COORDINATOR’S REPORT

Strategic planning for the period 2002 to 2005 has continued with active participation of the SPDC Advisory Group. As a result, a draft strategic plan could be prepared for submission to the IUFRO Board for approval. After completion of another round of discussions and collection of comments the strategic planning document will be finalised and printed. The major components of this SPDC strategy will be presented as a separate article in the next issue of IUFRO News.

As in the past, the SPDC Coordinator was invited to join the ETRFN Steering Committee Meeting, held in The Hague in conjunction with the Tropenbos International Seminar on “Forest Valuation and Innovative Financing Mechanisms for conservation and sustainable management of tropical forests.” The four-day visit to The Hague, The Netherlands, together with the SPDC Deputy Coordinator was utilised to get in contact with members of the European research community working in tropical forests and to discuss issues of cooperation. One of the tangible outcomes is the decision to enter into a Memorandum of Understanding between ETRFN and IUFRO, in order to enhance co-operation in capacity building activities in developing countries, networking and dissemination of information.

An expert consultation on a capacity building strategy in C&I, forest certification and auditing of sustainable forest management tailored to the needs of forest scientists will be organised by SPDC in Guatemala City, on October 19, 2002. This event is co-sponsored by the German Agency for Technical Cooperation (GTZ, Germany). Work to negotiate further support for these consultations is in progress. Overall, it is expected that the workshop will generate recommendations on how to design a training course for forest scientists enabling them to improve their role in local processes of development of C&I, forest certification and auditing of sustainable forest management.

Over the past four months important activities were carried out under the GFSis Africa Project. In March, the Coordinator joined the GFSis Task Force Meeting held in Curitiba, Brazil. Important milestones for further work on GFSis such as data entry campaign in Africa, GFSis documentation and the GFSis presentation at IUFRO’s European Regional Conference in Copenhagen, in August 2002, were endorsed. In April, a training workshop on “Application of the GFSis nodal software package” for webmasters and information managers from the five African Nodes was held in Vienna. In total, 10 colleagues from Africa joined this workshop which aimed at familiarising with and testing of the new GFSis nodal software. Margherita Sini of FAO (Rome), Guillaume Cornu of CIRAD (France), Nguyen Thanh Binh and Martin Nöbauer from the IUFRO GFSis Special Programme, provided valuable input in terms of technical training and logistics. After completion of the workshop the participants took back the nodal software package for installation at their GFSis information servers. Thereafter, a first metadata entry campaign commenced. Within a period of four months (until end of August 2002) it is expected to have about 4500 metadata records created and uploaded into GFSis. As further training input on metadata quality, the project also arranged the services of an external consultant who is reviewing new metadata records uploaded to the system. In addition, work on a comprehensive GFSis documentation including user manuals has started by an external consultant funded by SPDC. Since this issue of IUFRO News is devoted to GFSis, we have refrained from adding a comprehensive GFSis Africa update.

The French handbook on “Preparing and Writing Research Proposals” has been finalised and is ready for use in SPDC-supported training workshops and distribution to interested members of the forest scientist community. For more details please refer to the information box below or contact SPDC under spdc@forvie.ac.at.

Dr. Michael Kleine
Coordinator of IUFRO-SPDC

NEW

Hardcopies of the Manuel pour la préparation et la rédaction de propositions de recherche by C. P. Reid are available completely free of charge (no costs for postage or handling!) for scientists from member institutes in developing countries! The price for all others: USD 20.- plus USD 5.- for postage and handling.
Write to: spdc@forvie.ac.at
Our postal address:
IUFRO-SPDC
c/o Federal Forest Research Centre
Seckendorff-Gudent-Weg 8
A-1131 Vienna, Austria

Please note

Hardcopies of the IUFRO-SPDC Textbook Project No.3 Producción Forestal para América Tropical by Frank. H. Wadsworth are available completely free of charge (except costs for postage or handling!) for IUFRO members in developing countries!
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IUFRO News Vol. 31, 2002, Issue 2
NEWS FROM AFRICA

INTRODUCING ISRA-CNRF
THE SAHELIAN WEST AFRICA NODE OF THE GLOBAL FOREST INFORMATION SERVICE

Our Deputy Coordinator for Africa, Dr. Atse Yapi, continues his series on forest research institutes and their achievements in Africa in an effort to familiarize our readers with some of our IUFRO member institutions and their contributions to forest science and information. In this fifth part of the series, Dr. Yapi reports on the Centre National de Recherches Forestières (CNRF) of the Institut Sénégalais de Recherches Agricoles (ISRA). The CNRF also serves as the Sahelian West Africa node of the Global Forest Information Service currently being developed in Africa.

