing. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements present fairly, in all material respects, the financial position of INBAR as of December 31, 1999 and of the results of its operations and its cash flows for the year then ended in accordance with International Accounting Standards.

  
PricewaterhouseCoopers

10 April 2000

## International Network for Bamboo and Rattan

**Balance Sheet**  
**As at December 31, 1999**  
**(in US dollars)**

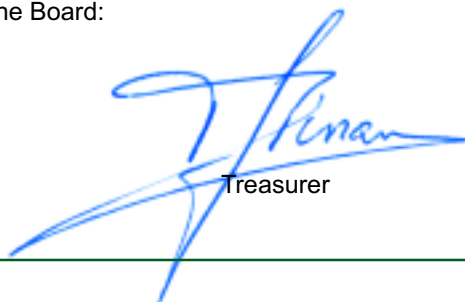
	1999	1998
<b>ASSETS</b>		
Non-current assets		
Fixed assets (note 3):		
Motor vehicles	\$ 71,936	71,936
Computer equipment	87,050	71,172
Office furniture and equipment	130,013	115,513
	288,999	258,621
Less: Accumulated depreciation	89,600	33,441
	199,399	225,180
Recoverable deposits	11,862	11,850
Current assets		
Prepaid expenses	15,425	49,613
Accounts receivable (note 4)	270,046	107,190
Cash and cash equivalents (note 5)	557,708	913,763
	843,179	1,070,566
	\$ 1,054,440	1,307,596
<b>NET FUNDS AND LIABILITIES</b>		
Net funds		
Restricted (note 6)	\$ 488,426	496,403
Unrestricted	335,678	263,058
	824,104	759,461
Current liabilities		
Payable to donor	-	478,714
Accounts payable and accrued liabilities	230,336	69,421
	230,336	548,135
	\$ 1,054,440	1,307,596

The accompanying notes form an integral part of the financial statements.

Approved on behalf of the Board:



Director General



Treasurer

# International Network for Bamboo and Rattan

## Statement of Activities For the Year Ended December 31, 1999 (in US dollars)

	Chinese Government	IDRC	DGIS	IFAD	Others	1999	1998
<b>Revenue</b>							
Grants:							
Restricted	\$ -	\$ 276,016	\$ 300,000	\$ 588,025	\$ 3,445	\$ 1,167,486	2,030,266
Unrestricted	546,766	1,006,236	-	-	-	1,553,002	1,164,186
Interest income	-	-	17,933	-	-	17,933	18,007
Publication sales	-	3,548	-	-	-	3,548	6,412
	546,766	1,285,800	317,933	588,025	3,445	2,741,969	3,218,871
<b>Program activities</b>							
Accelerating socio-economic development	4,740	21,259	2,709	340,814	-	369,522	31,542
Environmental applications	-	7,816	-	-	-	7,816	18,534
Genetic resources:conservative & sustainable use	-	52,352	-	2,175	-	54,527	35,759
Information dissemination and technology transfer	13,362	70,579	335,016	6,051	1,933	426,941	273,371
Natural resources and plantations management	6,904	3,535	302	-	-	10,741	13,473
Network development	2,394	96,451	-	-	-	98,845	101,554
Utilization and engineering applications	6,132	41,532	169,785	27,920	5,000	250,369	130,070
Network evaluation	-	-	29,163	-	-	29,163	-
Others	-	-	-	-	2,401	2,401	-
	33,532	293,524	536,975	376,960	9,334	1,250,325	604,303
<b>Management and administration</b>							
Secretariat expenses (note 7)	542,779	888,990	-	-	-	1,431,769	1,508,147
Board of trustees expenses (note 8)	-	(4,768)	-	-	-	(4,768)	346,960
	542,779	884,222	-	-	-	1,427,001	1,855,107
Excess of revenue over expenditures	(29,545)	108,054	(219,042)	211,065	(5,889)	64,643	759,461

## Statement of Net Funds For the Year Ended December 31, 1999 (in US dollars)

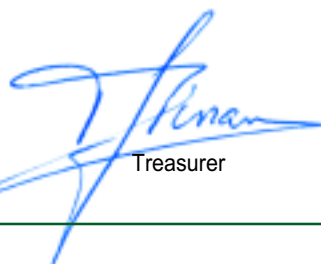
	1999	1998
Opening balance	\$ 759,461	-
Excess of revenue over expenditure for the year	64,643	759,461
Closing balance	\$ 824,104	759,461

The accompanying notes form an integral part of the financial statements.

