Table of Contents

Organisations - Programmes
- Iwokrama Programme - Guyana 1
- Network for the Availability of Scientific Publications (INASP) 5
- The African Coffee Research Network (ACRN) 7
- Third World Network of Scientific Organisations (TWNSO) 8

Research Cooperations
- CEBIOS/FUNBOSPRI are looking for project partners in Costa Rica 10
- Collaborative Allelopathy Research in Tropical Agroforestry 12

News
- First TAC Meeting of ETFRN 12
- Tropical Forestry Research under the 4th Framework Programme 13
- ETFRN Expert Groups 15
- Electronic Access to Water Quality and Agricultural Information 16

Publications 19

Vacancy Announcements 22

Enclosure: Agenda
Dear Readers,

The last issue of our Newsletter contained a questionnaire to help us optimize its concept according to the interests of our readers. Many of you have responded to date, providing many interesting remarks and ideas for future issues. We would like to thank you very much for your cooperation and interest in our Newsletter!

As you will surely have noticed, we have already picked up some of your suggestions regarding the cover page and the general layout with this issue. We hope that these slight changes will increase clarity and facilitate the locating of articles. Those of you who have favoured coloured photographs, we ask for your understanding that now as in future we will not be using these, since this would render a free distribution impossible.

Concerning the contents of the ETFRN-News we also wish to follow your ideas to the greatest possible extent. We would therefore like to invite you to continue sending us your suggestions and/or questionnaires (which forms the center-piece of issue no. 11).

We are looking forward to receiving your views!

ETFRN-News is a quarterly publication of the European Tropical Forest Research Network; free copies can be obtained from:

European Tropical Forest Research Network (ETFRN)
c/o ATSAF e.V.
Ellerstr. 50
D-53119 Bonn, Germany
Tel.: +49-228-98 46-16
Fax: +49-228-98 46-99

Editor: Horst Freiberg
Editorial Coordination and Design: Monika Reule
Editorial Assistant: Isabel von Grapow
The Government of Guyana took an unique initiative at the 1989 meeting of the Heads of the Commonwealth Governments in Kuala Lumpur. It offered approximately 400,000 hectares of virgin/unexploited Amazonian forests in the central part of Guyana - a country which still retains forest cover over 80 percent of its land mass. The main objectives of the Programme are to preserve biodiversity, conduct research leading to sustainable and equitable use of tropical rain forest resources, and integrate environmental and development concerns in the operational plans which could be applied to similar situations on a national, regional and even global scale. The Programme is intended to address a number of key national and international issues emerging from the 1992 Rio Summit (Agenda 21) and subsequent follow up meetings:

These issues include:
- the conservation of biodiversity,
- the sustainable use of both renewable and non-renewable resources,
- the role of indigenous communities in the use and conservation of forest resources,
- capacity and capability building for sustainable development,
- increased environmental awareness,
- Intellectual Property Rights for indigenous peoples based on their traditional and informal knowledge.

The Programme will have the following components when fully established:

- An International Centre for Research and Training at the University of Guyana campus.
- An Environmental Communication Unit for data base, exchange of information, publication and dissemination of research results.
- An Amazonian Rain Forest Wilderness Reserve. A major part of the project area will be converted into a Reserve and managed as such for in situ conservation.
- A Sustainable Utilization Zone. The remaining part of the project area will be subjected to research and trials for developing techniques and guidelines for ecologically compatible uses and economic benefits.

Presently, the IIRFP has the following administrative and financial arrangements:

- An Interim Board of Trustees oversees the Programme with assistance from the Government of Guyana, the Commonwealth Secretariat and UNDP.
- the UNDP through GEF has provided US$ 3.0 million seed funding for infrastructure development, resources surveys and a few research projects.
- An Interim Programme Management Group has been established. A Research and Development Manager, a Site Resource Survey Manager, and a Resource Economist are in place. A Director General and Site Development Manager are presently being recruited.
- A National Project Manager is in place along with essential ancillary staff, such as, accountants, secretaries, drivers, camp manager, and other support staff.

Below are given some of the important activities which have been completed or are planned in near future.

- With assistance from the Commonwealth and ODA (U.K.), The National Resources Institute (U.K.) carried out the survey of the site describing broad vegetation, soil and land types.
- A demographic/activity survey of Amerindian settlements peripheral to Iwokrama has been completed.
- A group of scientists from U.K. have carried out a quantitative assessment of biodiversity around Kurupukari in part of Iwokrama forests.
- Short consultancies have been completed on establishing a Communication Unit and possibilities of ecotourism in the area.
- The archaeological studies have been conducted in and around Iwokrama.
- A workable Base Camp has been established at Kurupukari on the northeastern corner of the project site on the bank of Essequibo River. The camp is capable of supporting up to 20 scientists for research activities.
- The Smithsonian Institution is presently conducting floral surveys.
- A faunal survey will commence in early 1995.
- A project to study the use of biological resources by the Amerindian communities living around Iwokrama with the objectives of developing parameters of their sustainability and studying Intellectual Property Rights issues will be started in early 1995.
- The legal framework for the Programme is in the final stage of development.

The proposed (draft) Research and Development Plan for IIRFP includes the following eight major programmes to deal with key issues in order to achieve the planned objectives.

**Programme 1: Management of the Conservation Zone**

Guyana, being a tropical country, is rich in biodiversity with a high degree of endemism. For instance, nearly 1,200 vertebrates, of which most (728) are birds, 198 species of mammals, 137 species of reptiles, and 105 species of amphibians, occur in Guyana. It is significant to note, that out of the above, 98 birds, 27 mammals and 19 reptiles are listed as endangered species in the CITES and Red Data Book. Presently, The Kaieteur National Park (57,498 ha) is the only legally protected area in Guyana. It is therefore proposed in Iwokrama, that a significant part of the area will be carved out and maintained as a Wilderness Reserve where natural, dynamic evolutionary processes will be continued unabatedly without any human intervention. A comprehensive management plan will be drawn up to manage the conservation zone. It will include research projects which could be carried out without disturbing the ecosystems and developmental processes. It will also act as a control against the disturbances and changes in the sustainable utilization zone because of harvesting the resources. Some of the important
projects in this zone will be the study of biodiversity including gene pool and microorganisms, ecological processes using non-destructive methodologies, selection and management of recreational and aesthetical sites for ecotourism, and study of undisturbed ecosystems as CO₂ sinks, climate and radiation regulators.

Programme 2: Biodiversity and Basic Sciences Research
Great emphasis has been laid, especially after the Earth Summit in Rio in 1992, on determination, conservation and wise management of rich biodiversity in a tropical rain forest, like the one in Iwokrama where 100 to 150 species can be identified in one hectare. Since the Rio conference, several workshops and seminars have been organized by the international and regional agencies, such as, UNDP, World Resources Institute, UNESCO, IDRC etc. to work out the strategies for conserving biodiversity. In Guyana, a document on the strategies and guidelines on conservation and utilization of biodiversity has been prepared. This programme will therefore concentrate on developing baseline information on the species diversity at both the population and community levels. The priority projects in this area will be a total count of plant and animal species, production of florula and monographs, description of plant associations on various soil land types, phenological behaviour of important species etc.

The programme will also include basic sciences studies on eco-physiological processes/mechanisms and species responses to abiotic factors and interventions.

The information gathered in this programme will be useful in programmes 3 and 4 for developing sustainable management practices.

Programme 3: Sustainable Management Practices for Timber Production
In most countries, and Guyana is no exception, timber production is still the most important use of natural forests even though it could be at a high cost of increased rate of deforestation, low and uncertain productivity of residual stands in subsequent rotations, loss of invaluable biodiversity and increased erosion due to destructive harvesting techniques, adverse impacts on climate, soil and water and on the well-being of the indigenous communities dependent on forest resources. In spite of concerted research efforts and yield of valuable data, a practical, viable silvicultural system based on sustained yield principles which could be applied on commercial scale under varying conditions (vegetation types, harvesting regimes etc.) has not yet been developed. Moreover, because of the complexity of the tropical ecosystems and unpredictable (unknown) behaviour of the component species, it is problematical whether a system developed in one country or a certain type of plant association under a set of existing site factors and introduced conditions of timber extraction can be applied to a different plant association in the country or the region. The component dominant and co-dominant species may differ in their growth requirements and response to harvesting regimes and silvicultural prescriptions. This programme will therefore concentrate on research projects related to planning and execution of harvesting opera-
tions, actual logging and its impacts on various properties in the residual stands, post-logging treatments with the main objective of developing sound and practical harvesting, silvicultural and management schedules.