The national forest policy of Senegal providing the overall framework of forest- and tree-related management and research is essentially directed towards improving the knowledge and conservation of the forest potential in harmony with the socio-ecological equilibrium, and satisfying the wood and non-wood forest product needs of the local population.

Taking into account the national forest policy and the needs of the different stakeholders and research partners has led to the definitions of the following major objectives for the CNRF:

(a) Develop and/or manage agroforestry technologies for a better integration of trees in agricultural production systems;
(b) Assess, preserve and manage forest ecosystems;
(c) Improve the productivity of natural forests as well as that of plantation forests.
(d) Conduct on the job training through seminar and field visits as well as the application of research results.

RESOURCES AVAILABILITY AND INFRASTRUCTURES

Forestry research at the CNRF is carried out by 43 civil servants, including 15 scientists, 8 of which with a doctoral degree, 3 forestry engineers, 3 technicians, 3 observers and 3 nursery agents. In addition, the Centre benefits from the services of an expatriate scientist from CIRAD-Forêt (the forestry unit of the French International Centre of Agronomic Research for Development) and a dozen technicians recruited seasonally. The 15 national scientists include: 2 geneticists, 1 botanist, 1 microbiologist, 1 ecologist, 1 sociologist, 1 agro-economist, 5 agro-foresters, 2 silviculturalists and 1 forest management specialist. 10 of the 15 scientists are working out of the Headquarters of the Centre (CNRF Harm) in Dakar, the capital city. The other 5 scientists are distributed over the 4 regional centres of the CNRF: 2 agro-forestry scientists located in the Centre de Bamby within the “groundnut belt” of Senegal; 1 botanist and 1 agro-forester located at the Centre de Kolda in the Casamance and Senegal Oriental region; 1 management forester at the Centre de Dahr in the silvo-pastoral zone; and 1 silviculturalist at the Niayes Centre.

The CNRF has access to a number of well-equipped research laboratories within the Institut Sénégalais de Recherches Agricoles (ISRA): 2 soil microbiology laboratories; 1 national laboratory for forest seed research; and 1 common laboratory for in-vitro tissue cultures. Part of the infrastructure of the CNRF includes 13 experimental stations, throughout the country, where field trials are conducted.

Financial resources of the Centre are both internal and external. Internal sources of funding are from government budgets and are used primarily to cover staff salaries. External sources are mainly from donor-funded projects and conventions developed by scientists. Currently, the sources of funding include: 5 projects financed by the Fonds National de Recherche Agricole et Agro-alimentaire (FNRAA), two of which are coordinated by the CNRF; 2 INCO DEV projects funded by the European Union (EU); The 3-year (2001-2003) Projet National des Semences Forestières (PRONASEF), the research component of which is entrusted to the CNRF with an annual budget of US$ 42,000; and the GFIS-Africa Project of IUFRO, funded by the European Commission. The Node of this IUFRO project for the Sahelian zone of West Africa is in fact located in Senegal at ISRA-CNRF.

RESEARCH PROGRAMS

The following two priority research programs have been identified for CNRF within the strategic plan of ISRA (1998-2003):

Program 1: Improvement of plant genetic materials. This program seeks to improve the productivity of natural and man-made forest ecosystems, as well as the sustainable management of plant biodiversity. Its main objective is to make available to individuals, NGOs and forestry development services, forest genetic materials of high quality and well adapted to the climatic and ecological conditions of the Sahelian and Sudanian Zones. It focuses on 4 specific objectives: (a) Control the provenance and physiology of seeds for the effective conservation and diffusion of high quality forest seeds; (b) Use natural variability of plant populations by carefully evaluating forest genetic resources, selecting the best strata and developing high quality tree seed orchards; (c) Create high grade individuals through controlled hybridization or genetic engineering; (d) Search for the best plants/microorganisms combinations for the soil.