Approved on behalf of the Board:



Director General



Treasurer

## International Network for Bamboo and Rattan

**Statement of Cash Flow**  
**For the Year Ended December 31, 1999**  
**(in US dollars)**

	1999	1998
Cash flows from operating activities		
Excess of revenue over expenditure	\$ 64,643	\$ 759,461
Adjustments to reconcile excess of revenue over expenditure to net cash provided by operating activities:		
Depreciation	56,159	33,441
Interest income	(17,933)	(18,007)
Increase in accounts receivable	(162,856)	(107,190)
Decrease/(increase) in prepaid expenses	34,188	(49,613)
Increase in recoverable deposits	(12)	(11,850)
Increase in accounts payable and liabilities	160,915	69,421
(Decrease)/increase in payable to donor	(478,714)	478,714
	(408,253)	394,916
Net cash provided by operating activities	(343,610)	1,154,377
Cashflows from investing activities		
Purchases of fixed assets	(30,378)	(258,621)
Net cash used in investing activities	(30,378)	(258,621)
Cashflows from financing activities		
Interest received	17,933	18,007
Net cash provided by financing activities	17,933	18,007
(Decrease)/increase in cash and cash equivalents	(356,055)	913,763
Balance, beginning of year	913,763	-
Balance, end of year	\$ 557,708	\$ 913,763

The accompanying notes form an integral part of the financial statements.

Approved on behalf of the Board:



Director General



Treasurer

# International Network for Bamboo and Rattan

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## Notes to Financial Statements For the Year Ended December 31, 1999” (in US dollars)

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### 1. PRINCIPAL ACTIVITIES

The International Network for Bamboo and Rattan (“INBAR”) was created in Beijing, the People’s Republic of China (“China”) on November 6, 1997, by international agreement signed by twenty-one sovereign nations. Subsequently, the Head Office of INBAR was established in China under the terms of a Headquarters Agreement signed between the Government of the People’s Republic of China and INBAR.

The mission of INBAR is to improve the social, economic and environmental benefits of bamboo and rattan. It supports and coordinates core programs in scientific research, technology generation and sustainable development programs, providing bamboo and rattan solutions for people and the environment.

INBAR is currently funded through support received from the Chinese government and by grants and contract supports from International Development Research Centre (‘IDRC’) of Canada, Directorate General of International Cooperation (‘DGIS’) of Netherlands and the United Nations’ International Fund for Agricultural Development (‘IFAD’).

### 2. ACCOUNTING POLICIES

The principal accounting policies adopted in the preparation of these financial statements are set out below:

#### **Basis of preparation**

The financial statements are prepared in accordance with and comply with International Accounting Standards. The financial statements are prepared under the historical cost method.

#### **Reporting currency**

The financial statements are prepared in US dollars as INBAR is an international organization and its clients and donors prefer the use of US dollars in the financial statements as it is a global currency.

#### **Foreign currencies**

Foreign currency transactions are accounted for at the average exchange rates that closely approximate the exchange rates prevailing at the date of the transactions; gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies, are recognised in the statement of activities.

#### **Fixed assets**

Fixed assets are stated at cost less accumulated depreciation.

Depreciation is calculated on the straight line method to write off the cost of each asset after taking into account zero residual values over their estimated useful lives as follows:

Motor vehicles	5 years
Computer equipment	3 years
Office furniture and equipment	10 years

#### **Accounts receivable**

Accounts receivable are carried at anticipated realisable value.

#### **Cash and cash equivalents**

Cash and cash equivalents comprise of cash on hand and short-term deposits with original maturities of three months or less.

# International Network for Bamboo and Rattan

## Net funds and grants

Net funds comprise of unrestricted and restricted contributions from donors. Grants which can be used at the discretion of INBAR is classified as unrestricted net funds. Grants which are restricted by the donors for specific purposes or periods are classified as restricted net funds.

Grants are recorded using the accrual method. All grants are included in unrestricted net funds unless specifically restricted by the donor or the terms of the grants. If restrictions are met in the same reporting period, the amount is recorded in unrestricted net funds.

## Taxation

INBAR enjoys the same exemptions as diplomatic missions in China according to the Headquarters Agreement between the Government of the People's Republic of China and INBAR. As such, INBAR is exempt from taxation in China.

## 3. FIXED ASSETS

	Motor vehicles	Computer equipment	Furniture and equipment	1999	1998
Opening net book amount	\$ 63,938	\$ 56,114	\$ 105,128	\$ 225,180	-
Additions	-	15,878	14,500	30,378	258,621
Disposals	-	-	-	-	-
Depreciation charge	14,387	28,702	13,070	56,159	33,441
Closing net book amount	\$ 49,551	\$ 43,290	\$ 106,558	\$ 199,399	\$ 225,180
As at December 31, 1999					
Cost	\$ 71,936	\$ 87,050	\$ 130,013	\$ 288,999	\$ 258,621
Accumulated depreciation	22,385	43,760	23,455	89,600	33,441
Net book amount	\$ 49,551	\$ 43,290	\$ 106,558	\$ 199,399	\$ 225,180

## 4. ACCOUNTS RECEIVABLE

Accounts receivable include the following:

	1999	1998
IDRC	\$ 259,372	-
IFAD	-	107,109
Advances to employee	10,674	81
	\$ 270,046	\$ 107,190

The accounts receivable from IDRC represents amount due from IDRC for grants received from IFAD.