Programme 4: Sustainable Development of Non-wood Products
The tropical forests are the treasure house of non-wood forest products, many of which have high potential both in terms of generating income and meaningful employment. The variety of minor forest products could include various types of exudates (latex, resins, gums, poisons, oil), edible nuts, fruits, drinks, medicinal plants, wood for making toys and artifacts, non-timber species for making furniture, thatching material, etc. fish, and animals. Many of these materials have played an important role in the subsistence life of the forest dwellers and indigenous communities from time immemorial. In fact, if properly developed, some of these products may outweigh earnings and employment opportunities from harvesting of timber under certain conditions. Two examples from Iwokrama will illustrate the high potential of non-wood products. It is on record that there was significant trade of Balata (Manilkara bidentata) latex involving Amerindians about two to three decades back that collapsed in 1980s. It is also known that Greenheart (Chlorocardium rodiei) seeds contain at least two alkaloids, bibrine and sipirine to treat dysentery, diarrhoea and malarial fevers. They are also used by the Amerindians as contraceptives.

This programme will therefore concentrate on the inventory, research for product development, relevant training and marketing of non-timber products from Iwokrama.

Programme 5: Forestry Resources and Amerindian Communities in Iwokrama
A small group of Amerindian communities living in four villages, Kurupukari, Surama, Annai, and Paramaktoi, utilize Iwokrama resources to a lesser or greater extent in diverse ways (hunting, gathering, fishing, recreation, use of timber and other material for construction of their houses, boats and implements). These people, in fact, have over the centuries developed a symbiotic and even synergistic relationship with the forest biome. It is very important to include the study of these relationships with particular reference to ecological prudence and conservation practices, as one of the important studies in Iwokrama. This programme will undertake the chronicling of Amerindians' knowledge on utilization and conservation of the biological diversity. Attempts will be made to identify parameters of sustainability and develop guidelines for enhancing the same. These studies will also help to articulate methods of recognizing and rewarding the Intellectual Property Rights of Amerindians.

Programme 6: Environmental Awareness
The International Development Research Centre (IDRC), Canada, has agreed to establish an International Environment Communication Unit as a component of the Research and Training Centre.
Some of its projects as related to Iwokrama's research programme will be to publish research results for the use of its clients, exchange of information, CD ROM facilities, data base on ethnobotanical, biodiversity, socio-economic parameters of Amerindian communities etc.

Programme 7: Environmental Impact Assessment
During the course of management of the project area for various purposes as projected in Programmes 1 - 4, there will be disturbances to the ecosystems on various scales. It is important that these disturbances are monitored, controlled and kept to the minimum. The cause of disturbances, such as, trials for sustainable management of timber resource, harvesting of non-wood forest produce, ecotourism, subsistence farming by the Amerindians on the northeast boundary of the Reserve, small mining operations in the northwest of the Reserve, use of Surama lake, the Georgetown-Lethem highway dissecting the Reserve, will be constantly monitored for the environmental impacts.

Programme 8: Education and Training
There is an urgent need for capacity building at every level in the forestry sector. The Guyana Forestry Commission is grossly understaffed with adequately trained personnel resulting in poor control of the concession areas. The University of Guyana which runs a diploma course in forestry is also not fully equipped. In fact, there is a shortage of trained personnel in almost every field in Guyana, so much so, that different programmes may compete for the same resource person.

It is therefore envisaged that the proposed Centre will play a significant role in augmenting training at various levels. This may include on-the-job training in biodiversity survey, research methodologies, product development and forest-based industries of Amerindians around Iwokrama and other Guyanese. It may also include assistance to the University of Guayana in undergraduate and postgraduate training in different areas with particular reference to the on-going programmes in Iwokrama.

All organizations, aid agencies, scientists, NGOs and graduate students interested in the IIRFP programme are invited to collaborate.

For further information, please contact:
Dr. Prem Srivastava
Research & Development Manager
Iwokrama International Rain Forest Programme
c/o Guyana Natural Resources Agency
41 Brickdam & Boyle Place
Brickdam, Stabroek, Guyana
Tel: +592-2-73306
Fax: +592-2-59199

The International Network for the Availability of Scientific Publications (INASP) is a project of the International Council of Scientific Unions (ICSU) supported by the EC and UNESCO. Furthermore it is a co-operative network of donors and representatives of recipient institutions.
It has three immediate objectives:
- to map, support and strengthen existing programmes involved in the distribution, local publication, exchange and donation of books, journals, and related materials (e.g. maps and charts, audio-visual materials, software and CD-ROM);
- to encourage and support new initiatives that will increase local publication and general access to quality scientific literature;
- to identify methods that will permit the ongoing and sustainable exchange and distribution of scientific publications.

Network activities
INASP has set up two integrated databases. The first provides current information on existing sources of scientific material and efforts to support indigenous publishing. The second provides an inventory of "recipient" institutions with the potential to be involved in these programmes.

Retrieval of data is manipulated in order to identify areas of duplication and omission. The results of these analyses are circulated in order to encourage discussions among existing donation programmes on ways to further rationalise and coordinate efforts.

A hard copy directory of organisations supporting the Network is produced every year and available on request from the INASP secretariat.

Both databases are also available in read-only soft-copies supported and linked by an interface which can run on 286 AT PC’s and higher with a minimum amount of 2MB RAM.

INASP offers a clearinghouse and advisory service and assists in the matching of prospective donors to appropriate recipients and vice-versa. As part of the advisory service INASP publishes small leaflets giving detailed information on various aspects of donating and distributing scientific publications.

INASP promotes and supports the establishment of new programmes to distribute current journals on a continuing basis. It has assisted with the establishment of a number of activities, such as a new project to distribute African published scholarly journals throughout the continent and a proposal for a support programme for academic communities in Central and Eastern Europe and the republics of the former Soviet Union.

INASP circulates a Newsletter twice a year to provide updated information from the databases and discuss the problems involved in and possible solutions for making scientific literature more equally available. It also contains progress reports of the latest INASP activities. Subscription is free and can be obtained by writing to the secretariat.

Furthermore, INASP is currently publishing a new and expanded edition of the INASP Directory (1995) which contains, among others, profiles of institutes working in the field of forestry. The directory is expected to be available by March and is provided free to libraries in the developing world. Those organizations listed in the directory receive their first copy gratis.
For further information please contact:
Ms Pru Watts-Russell
INASP
P.O. Box 2564
London W5 1ZD
UK
Tel: +44-181-997 3274
Fax: +44-181 810 9795
Email inasp@gn.apc.org

In the face of an unfavourable environment with adverse effects on the economies of African coffee producing countries, the Inter-African Coffee Organisation (IACO), jointly with the the Technical Centre for Agricultural and Rural Cooperation (CTA) and the support of the EU, decided to reinforce African coffee rehabilitation programmes by setting up the African Coffee Research network - ACRN in March 1993.

The Network’s objective is to achieve conditions for establishing a qualitative and quantitative viable African coffee sector for which its activities are roughly centred on four areas:

Research
African coffee genetics, flowering, irrigation, fertilisation, photosynthesis, rooting systems, soil analysis, effective chemical control methods, etc.,

Development
Biological control, protection against coffee pests, selected planting material, disease-resistant cultivars, etc.,

Studies
Plant spacing, mixed cropping, coffee technology, data bank on everything related to the coffee sector, etc.,

Training
Training of African research scientists, exchange visits between African researchers, preparation of audio-visual aids, dissemination of research results, etc.

AFRICAN COFFEE, a bilingual quarterly (English/French) publication, which apart from promoting the exchange of technical, commercial and general information for all sectors of the coffee industry has a special section for research through which all activities of ACRN are published.

For further information please contact:
The Coordinator (ACRN)
BP V 210
Abidjan
Côte d’Ivoire
Tel: +225-21 61 31
Fax: +225-21 62 12
The Third World Network of Scientific Organizations (TWNSO) is a non-governmental organization, founded in 1988 by 15 Ministers of Science and Technology and Higher Education and 30 Heads of Science Academies and Research Councils from 36 Developing Countries, to promote (a) science-based economic development of the Third World, and (b) cooperation among the nations of the South in areas of Science and Technology critical to their sustainable development. In 1990 TWNSO acquired consultative status with UNESCO.