Program 2: Characterization and management of forest and agro-forest ecosystems. The objective of this program is to: (a) Characterize forest and agro-forest ecosystems, using participatory approaches; and (b)
develop forest ecosystem management tools, which will ensure their conservation, quality and sustainable yields.

For the forest ecosystems, the program aims at studying their dynamics, estimating their productivity through time and space, and identifying high performance species in terms of their wood and non-wood productive capacities for the establishment of appropriate models of forest ecosystem management.

For agro-forestry, the program seeks first to understand the functioning of traditional agro-forestry systems, especially the “système à parc”, which is the most common land use system in the Sahel. Secondly, the program seeks to develop agro-forestry technologies, which could mitigate identified constraints and improve the productivity of available land use systems in all their dimensions (food crops, animal and tree productions).

ACHIEVEMENTS

Over the years, the Centre National de Recherches Forestières (CNRF) has developed a number of useful technologies in the areas of silviculture and natural forest management, genetics and forest resources improvement, agro-forestry, and microbiology.

Achievements in silviculture and natural forest management: The technologies developed in this area include:

(a) Techniques for tree nursery and forest plantation development in tropical dryland;
(b) Techniques for Arabic gum harvesting;
(c) Volume tariffs for individual trees and tree stands; and
(d) Techniques for forest fertilization by trails.

Achievements in genetics and forest resources improvement: In this area, CNRF has also developed a number of technologies, including:

(a) Effective selection of improved plant species by ecological zones of the country;
(b) Selected provenances for the main forest species by ecological regions
(c) Improved methods for vegetative propagation (by cuttings and grafting) and in vitro of some valuable local species (e.g., Acacia senegalensis, anacardium occidentale, Khaya senegalensis, Eucalyptus sp.)

Achievements in agro-forestry: The three most significant achievements in this area are:
(a) Complete agro-forestry diagnosis in the main land use system;
(b) Modalities for establishing and managing agro-forestry technologies (e.g., hedgerows, wind breaker, fodder banks and fallow improvement) in the different agro-ecological zones; and
(c) Typology of the agro-forestry parks in the country.

Achievements in microbiology: Two of the many technologies developed in this area are worth mentioning here:

a) Inoculum production for grainy and perennial legumes, as well as their mode of utilization; and
b) Techniques to identify Rhizobium and Mycorrhiza using molecular biology.

BACKGROUND AND INTRODUCTION

From colonial and postcolonial periods until 1974, land-based sectors in Senegal were the object of separate research structures operating independently. The Centre National Agronomique de Bamby (CNAB) was the research structure for the agricultural sector (narrowly defined), while the Laboratoire national d’élevage et de recherches veterinaires catered for research in animal husbandry. The Centre de recherches océanographiques was the research structure for fisheries, while forest sector research was handled by the Senegalese node of the Centre Technique Forestier Tropical (CTFT), a French forestry research organization in French-speaking Africa which later was replaced by the Centre National de Recherches Forestières (CNRF). In 1975 however, the search for multidisciplinary research programs coupled with the need for a unique and more comprehensive interlocutor for land-based research vis-à-vis donors and national economic agents, have led to the creation of the Institut Sénégalais de Recherches Agricoles (ISRA).

ISRA is thus the scientific and technical umbrella for all the agricultural (broadly defined) research structures. It operates under the Ministry of Agriculture and Animal Husbandry (ministère de l’Agriculture et de l’élevage), and has a decentralized system of management, with the following autonomous decision bodies:

(a) A Directorate General, which sets the general guidelines to orient, coordinate, evaluate and control the overall management of the institute.
(b) National research centres, grouping research activities and disciplinary groups into classified scientific domains: animal production, forestry production, plant production, fisheries production, socio-economy and policy.
(c) Regional research centres located in the different agro-ecological zones of Senegal pursue integrated, multidisciplinary programs cutting across all sectors and domains of research.