## 5. CASH AND CASH EQUIVALENTS

Cash and cash equivalents include the following:

	1999	1998
Petty cash	\$ 4,051	258
Bank of China	357,920	40,244
Bank of Montreal	195,737	873,261
	\$ 557,708	913,763

# International Network for Bamboo and Rattan

## Notes to Financial Statements For the Year Ended December 31, 1999” (in US dollars)

### 6. RESTRICTED NET FUNDS

Restricted net funds are only used for specific programs activities designated by the donors.

### 7. SECRETARIAT EXPENSES

Breakdown of secretariat expenses are as follow:

	Chinese Government	IDRC	1999	1998
Motor vehicle expenses	\$ -	15,564	\$ 15,564	3,093
Training	-	765	765	6,137
Conference and seminars	-	143	143	7,683
Miscellaneous	-	11,096	11,096	17,777
Office	4,082	30,262	34,344	24,663
Depreciation	46,004	10,155	56,159	33,441
Printing and reproduction	-	15,197	15,197	34,937
Telephone	30,000	30,203	60,203	52,965
Professional services	-	163,115	163,115	97,665
Foreign exchange loss	-	(23,545)	(23,545)	101,732
Travel	-	64,582	64,582	116,606
Employee salaries and benefits	70,969	560,080	631,049	394,715
Rent and utilities	391,724	11,373	403,097	616,733
	\$ 542,779	888,990	\$ 1,431,769	1,508,147

### 8. BOARD OF TRUSTEES EXPENSES

Breakdown of Board of Trustees expenses are as following:

	1999	1998
Conference and seminars	\$ 226	1,335
Office	-	2,514
Allowances for Board of trustees	7,572	31,731
Foreign exchange loss	(25,742)	42,623
Professional services	-	87,300
Travel	13,176	181,457
	\$ (4,768)	346,960

### 9. CONTRIBUTIONS IN-KIND FROM DONORS

During the year, INBAR received contributions in-kind USD461,766 from the Chinese Government.

### 10. CONTRACTUAL COMMITMENTS

INBAR is committed to provide grants to various organizations in the amount of \$139,036 (1998-\$148,265) subject to fulfillment of conditions stipulated in the agreements.

# Publications

INBAR issues several publications each year. Apart from the Newsmagazine, corporate documents (such as Annual Reports) and occasional publications, INBAR publications fall into four categories: Technical Reports, Working Papers, Proceedings and the new Journal.

## A. Technical Report

Technical Reports (TRs) are publications that bridge an identified knowledge gap or address a specific issue raised by INBAR stakeholders or Working Groups. TRs contain significant and conclusive statements on areas of wide interest. Invariably, a TR is written by a renowned scientist or team of scientists who have conducted recognized work in relevant fields.

*Published in 1999*

\* TR 11. Inventory Techniques and Assessment of Rattan and Bamboo in Tropical Forests (In press; published jointly with FRIM and DFID)

\* TR 12. Bamboo Panel Boards: A State-of-the-Art Report

\* TR 14. Considerations in Rattan Inventory Practices in the Tropics (Published jointly with FRIM and DFID)

## B. Working Paper

Working Papers (WPs) are final reports covering work done under INBAR projects (there may be more than one Working Paper resulting from one project) or discussion papers written by scientists on topics related to INBAR programmes.

*Published in 1999*

\* WP 22. The Bamboo and Rattan Sectors in Asia: an Analysis of Production-to-Consumption Systems

\* WP 23. Socio-economic Issues and Constraints in the Bamboo and Rattan Sectors: INBAR's Assessment

## C. Proceedings

Reports of the proceedings of workshops (including collection of papers presented), seminars, meetings, etc. will, in future, be grouped under the series "Proceedings."

## D. INBAR Newsmagazine

The INBAR Newsmagazine is published twice a year. It is the only publication that regularly reports on INBAR activities and hence, is the means with which INBAR reaches out to its constituencies. Currently, the NM is prepared in two editions - English and Spanish - and the Chinese and French editions are to be added in 2000.

## E. Bamboo and Rattan Journal

INBAR will join with Brill Publishing of The Netherlands to commence a Bamboo and Rattan Journal. The first issue is expected in 2001.