At present TWNSO has 130 Members, including 26 Ministries of Science and Technology and Higher Education, 36 Science Academies, 42 Research Councils and 26 other Organizations from 69 Third World countries.

The affairs of TWNSO are supervised by an Executive Board, elected every four years by the Members. To facilitate its work, the Executive Board has established a central office within the Third World Academy of Sciences (TWAS) Secretariat, four Regional Offices at the location of the Vice-Presidents, and two Chapters in the North. In addition, TWNSO National Committees have been established in 22 countries in the South.

The objectives of TWNSO are:
- To encourage adequate resource allocation for Science and Technology by governments in the South;
- To promote the integration of Science and Technology in the national development plans of Third World countries;
- To further the South’s contributions to and involvement in global science projects and frontier Science and Technology programmes;
- To promote the development of collaborative programmes between research institutions in areas of science, technology and environment which are of critical importance to the development of the South;
- To recognize and encourage scientific and technical innovations of substantial benefit to the economic and social development of the South.

**TWNSO's Activities:**
In pursuance of its overall objectives - and with the full collaboration and support of the Third World Academy of Sciences (TWAS) - TWNSO has designed a number of programmes which are outlined below. In addition to these programmes, the TWNSO Executive Board has instituted three Standing Committees: one on Environmental Hazards and Global Change, one on Global and Frontier Problems in Science and Technology, and one on National/Regional Plans for Science and Technology.

**Grants for Joint Research Projects**
With financial support from the OPEC Fund for International Development, TWNSO has recently established a competitive research grants scheme designed to encourage and
support joint research projects involving 2-3 competent research and training institutions from different countries in the South. To ensure maximum benefit to the Least Developed Countries (LDCs), it is required that at least one of the cooperating institutions in any proposed project should be located in a LDC.

A research grant amounts to a maximum of US$ 30,000 and is provided for up to two years. It can be utilized for purchasing scientific apparatus, consumable materials, specialized literature and any other items needed for the joint project by any of the cooperative institutions, especially those in LDCs. The programme provides support for research projects in both basic and applied fields. Preference is given to joint projects which are likely to provide direct benefits to production sectors in the South.

**Awards in Applied Sciences**
TWNSO awards to annual prizes of US$ 10,000 each, one in Agriculture and one in Technology, to honour distinguished individuals or institutions whose scientific and technical innovations have provided significant and sustainable solutions to certain economic and social problems in the Third World, and have brought benefits to the well-being of the people.

**Prizes for Promoting the Public Understanding of Science**
TWNSO offers financial assistance to its Members to institute annual prizes to scientists who have made significant contributions to the improvement of the public understanding of science in their country.

**Network of International Centres for Sustainable Development in the South**
In collaboration with TWAS and UNIDO, TWNSO is initiating the establishment of a network of centres dedicated to research and training in areas of high technology and environmental sciences critical to sustainable economic development in the South. The proposal was endorsed by the 1989 summit meeting of non-aligned countries, and has since been backed by a number of heads of state and government from the South. A comprehensive feasibility study for the project is currently being undertaken in collaboration with UNIDO. A Commission on Science and Technology for Sustainable Development under the chairmanship of the Prime Minister of Pakistan has been formed at the invitation of TWNSO’s President to provide political and financial backing to the establishment of the Network of International Centres.

**Profiles of Science Ministries, Academies and Research Councils in the South**
TWNSO annually publishes a book containing detailed information about its Members, including their programmes, functions and budget. The publication is the first of its kind and is providing useful information to many organizations concerned with the status and prospects of science and technology in the South.

**Profiles of Institutions for Scientific Exchange and Training in the South**
In collaboration with the South Centre and UNIDO, TWNSO is compiling an inventory of world-class research and training institutions in various countries in the South.
The purpose of this project is to facilitate the launching of a comprehensive fellowship programme for scientists from the South who wish to pursue research and training in centres of excellence in the South. The first issue of the inventory has been published in 1994 and contains profiles of over 200 centres. It will be widely circulated in the South as well as in the North. It is hoped that the publication and distribution of these profiles will promote further scientific collaboration among centres of scholarship in the South as well as between them and similar institutions in the North.

For further information please contact:
Prof. Mohamed H.A. Hassan
Secretary General TWNSO
International Centre for Theoretical Physics
P.O. Box 586
34100 Trieste, Italy
Tel: +39 40 2240-386
Fax: +39 40 224559
E-mail: twas@ictp.trieste.it

---

Under this heading the ETFRN Newsletter offers its readers the possibility to write a short article for future issues of the Newsletter offering research cooperation opportunities. Should you be interested in making your cooperation efforts known to the Newsletter readers, please feel free to send us your summaries.

---

**CEBIOS/FUNBOSPRI are looking for project partners in Costa Rica**

The Foundation for Primary Forest Protection - FUNBOSPRI (see also Newsletter No. 9) and the Osa Centre for Biological Studies (CEBIOS SA) (see also Newsletter No. 8), are trying to implement a programme on Sustainable Development for Osa Peninsula in Costa Rica. The programme will begin by giving some economic support for those people who have primary forest (or want to reforest) at the foundries (buffer area) of Corcovado’s National Park. The first stage includes 45 owners from four communities: Los Planes, Drake, Los Angeles y Rancho Quemado.

The Population of these communities is no more than 10,000 individuals in around 70,000 ha. It is desired that parallel with this economic incentive, the programme will contribute by looking for economic alternatives and planning. The objective is to prevent present and future negative impacts on the region. Given that its population is small, it is hoped that the programme will achieve with success. However, this implies a commitment from other institutions related to the zone (the project proposal is written in Spanish and is available to those people interested).

Osa Peninsula is very rich in forestry resources (an important number of them of commercial value).
Deforestation processes affect and reduce, in a significant way, these resources. When people deforest, on the one hand, they chop down those trees that present, from a genetic point of view, desirable characteristics. On the other hand, these trees are of slow growth, and this exerts a pressure on the genetic resources. Related to "desirable characteristics" there remain to solve two important problems:
- In Costa Rica there is a need for an adequate quality system for the evaluation of forestry varieties;
- Research in Costa Rica is mainly oriented to those varieties with commercial value. Therefore, those varieties of no commercial value, but rich in biodiversity, their potential for water quality protection and so on, are left aside.

CEBIOS SA will begin working in this area by doing an account of those trees that meet some initial set of desirable genetic and biodiversity characteristics. The next step will consist of investigating ways of getting more rapid growth and appropriate environments for cultivations, and technics for genetic improvement. The final goal is to introduce biotechnology in the treatment of forestry resources, particularly those varieties whose reproductive capabilities are limited to natural environments.

Osa Peninsula is classified within the life zone called humid tropical forest. Its system of rains, its topography and its geographic location makes Osa Peninsula a region extraordinarily rich in biodiversity. It presents different kinds of ecosystems, including mountain forest (this ecosystem present the highest richness in biodiversity, both, flora and fauna), forest of the plain (this ecosystem varies according to the water percentage of soil; some of these ecosystems are as complex as mountain forests), yolillal (formed mainly by a palm called yolillo), Marsh and Coral reefs. These natural characteristics bestow important alternatives for doing research in biodiversity and tropical biology.

Given these elements CEBIOS SA is interested in doing research in the following areas:

1. Models of planning and development
2. Economic alternatives for Osa Peninsula
3. Forest genetic resources
4. Environmental impact studies
5. Biodiversity accounting and taxonomies
6. Studies in tropical biology

CEBIOS SA is interested in coordinating research activities with institutions from Europe and other countries in the above mentioned areas, assuming that people from other countries will increase their knowledge and help CEBIOS in sharing experiences and transferring their scientific knowledge.

For further information please contact:
Celso Vargas
Department of Computer Sciences
Costa Rica Institute of Technology
PO Box 159
Cartago, Costa Rica
Fax: +506 53 48
Email cvargas@itcricic.cic.ac.cr
Collaborative Allelopathy Research in Tropical Agroforestry

Allelopathic interactions between trees and crops in agroforestry systems (AFS) play a major role in their productivity. However, very little information is available. It has been reported that based on allelopathy, highly productive and sustainable AFS could be developed. The International Allelopathy Society intends to submit the following two transnational multidisciplinary collaborative projects for funding to the European Commission:

1) Studies to develop highly productive and sustainable AFS for Semi-Arid Tropics
2) Evaluation of non-wood forest products for pests control and source of nutrients

According to EC guidelines, projects should involve participants from at least one developing country (however preference is given to those including more) and two different European countries.