CNRF, the national centre for forest research, is therefore part and parcel of the national system of agricultural research. The remaining parts of this report focus on objectives of the CNRF, its infrastructure and available resources. It also highlights the Centre’s research programs, achievements and involvement in the development of GFIS in Africa.
ISRA-CNRF AS A GFIS-AFRICA NODE

The GFIS-Africa Project has currently five nodes, two of which are located in West Africa. The first of these two nodes is located in Kumasi, Ghana, at the Forestry Research Institute of Ghana (FORIG), with a jurisdiction over the humid West African countries (i.e., Benin, Côte d’Ivoire, Ghana, Guinea (Conakry), Liberia, Nigeria, Sierra Leone, and Togo). The second West African node of the GFIS-Africa Project is located in Dakar, Senegal, at the ISRA-CNRF, and has a jurisdiction over the Sahelian countries (Burkina Faso, Cape Verde, Gambia, Guinea-Bissau, Mali, Mauritania, Niger, and Senegal).

Unfortunately, all the countries in the geographic area of responsibility of each node cannot be accommodated within the current project budget. However, Senegal was able to engage the active participation of two non-nodal countries, namely Mali and The Gambia.

To-date, the nodal platform in Senegal, as in all the other sub-regions, is up and ready for GFIS operation. The necessary hardware and related software and basic IT equipment have been fully installed. The GFIS central information server and a “workflow” software package have been developed and are ready for use by the nodes. Intensive training for the use of the new software to enter metadata, perform modifications and various search operations in an interoperable manner has started in April 2002 in Vienna. Currently, an intensive metadata entry campaign is underway in Senegal and in all the other African nodes. It is hoped that a second phase for the GFIS-Africa project could be successfully developed, which would focus on extending the GFIS concept to more countries in the different sub-regions. The ultimate goal is that in a medium term, these African countries would be able to internalize the GFIS concept and make it part of their forest research and development structures.

ACKNOWLEDGEMENT

We sincerely thank Dr. Abibou Gaye, Director, Centre National de Recherches Forestières, Dakar, Senegal, for his assistance and guidance in collecting the information presented in this report.

Dr. Atse M. Yapi
IUFRO-SPDC Deputy Coordinator for Africa

Call for Research Grant Applications from Developing Country Scientists

The International Foundation for Science (IFS) provides support to young scientists of merit in developing countries by awarding research grants and providing grantees with additional services such as travel grants and purchasing assistance.

The IFS supports research related to renewable utilisation of biological resources in areas such as crop and animal production, forestry, food science, natural products, and fisheries, as well as research on sustainable utilisation and conservation of natural ecosystems, including themes such as water management and biodiversity. Proposals for projects may address biological, chemical, or physical processes as well as social and economic relationships important in the conservation, production, and renewable utilisation of the biological resource base.

Research grants are awarded up to a maximum value of USD 12,000 for a period of one to three years and may be renewed twice. They are intended for the purchase of equipment, expendable supplies, and literature. Applicants must be citizens of, and carry out the research in, a developing country. They should also work at a university or national research institution in a developing country. Specifically excluded are countries in Europe, including Turkey and Cyprus, as well as the countries of the former Soviet Union. Argentina and Uruguay are also not eligible to receive support. As well as being under the age of 40 (under 30 for applicants from China) and at the start of their research career, candidates must possess a higher academic degree, which should be at least MSc or equivalent.

Applications are made on the application form, in English or French, which is available from the IFS Secretariat or can be downloaded from the website.

For further details, please contact:
IFS, Grev Turegatan 19,
S-114 38 Stockholm, Sweden
Fax: +46-8-54581801
E-Mail: info@ifs.se
Website: www.ifs.se

ERRATUM

The last issue of IUFRO NEWS Vol. 31 contained the announcement of the Workshop on “The Role of Research and Higher Education in Development National Forest Programmes in Countries with Economies in Transition” to be held in Kaunas (Lithuania) from 1-3 July, 2002.

Unfortunately, it was stated that the workshop was organised solely by the European Forest Institute (EFI). However, this event was co-organized by the United Nations University (UNU), European Forest Institute (EFI), Silva Network, University of Joensuu, Faculty of Forestry and the Lithuanian University of Agriculture.

UNU Centre (Contact: Brita Pajari, E-Mail: brita.pajari@efi.fi and Libor Jansky, E-Mail: jansky@hq.unu.edu)

We apologize to our readers for this error.