Research as mentioned above, focusses mainly on allelopathy and competition studies. Therefore, brief collaborative proposals (biota data, reprints, details of laboratory and equipment facilities available) are requested from agricultural scientists (agroforestry, forestry, horticulture, vegetable crops, agronomy, soil science, entomology, nematology, plant pathology) and bioscientists (biochemistry, organic chemistry (natural products), phytochemistry, microbiology and plant physiology) before March 30 1995.

For further information please contact:
Prof. S. S. Narwal
Vice-President (Asia)
International Allelopathy Society (USA)
Department of Agronomy
CCS Haryana Agricultural University
Hisar 125 004
India
Tel: + 91-1662-73721
Fax: + 91-1662-73552
Telex: 0345-216 HAU IN

1st Technical Advisory Committee Meeting of ETFRN

The 1st ETFRN - Technical Advisory Committee (TAC) Meeting took place at the premises of the Dutch ETFRN National Node, TROPENBOS, on 3rd November 1994.

TAC Meetings are aimed at bringing together scientists from Europe and Developing Countries. Also participating is a representative of the European Commission and the European Parliament. TAC shall assist the ETFRN Coordination Unit and the ETFRN General Assembly to achieve their goals. TAC will meet twice a year.
## Conferences

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 95</td>
<td>Stand Establishment and Inter-Rotation Management: 2nd International Conference on Forest Vegetation Management, Rotorua/ New Zealand</td>
<td>IFVM, NZ FRI, Private Bag 3020, Rotorua, New Zealand; Fax: +64-7-347 93 80</td>
</tr>
<tr>
<td>20. - 24.</td>
<td>Reunión de la Red de Información Forestal Para América Latina y el Caribe, Resistencia/Chaco, Argentina</td>
<td>Secretaría de IUFRO, Seckendorff-Gudent-Weg 8, 1131 Vienna, Austria; Fax: +43-1-18779355 Email <a href="mailto:iufro@forvie.ac.a">iufro@forvie.ac.a</a></td>
</tr>
<tr>
<td>21. - 25.</td>
<td>European Floodplain Forest Ecosystems: structure, functioning, conservation, Leicester/UK</td>
<td>The University of Leicester Department of Geography, Dr. Tony Brown, Department of Geography, University Road, Leicester LE1 7RH, UK; Tel: +44 (0) 533 52 38 23 Fax: +44 (0) 533 52 22 00</td>
</tr>
<tr>
<td>22. - 25.</td>
<td>International Sustainable Development Research Conference, Manchester/UK</td>
<td>ERP Environment, PO Box 75, Shipley, West Yorkshire BD17 6EZ, UK; Fax: +44-274-530 409</td>
</tr>
<tr>
<td>27. - 7.4.</td>
<td>First Conference of the Parties (COP) of the Framework Convention on Climate Change, Berlin/Germany</td>
<td>Miriam Motahari, Projektstelle Umwelt &amp; Entwicklung; Am Michaelshof 8-10, D-53117 Bonn, Germany; Tel: +49-(0)228-359005 Fax: +49-(0)228-359096</td>
</tr>
<tr>
<td>April 95</td>
<td>’Tools or Toys: Applications of New Technologies in Forestry’. 16th Biennial Conference of the Institute of Foresters of Australia, Melbourne/ Australia</td>
<td>R. Spencer, Organising Committee Chairman, School of Forestry, University of Melbourne, Creswick Vic. 3363, Australia; Fax: +61-53-451 094</td>
</tr>
<tr>
<td>18. - 21.</td>
<td>Ungulates in Temperate Forest Ecosystems, Oxford/UK</td>
<td>The Institute for Forestry and Nature Research (IBN-DLO) and Wageningen Agricultural University, Nature Conservation Department. Dr. A.T. Kuiters, Institute for Forestry and Nature Research, P.O. Box 23, NL-6700 AA Wageningen, NL; Tel: +31 (0) 83 70 77 70 0 Fax: +31 (0) 83 70 24 98 8</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td>Organizer</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>11. - 15.</td>
<td>9th International Conference on The state-of-the-Art of Ecological Modelling, Beijing, China</td>
<td>Dr. I. Kang, ISE M’95 Conference Secretariat, c/o Institute of Zoology, Chinese Academy of Sciences, 19 Zhongguancun Lu, Beijing 100080, China; Tel: +86 1 25 55 56 12 Fax: +86 1 25 65 68 9</td>
</tr>
<tr>
<td>Sept. 95</td>
<td>Innovations in Tropical Tree Seed Technology, Arusha/Tanzania</td>
<td>Organisers of IUFRO Symposium, National Tree Seed Programme, PO Box 4012, Morogoro, Tanzania; Tel: +255-56 3192 Fax: +255-56 3275</td>
</tr>
<tr>
<td>18. - 21.</td>
<td>Terrestrial Ecosystem Monitoring, Southampton, UK</td>
<td>Joint ISPRS-WG VII/5 &amp; Remote Sensing Society Meeting, Prof. P. Curran, Tel: +44 (0) 703 59 22 95 Fax: +44 (0) 703 59 32 95</td>
</tr>
<tr>
<td>Oct. 95</td>
<td>Symposium on &quot;Advances in Forest Seed Production in Latin America&quot;, Turrialba/Costa Rica</td>
<td>Dr. R. Salazar, PROSEFOR Project, CATIE, 7170-137 Turrialba, Costa Rica; Tel: +(506) 556-1933 or 556-6431, Fax: +(506) 556-1533</td>
</tr>
<tr>
<td>30. - 3.11.</td>
<td>International Congress on Soils of Tropical Forest Ecosystems, Balikpapan (Kalimantan)/Indonesia</td>
<td>Dr. A Schulte, Indonesian-German Government Cooperation, Indonesian-German Forestry Project, Faculty of Forestry, Mulawarman University, P.O. Box 1227, Samarinda 75123, East Kalimantan, Indonesia; Tel: +62 (0)541-35089 Fax: +62 (0)541-35379</td>
</tr>
<tr>
<td>Nov. 95</td>
<td>VII Sympósio Latinoamericano de Percepción Remota, Puerto Vallarta/ Mexico</td>
<td>R. Alvarez, SELPER-Mexico, Ap. Postal 20-850, 01000 Mexico, D.F., Mexico; Tel: +525622 43 39 Fax: +525-616-2145, Email: <a href="mailto:rab@igiris.igeograf.unam.mx">rab@igiris.igeograf.unam.mx</a></td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>5. - 11.</td>
<td>Fire Management and Natural Resource Development in Latin America and the Caribbean Guadalajara/Mexico</td>
<td></td>
</tr>
<tr>
<td>13. - 17.</td>
<td>GIS/LIS '95, Nashville, Tennessee/USA</td>
<td></td>
</tr>
<tr>
<td>Feb. 96</td>
<td>Inventory of Non-Timber Forest Products (NTFP), Nairobi/Kenya</td>
<td></td>
</tr>
<tr>
<td>July 96</td>
<td>5th ISSR Symposium on Root Demographics and their Efficiencies in Sustainable Agriculture, Grassland, and Forestry Ecosystems, Athens, Georgia/USA</td>
<td></td>
</tr>
<tr>
<td>Sept. 96</td>
<td>Effects of Environmental Factors on Tree And Stand Growth, Dresden/Germany</td>
<td></td>
</tr>
<tr>
<td>May '97</td>
<td>Forestry in a Changing Political Environment: Challenges for the 21st Century, Victoria Falls/Zimbabwe</td>
<td></td>
</tr>
<tr>
<td>A. Koonce, Prescribed Fire Research, USDA Forest Service, Pacific SW Station, Forest Fire Laboratory, 4955 Canyon Crest Drive, Riverside, CA 92507-6071, USA; Tel: +1-909-276 65 70 Fax: +1-909-276 64 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Society for Photogrammetry and Remote Sensing; Tel: +301 493 02000 Fax: +301 493 8245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. August B. Temu, ICRAF, United Nations Ave., Gigiri, P.O. Box 30677, Nairobi, Kenya; Tel: +254-2-521-450 Fax: +254-2-521-001 Email: CGNET CGI:236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prof. James E. Box, USDA, Agricultural Research Service, South Atlantic Area, Southern Piedmont, Conservation Research Center, 1429 Experimentation Station Road, Watkinsville, Georgia 30677, USA; Fax: +1-706-769 8962</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prof. Dr. Habil. Günter Wenk, Institut für Waldwachstum und Forstliche Informatik, Postfach 10, 01735 Tharandt, Germany;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Secretary General, the 15th Commonwealth Forestry Conference, Forestry Commission, PO Box HG 139, Highlands, Harare, Zimbabwe; Tel: +263-14-49 8430 Fax: +263-14-49 7066</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Workshops

**May 95**

Prof. Dr. Frühwald, Federal Research Centre for Forestry and Forest Products, Institute for Wood Physics and Wood Technology, Leuschnerstraße 91, 21031 Hamburg, Germany;  
Fax: +49 40 739 62 48

**Aug. 95**

1. - 5.  Internet Applications and Electronic Information Resources in Forestry and Environmental Sciences, Joensuu/Finland  
Hannu Saarenmaa, European Forest Institute, Torikatu 34, 80100 Joensuu, Finland;  
Tel: +358 (0) 73 252 020  
Fax: +358 (0) 124 393

---

### Training Courses

**April 95**

24. - 18.5.  Rural Projects - Design, Monitoring and Evaluation, Canberra/Australia  
Course Coordinator, ANUTECH Pty Ltd, Australian National University, Canberra ACT 0200, Australia;  
Tel: +61-6-249-5671  
Fax: +61-6-249-5875

**May 95**

1. - 6.6.  Urban and Rual Planning and Local Development Policy, Armidale/ Australia  
Programme Director, International Development Training Programme, PO Box U298, University of New England, Armidale NSW 2351, Australia; Fax: +61-67-73 3799

**June 95**

5. - 12.  Multiple Use and Environmental Values in Forest Planning, Tohmajärvi/ Finland  
Dr. Penti Hyttinen, European Forest Institute, Torikatu 34, 80100 Joensuu, Finland;  
Tel: +358 73 252020  
Fax: +358 73 124393
ETFRN - International Agenda

5. - 6.10. The 1995 Certificate Course in Community Forestry, Bangkok/Thailand
Dr. Somsak Sukwong, Director, RECOFTC, Kasetsart University, PO Box 1111, Bangkok 10903, Thailand, Tel: +662-5700108 Fax: +662 5634880

12. - 17. Assessment of Biodiversity for Improved Forest Management, Koli/Finland
Mr. Janne Uuttera, European Forest Institute, Torikatu 34, 80100 Joensuu, Finland; Tel: +358-73-252-020 Fax: +358 73 124 393 Email: uuttera@joyl.joensuu.fi

15. - 22. Large-Scale Forestry Scenario Models: Experiences and Requirements, Joensuu/Finland
Dr. Ivo Kupka, European Forest Institute, Torkatur 34, 80100 Joensuu, Finland; Tel: +358 73 88570 5332 Fax: +358 73 124 393 Email: efidat@joyl.joensuu.fi

29.6. - 22.9. Tropical Forest Management, Tropical Agroforestry, Tropical Forest Modelling, Edinburgh/UK
Catherine Bancroft, The University of Edinburgh, Univ.Ed Technologies Limited, 16 Buccleuch Place, Edinburgh, EH8 9LN, Scotland, United Kingdom; Tel: +44 (0) 131 650 34 75 Fax: +44 (0) 131 650 34 74

July 95

3. - 14.7. Geographic Information Systems and Environmental Modelling Course, Canberra, Australia
Course Coordinator, ANUTECH Pty Ltd, Australian National University, Canberra ACT 0200, Australia; Tel: +61-6-249-5671 Fax: +61-6-249-5875

The Course Coordinator, Oxford Forestry Institute, Department of Plant Sciences, University of Oxford, South Parks Road, Oxford OX1 3RB, UK; Tel: +44-1865 275000 Fax: +44-1865 275074, Email: ofi@plantsciences.oxford.ac.uk

Mrs. Helen Stutley, Administrator, Statistical Services Centre, Harry Pitt Building, The University of Reading, P.O. Box 240, Reading, Berkshire RG6 2FN, UK; Tel: +44 (0)1734 318025 Fax: +44 (0)1734 753169 Email: statistics@reading.ac.uk
ETFRN - International Agenda

30. - 5.8. Climate Change, Biodiversity and Boreal Forest Ecosystems, Joensuu /Finland

Mr. Timo Karjalainen, Univ. of Joensuu, Faculty of Forestry, P.O. Box 111 FIN 80101 Joensuu, Finland; Tel: +358 73 1513630 Fax: +358 73 151 3590 Email: tkarjalainen@hiyk,hiebszz.fi

Sept. 95


IAC, P.O. Box 88, 6700 AB Wageningen, Netherlands; Tel: +31-8370-90111 Fax: +31-8370-18552 Email: IAC@IAC.AGRO.NL

4. - 29. Environmental Assessment for Development Projects, Canberra /Australia

Course Coordinator, ANUTECH Pty Ltd, Australian National University, Canberra ACT 0200, Australia; Tel: +61-6-249-5671 Fax: +61-6-249-5875


Programme Director, International Development Training Programme, PO Box U298, University of New England, Armidale NSW 2351, Australia; Fax: +61-67-73 3799

Oct. 95

23. - 10.11. Agroforestry Research for Development, Nairobi /Kenya

The Training Coordinator, October 1995 Training Course, ICRARF Training Programme, P.O. Box 30677, Nairobi, Kenya; Fax: (254-2) 521 001; Email: 157:CG1236

June 96

27.06. - 20.09. Tropical Forest Management, Tropi- cal Agroforestry, Tropical Forest Modelling, Edinburgh /UK

Catherine Bancroft, Univ.Ed Technologies Limited, 16 Buccleuch Place, Edinburgh, EH8 9LN, Scotland, United Kingdom; Tel: +44 (0) 131 650 34 75 Fax: +44 (0) 131 650 34 74

July 96

8. - 12. Participatory Rural Appraisal Techniques, Edinburgh /UK

Catherine Bancroft, Univ.Ed Technologies Limited, 16 Buccleuch Place, Edinburgh, EH8 9LN, Scotland, United Kingdom; Tel: +44 (0) 131 650 34 75 Fax: +44 (0) 131 650 34 74
At its 1st meeting TAC agreed on:
- the elaboration of a revised ETFRN information brochure;
- the compilation of a "Directory of Tropical Forest Research Organisations" in Europe;
- the quarterly publication of the ETFRN-News; and
- the implementation of five ETFRN-Expert Groups on tropical forest research themes relevant for the European Commission’s 4th Research Framework Programme.
For further information please contact the ETFRN Coordination Unit.

Under the Fourth Research Framework Programme (1994-98) the main objectives of the Scientific and Technological Cooperation with Developing Countries (DC) continue to be boosting DC research capacity and improving European excellence in scientific research relevant to DC problems. The first call for proposals will be launched on 15 March 1995. The following calls, disposing of a larger budget also for forestry research, will presumably be launched in March 1996 and 1997.

The programme is open to all individuals and organisations established in the member states of the European Economic Area (European Union and EFTA) and tropical and subtropical developing countries.

For each project proposal a coordinator has to be nominated, who collects the information from his partners and submits the proposal to the European Commission services. In case of selection of this proposal the coordinator would act as the main contact partner for the Commission, being responsible for the project implementation, reports, etc.

The Commission services themselves can offer only very limited assistance in the initiation of proposal preparation of EU and DC partners. However, in the area of tropical forestry research ETFRN offers unique opportunities to identify potential European partners for joint projects. Developing Countries’ institutes interested in the participation in an EU forest project should contact the ETFRN Coordination Unit.
All projects must be transnational and involve participants from at least two different European States, and at least one from a developing country. Preference will be given to projects involving more than one developing country. The skills and provisions of the partners within a project should be complementary and the DC participants should have a major input to the research.

The most important selection criteria are the scientific quality and the conformity with the scope and objectives of the programme explained in the work plan and the information package which can be ordered from the EU in March 1995. The Commission gives preference to strategic research on model systems which allow the application of results in different parts of the world.

Research Areas and Priority Setting
STD tropical forestry research always has covered a broad range of different issues, due to the broad scope of the STD calls for proposals. The allocation of funds was determined by the topics addressed by good proposals.

The focusses of the future work programme will not be basically different from those of the STD programmes. The two programme sectors ‘Sustainable Management of Renewable Natural Resources’ and ‘Sustainable Improvement of Agricultural and Agro-Industrial Production’ (incl. budget for the two sectors: 126 Mio ECU/154 Mio US$) include forests and silviculture as potential areas for funding.

In this context ETFRN is now establishing Expert groups in order to assemble relevant information (state-of-the-art, potential collaborators etc.) on the following topics:

1. Management of Natural Resources

Genetic diversity studies: Assessment of intra- and interpopulation diversity in tropical forest trees for improved conservation concepts and selection. Priority should be given to species with a model character, and influences of biological and habitat parameters on population genetic structures should be analysed.

Monitoring of impacts on forest ecosystems: Assessment of responses of different components of tropical forest ecosystems (ecological niches, systematic groups, soils) to human and environmental influences as a basis for the development of sensitive monitoring systems.

Natural forest conservation: Development of concepts for an improved buffer zone management with an emphasis on socio-economic aspects (agroforestry systems).

2. Improvement of Agricultural Production

Tree rhizosphere studies: Understanding of the coevolution of host/symbiont systems, study of the ecogeographical distribution of rhizosphere microorganisms and investigation of host - symbiont signalling mechanisms.
Natural ecosystems: Germination and early development of seeds/seedlings of valuable tree species under different microhabitat conditions for the development of forest management schemes favouring natural regeneration of these species.

**How to Improve the Effectiveness of Future EC Tropical Forest Research?**
The European Tropical Forest Research Network is establishing expert groups on the subjects mentioned above in order to stimulate the preparation of research proposals in these areas. Future joint Commission and EFRN initiatives should lead to a more focused research strategy, integrating projects on similar subjects into larger cooperative structures. In other programmes the European Commission already has initiated such large projects (e.g. BIOTECH generic projects). All projects in a specific research area are merged and a coordinator for the whole sector is identified. Combining the expertise and efforts of many groups would allow to tackle efficiently more basic research topics and develop a strong profile and strategy for European research in tropical forestry. EFRN could play a central role in such a development.

For further information please contact:
Dr. Kay Beese/Dr. Joachim Kreysa
European Commission, DG XII
200, Rue de la Loi/SDME R2/137
B-1049 Brussels, Belgium
Tel: (+32-2) 29 54484 or 60973
Fax: (+32-2) 29 66252
Email BeeseK@mhsgh.cec.rrt.be
or
Dr. Horst Freiberg,
ETFRN-Coordination Unit

---

**ETFRN-Expert Groups**

As outlined in the previous article, EFRN is establishing five expert groups related to tropical forest research aspects. The topics have been identified in accordance to their importance to the European Commission´s 4th Research Framework Programme.

The five topics with their respective expert group "Initiators" are:

1) **Tree rhizosphere studies**
   (Dr. C. T. Wheeler, University of Glasgow, United Kingdom)
2) **Monitoring of anthropogenic or climatic impact on forest ecosystems**
   (Prof. Matti Palo, University of Helsinki, Finland)
3) **Natural regeneration of natural and semi-natural forest ecosystems**
   (Dr. F. J. M. Bongers, University of Wageningen, The Netherlands)
4) **Genetic diversity studies**
   (Prof. O. Luukkanen, University of Helsinki, Finland)
5) **Natural forests management and conservation**
   (Dr. A. Cleef, University of Amsterdam, The Netherlands)

A first meeting of all Initiators is scheduled for the 3rd of February 1995. Each expert group will be composed of 4-5 members, who are already identified, and will prepare a paper of 8-10 pages, assembling relevant information for all potential applicants to the European Commission’s Research Programme on:
- how to apply to STD;
- state-of-the-art information on the research theme, and
- potential collaborators in the specific research theme.

Scientists interested in one or more of the above-mentioned topics and who are interested to be included in the paper as potential collaborators are invited to provide the ETFRN-Coordination Unit with
- their names and full addresses (Tel. & Fax), and
- a short indication of specific research interests and experience in one or more of the above-mentioned topics.
until the 31th of March 1995.

**Electronic Access to Water Quality and Agriculture Information**

The Water Quality Information Center at the National Agricultural Library (NAL), Beltsville, Maryland/USA, provides a variety of information electronically both through an electronic bulletin board system and through a gopher server on Internet.

**The Water Information Network**
The Agricultural Library Forum (ALF) is the electronic bulletin board system of NAL. ALF provides an efficient means of exchanging agricultural information and resources among individuals and institutions. The library’s Water Quality Information Center manages the Water Information Network (WIN), one of several subject-specific conferences on ALF.

WIN contains bulletins which provide information on timely water quality topics as well as files containing information useful in research and education. WIN also has an electronic mail capability that allows users to exchange information among themselves or with the Water Quality Information Center. ALF operates 24 hours a day and charges no subscription or usage fees.

**Water quality information on WIN includes**
- List of call-for-papers and meetings (updated monthly)
- Fact sheets
- List of satellite videoconferences (updated monthly)
- Funding opportunities
- Job postings
- Bibliographies
- Hotline numbers

**Accessing ALF\WIN**
You can connect to ALF\WIN through either dial-up or Internet connections.

**Dial-up**
For dial-up connection with microcomputer, modem and telecommunications software, use these software settings: Baud rate: up to 9600, Stop Bit:1, Duplex: Full, Data Bits: 8, Parity: None, and any of these phone numbers:
(301) 504-6510 or (301) 504-5111 or
(301) 504-5496 or (301) 504-5497.

If calling long distance, telephone toll charges will apply. For information on toll-free access, send an electronic message on ALF to the system operator, Karl Schneider, or send a message to kschneid@nalsusa.gov on Internet.
Internet
ALF is available through a gateway on the U. S. Department of Commerce’s bulletin board, called Fedworld, which is on the Internet. If you have Internet accessibility, type the following at the system prompt to access Fedworld: telnet fedworld.gov

On your first connection to Fedworld, register as a new user (in a process similar to the one described below). Once registered, Fedword will present some introductory material. At the prompts, respond by entering q to get to the Fedworld menu.

(Note: Fedworld and ALF/WIN commands are single letters or numbers and are listed here in italic. ALF/WIN commands may be in the form of a word with the first letter in brackets, such as [Q]uit, or they may be a word with a right parenthesis following the first letter, such as N)one. To enter a command, type the letter and hit the RETURN or ENTER key.)

Once there, enter d to access the GateWay system. In the GateWay system menu, enter d to choose a connection. Then you’ll be prompted to enter a number corresponding to the bulletin board you want to access. Enter 2 (ALF’s number). This will connect you to ALF. Follow the directions below to access WIN. (Please note: To go directly to ALF, at the first Fedworld menu enter d d 2. Also, connecting to Fedword is sometimes difficult. If you can’t connect, try again at a different time of day.)

First-time ALF/WIN users
After connecting to ALF, you will be asked for your name, a password of your choosing, and information regarding your individual communications system.

When in doubt, select the default setting, M)one. For the questions pertaining to either graphics, color or highlighting, also use the M) or M)one option. After you’ve become more familiar with ALF you can experiment with changing these settings to find ones that may work better with your particular system. Once you’ve answered the registration questions, ALF will greet you, list policies, and check for any private mail. It will then list conference news and inform you of any new bulletins or files that have been uploaded. (To go through this material without viewing it, type M)or A)abort when prompted.) Following this, the main menu for the entire ALF system will be displayed.

To enter the WIN conference from the main bulletin board, type J W/N (case doesn’t matter). You’ll now see the WIN introductory screen. At the "Continue" prompt, hit return (for yes) then select M)o at the "Read mail" prompt. This will bring you to the WIN menu. It’s the same setup as the main menu, but "WIN subboard" appears in the lower left of the screen.

Items to explore
Once in Win, you’ll want to take a look at the bulletins, files and mail.

Bulletins
From the WIN menu, type [B]ulletins. This will bring up - one screen at a time - a listing of the bulletins currently on WIN. Enter a RETURN to move to the next screen. When the entire listing has been displayed, the "Read what bulletin(s)" prompt appears. You can then enter the number of the bulletin you want to view.
After reading a bulletin, you will be given the option to go back and read other bulletins.

Files
Unlike bulletins, files are larger documents that cannot be viewed on screen, but can be downloaded to your computer. WIN bulletin #5 lists water quality files. You can also see a listing of files by selecting [F]iles from the WIN menu. This brings you to the files submenu. From there, type [L]ist to display the file categories (directories). There are two screens listing file categories, so you’ll have to hit RETURN to get to the "What directory(s)" prompt. Type WATER here to bring up a list of water-related files. Some water quality files are also available in the QB SERIES directory. To leave the files section, type [Q]uit from the files menu, then select [M]ain to return to the main menu.

Mail
To get started reading mail, type [R]ead messages then, at the next set of prompts, type [L]ast. This will bring you to the most recent message posted. To continue going back through the messages, hit RETURN (for yes) or type ", -" to go backwards or "+" to go forward through available messages. When you want to return to the WIN menu, type [A]bout.

To send mail to someone, select [E]nter message, then follow the prompts. After composing your message, enter a RETURN to bring up a command line. Choosing [S]ave, sends the message.

Ending a session and logging on again
To exit ALF\WIN, at the menu enter [G]oodbye followed by Y for yes. When you log on to ALF in the future, you can get directly to WIN by typing

First Name Last Name Password! WIN

at the opening prompt that asks for your first name.

For more information about WIN
Download a more complete ALF users’ guide directly from ALF (file "ALFGUIDE.TXT") or, for a hard copy of the guide, call (301) 504-5204 or write to NAL Reference Unit, Room 111, 10301 Baltimore Blvd., Beltsville MD 20705-2351.

ALF also offers online help. To access help, type H or ? from any menu, then enter the command letter at the help prompt. (To get help, the command you’re interested in must be in the current menu.) If you need further assistance, contact the system operator.

For further information please contact:
Joseph R. Makuch, Ph.D.
Coordinator
Water Quality Information Centre
National Agricultural Library
Room 1402
10301 Baltimore Boulevard
Beltsville, MD 20705-2351
USA
ETFRN is preparing a 'Directory of Tropical Forest Research Organisations in Europe'. This Directory will contain more than 200 individual European forestry research organisations and institutes indicating names of contact persons, addresses and research areas. The first version is expected to be available at the end of March 1995 and can be ordered from the ETFRN Coordination Unit.


The "Capacity Building in Forestry Research (CBFR)" Project of the African Academy of Sciences (AAS) in collaboration with the Ugandan National Council of Science and Technology organized the First International Workshop on Capacity Building in Forestry Research in Africa in Kampala, Uganda, from 9 to 11 November 1992.

The workshop brought together project grantees, their supervisors, members of the selection committee and invited senior scientists. They shared skills, experiences, and the results gained from the first year of the project.

The present proceedings of the workshop contain the review papers which have been presented on all aspects of forestry research including:
- Applicability and applications of research finds
- Evolving technologies for forest resources planning
- The valuation of tree based resources
- Post-graduate research education in forestry
- Models for integrated research on use and management of forest resources
- The development and relevance of forestry networks in Africa

Papers covering original research work like an ethnobotanical study of indigenous plant species and a socio-economic survey of the use of local plant/tree species or studies about the potential of agroforestry species, wood energy production and consumption by small scale farmers, development of propagation methods of endangered species, were also presented and form part of the proceedings.

The assessment of the magnitude and ecological impacts of deforestation is most relevant and useful when it is accompanied by the modelling of the linkages between socio-economic configurations and the processes of changes. The development of models of deforestation processes is aimed at: (i) better understanding the causes and mechanisms of deforestation, (ii) generating predictions of future deforestation rates and (iii) contributing to the design of policy responses to deforestation.

This report reviews all the modelling approaches which have been applied to deforestation processes - i.e. Markov chains, logistic function-based models, regression models, spatial statistical models using GIS capabilities, models of population pressure, models of periurban landuse change, economic approaches, ecosystem simulation models and dynamic spatial simulation models. A conceptual framework to integrate different modelling designs is proposed as a basis for future research.


This paper provides a critical review of the historical development of approaches to sustainable forest management in the High Forest Zone in Ghana. It begins with some general information on Ghana, including a brief description of its topography, climate and vegetation. It describes the forests of Ghana, their environmental, social and economic uses, and analyses consequent impacts of these on the conservation of biodiversity.

Historical development of forestry and past forest management practices are described. The recent National Forest Inventory and its associated botanical/ecological and non-timber forest product surveys, are analyzed to show their impacts on current forest management practices and essential linkages between conservation and sustainable use of the forest resources. Current approaches to sustainable forest management are described in detail to show what progress Ghana has made. Finally, problems that hinder progress and the future of Ghana’s forestry are discussed.

This volume on timber trees deals with the most important commercial timbers of South-East Asia, a region which produces the major part of the timber on the world market. Timber is a major export product and increasingly important domestically. Uncontrolled logging, together with other human activities, such as shifting cultivation, leads to destruction of tropical forest. Sustainable management of natural forest and the establishment of timber plantations integrated with land-use programmes (including agriculture) will protect forests from destruction and generate permanent timber production in the future. Reliable and up-to-date information on all aspects of tree species and their wood is a prerequisite for sustainable utilization. Among the 55 timber trade groups described in this volume are meranti, balau, keruing, kapur, white seraya, mersawa, merbau, sepitir, narra, kempas, teak, nyatoh, mengkulang, ramin, ulin, pulai, kauri, pine, mahogany and eucalypt. Brief characteristics of 550 species belonging to those trade groups are included. A glossary explains the terms used.

(from the back cover)


This report is the result of an FAO fact-finding and formulation mission carried out in Thailand, China, Pakistan, The Philippines in November/December 1993. This mission was initiated in response to a request by the Government of China to FAO for the transfer of the FAO’s ARTEMIS and DIANA satellite environmental monitoring and communications technology, presently used in Africa to support early warning for food security and migratory pest forecasting.

The objective of the mission called OLIVIA (Operational Low-Cost Integrated Vital Information Access) was to perform a preliminary analysis of the current status of the needs for environmental information technology in the Asia and Pacific Region.

The most important conclusions are that there is a large and rapidly increasing demand for environmental information products derived from earth observation satellites at four levels of decision making: sub-national (provincial/district), national, regional and global.
Vacancy Announcements

Widespread up-to-date information on the status of natural resources, land-use, and climate are considered to be essential for sustainable development, which should include natural resource value accounting, disaster prevention, food security and pollution control in a region where erosion, overgrazing, deforestation, land misuse, soil and water pollution, floods, and water shortage are the main limiting factors of economic development. Special emphasis has to be put on the dissemination of relevant multisource information products to local users at provincial level.

ICRAF: Regional Coordinator for Latin America

The International Centre for Research in Agroforestry (ICRAF) is an international research organisation supported by the Consultative Group on International Agricultural Research (CGIAR). Its ultimate purpose is to help mitigate tropical deforestation, land depletion and rural poverty through the better use of trees and shrubs in crop and livestock production systems in humid, sub-humid and semi-arid tropics.

ICRAF is seeking to fill an internationally-recruited senior scientist position of Regional Coordinator for Latin America. The objective of this position is to coordinate and manage ICRAF’s programme in Latin America in collaboration with other international centres, national and regional organisations undertaking agroforestry research and training.

The incumbent will therefore be expected to guide and monitor the output of the various projects in the region, and supervise ICRAF scientific and support staff working in this region. He/She will also ensure a focused, efficient and collaborative development of ICRAF research efforts in Latin America; synthesize research output to provide guidelines for policy and decision makers, and for ICRAF’s participation in the "Alternatives-to-Slash-and-Burn"-Initiative. He/She will actively contribute to fund raising from donors and will also be responsible for ICRAF’s annual programme of work and budget for Latin America. The position will be located on Porto Velho, Rondonia, Brazil.

The successful candidate must have a Ph.D. degree or equivalent with at least 10 years of scientific and practical experience in biophysical or social science research in Latin America and be a recognised scientist in the region. He/She should have experience of successful collaborative work with regional, national institutions and policy makers; demonstrated ability to design, establish and coordinate research programmes. The candidate should have excellent command of English and be fluent in Spanish and/or Portuguese.
Teaching experience and/or experience in the preparation of training material would be an asset. Ability to work in a cross-cultural and multi-disciplinary environment is essential.

Salary and perquisites are highly competitive. Benefits include housing and education allowances, annual leave, personal car and an excellent retirement and health insurance package. ICRAF offers a collegial and gender-sensitive working environment. Initial appointment is for two years, renewable with satisfactory performance.

Applicants are invited to send a detailed curriculum vitae, including date of birth, salary details and the names and addresses of three referees (including telephone and fax numbers or Email address). All correspondence should be addressed to:
The Head of Human Resources
International Centre for Research in Agroforestry
P.O. Box 30677
Nairobi
Kenya
Tel: +254-2 521450
Fax: +254-2 521001
Email: R.Lecuyer@CGNET.COM

Applications will be considered until April 1st, 1995, or until position is filled.

The World Conservation Monitoring Centre (WCMC) is an independent charity founded in 1987 by IUCN, WWF and UNEP. WCMC provides information services on the conservation and sustainable use of species and ecosystems, and supports others in the development of their own information systems. WCMC is seeking to strengthen its activities on terrestrial ecosystems, in particular with a new programme to gather and disseminate information on the biological diversity of forests, for which it is seeking to appoint four new posts. For each post, qualifications should include a scientific degree in a natural resource discipline, such as forestry, and experience in building information systems and the management and distribution of data. Fluency in English is essential. Experience in the developing world and a good working knowledge of Spanish or French will be a distinct advantage.

Forest Programme Manager (Ref. No. 1)
The Forest Programme Manager will be responsible for the management and development of a portfolio of projects and activities initially focussing on forest ecosystems worldwide and their role in biodiversity conservation. The programme will focus on gathering and compiling information on the biodiversity of terrestrial ecosystems for dissemination to users worldwide. Regular travel is envisaged.
Vacancy Announcements

Qualifications should include: a PhD in natural resources discipline; at least five years’ experience in management and application of forest-related data from remote sensing and other sources; familiarity with the application of GIS; involvement with international research and conservation communities; experience of tropical and temperate forest management.

Trees Information Coordinator (Ref. No. 2)
Furthermore, WCMC is looking for a Trees Information Coordinator who will oversee the gathering and management of data on tree species, including but not restricted to timber species, as part of the development of information resources on the distribution, conservation status, management and uses of trees world-wide. Regular travel is envisaged to work with other collaborating organisations.

Qualifications should include a degree in botany or forestry and at least five years’ experience of work with international conventions and agreements (such as CITES and ITTA). A proven track-record of publications and networking is essential. Previous experience of organising international workshops and a working knowledge of French and Spanish would be an advantage.

CIFOR Liaison Officer (Ref. No. 3)
WCMC is also looking for a CIFOR Liaison Officer who will be responsible for the collection and analysis of spatial data on the world’s forests in support of the Centre for International Forestry Research in Indonesia.

In addition to supplying and managing data on global forest extent, the officer will be expected to undertake and publish analytical research using the data. Regular travel for joint research will be required.

Qualifications should include a higher degree in a relevant subject; experience with the use of GIS and the interpretation of satellite imagery, and at least three years’ research in forest resource issues demonstrated by an active record of publications.

Research Officer (Ref. No. 4)
WCMC is recruiting a Research Officer to provide support to a variety of projects within the Forest Programme. This will include compilation of material relating to the conservation status of timber tree species, collection and formatting of data and responding to information requests.

Qualifications should include at least one year’s post-graduate experience in applied ecological research. Renumeration will be paid according to qualifications and experience. An excellent pensions and insurance package is offered.

Please send your application quoting name and reference number of post, together with Curriculum Vitae and the names of two referees, as soon as possible, to:

Personnel Officer
World Conservation Monitoring Centre
219 Huntington Road
Cambridge CB3 0DL
United Kingdom
Tel:  +44 1223 277314
Fax:  +44 1223 277136
### ETFRN - National Nodes

**Austria:** Institut für Waldökologie, Universität für Bodenkultur Wien, Peter-Jordan-Str. 82, A-1190 Vienna. Tel: +43-1-47 65 4-41 00, Fax: +43-1-479 78 96, contact: Prof. Dr. Gerhard Glatzel

**Belgium:** CIS/BIO, p.a. Science Policy Office, Wetenschapsstraat 8, B-1040 Brussels. Tel: +32-2-238 34 11, Fax: +32-2-230 59 12, contact: Monnic Desmeth

**Denmark:** Danish Centre for Tropical Agriculture & Environment, Royal Veterinary University, Rølighedsvej 23, DK-1958 Frederiksberg C. Tel: +45-35 28 34 29, Fax: +45-35 28 34 28, contact: Dr. Kay Bruhn

**Finland:** University of Helsinki, Dept. of Forest Ecology, Tropical Silviculture, Viikin kotiela 20, SF-00014 University of Helsinki. Tel: +3 58-0-708 56 43, Fax: +3 58-0-708 56 46, contact: Prof. Olavi Luukkanen

**France:** CIRAD-Forêt, 45 bis, Avenue de la Belle Gabrielle, F-94736 Nogent/Marne cedex. Tel: +33-1-43 94 43 62, Fax: +33-1-43 94 43 29 81, contact: François Grison

**Germany:** Bundesforschungsanstalt für Forst- und Holzwirtschaft, Leuschnerstr. 91, D-21031 Hamburg. Tel: +49-40-739 62-100, Fax: +49-40-739 62-480, contact: Prof. Jochen Heuveldop

**Greece:** Directorate of Forest Resource Development, Section of Forest Research, Ippokratos St. 3, GR-10164 Athens. Tel: +30-1-362 12 90, Fax: +30-1-360 71 38, contact: Nicolas Efstathiadis

**Ireland:** Council for Forest Research and Development, Agriculture Building, University College Dublin, Belfield, IRL-Dublin 4. Tel: +353-1-706 77 00, Fax: +353-1-706 11 80, contact: Fergal Mulloy

**Italy:** Laboratorio di Botanica, Agraria e Forestale, Dipartimento di Biologia Vegetale, Università di Firenze, Piassale delle Cascine 28, I-50144 Firenze. Tel: +39-55-36 57 98, Fax: +39-55-36 01 37, contact: Prof. Carlo Lenzi-Grillini

**Netherlands:** Tropenbos, P.O. Box 2 32, NL-6700 AE Wageningen. Tel: +31-83 70-262 62, Fax: +31-83 70-230 24, contact: Dr. Erik Lammerts van Bueren

**Norway:** Norwegian Centre for International Agricultural Development, Agricultural University of Norway, P.O. Box 50 02, N-1432 Aas. Tel: +47-64-94 98 24, Fax: +47-64-94 07 60, contact: Eirik Stjøthoorn

**Portugal:** Tropical Forestry Centre, Tapada da Ajuda, P-1300 Lisbon. Tel: +351-13 97 32 06, Fax: +351-13 97 31 63, contact: Prof. Dr. Raul M. de A. Sardinha

**Spain:** CICYT, Calle Rosario Pino 14-16, E-28020 Madrid. Tel: +34-1-577 00 98, Fax: +34-1-571 57 81, contact: José. A. Muñoz-Delgado

**Sweden:** Natural Resources Management Institute, Stockholm University, S-10691 Stockholm. Tel: +46-8-16 12 90, Fax: +46-8-15 59 87, contact: Miran Kegl

**United Kingdom:** UK Tropical Forest Forum, c/o Royal Botanic Gardens, Kew, Richmond, UK-Surrey TW9 3AE. Tel: +44-63-4-88 39 54, Fax: +44-63-4-88 00 77, contact: Jane Thornback
Natural Resources Institute, Central Avenue, Chatham Maritime, UK-Kent ME4 4TB. Tel: +44-634-88 00 88, Fax: +44-634-88 00 66, contact: Dr. Ian Hunter

**European Union:** Commission of the European Union, DG XII/B-4, Rue de la Loi 200, B-1049 Brussel. Tel: +32-2-295 44 84, Fax: +32-2-296 62 52, contact: Dr. Kay Beese, Dr. Joachim Kreysa
The European Tropical Forest Research Network, an initiative of the Directorate General XII of the European Commission, was established in October 1991.

Its overall aim is to contribute to the international efforts to further a wise and sustainable management and protection of tropical forests and woodlands.

For this purpose, ETFRN offers a forum for information exchange and discussions, and stimulates joint research activities with a clear focus on multi-disciplinary research between European institutions or individuals and in cooperation with scientists from developing countries, working in the field of tropical forestry.

For further information, please contact:
European Tropical Forest Research Network
Dr. Horst Freiberg,
ETFRN - Coordinator
c/o ATSAF e.V;
Ellerstr. 50
D - 53119 Bonn
Germany
Tel.: + 49-228-98 46-16
Fax: + 49-228-98 46-99