



HIGHLIGHTS FROM THE XI WORLD FORESTRY CONGRESS 18 AND 20 OCTOBER 1997

XI WFC delegates continued to participate in technical sessions on Saturday and Monday, 18 and 20 October, and attended a special Plenary session on women in forestry on 20 October. A synopsis of this Plenary session will be included in *Sustainable Developments'* summary issue of the entire XI WFC, which will be available on the Internet on 25 October at http://www.iisd.ca/linkages/sd/sd_antalya.html.

TECHNICAL SESSIONS

FOREST AND TREE RESOURCES

Urban and Peri-urban Forests: A special paper detailed the planning, species selection, management, maintenance, cost effectiveness and environmental and social aspects of urban forests. Another special paper outlined the history of urban forests.

Voluntary papers emphasized: the cultural, social and psychological roles of forests in cities; benefits of urban forestry in the US including energy cost reduction and improved water quality; reduction of air pollution and community betterment; and pests and disease management in urban forests in Moscow.

Forests and Climate Change and the Role of Forests as Carbon Sinks: A special paper emphasized that with proper management, forests can mitigate carbon dioxide emissions by sequestering carbon and can be strategic for meeting emission reduction targets in some countries. Another special paper documented accumulation of carbon dioxide due to biomass increases in Turkish and Bulgarian forests.

Voluntary papers underscored the role of forests as carbon sinks and provided estimates of the carbon budgets in Indonesia, Korea, Lithuania and Russia.

FOREST BIOLOGICAL DIVERSITY AND THE MAINTENANCE OF THE NATURAL HERITAGE

Conservation and Utilization of Forest Genetic Resources: A special paper addressed forest conservation through maintenance of genetic resources, stressing handling methods, application, valuation, databases and multi-subject linkages. Others special papers considered: strategies for prioritized genetic resource conservation based on adaptive value and plasticity; South African clonal programmes for micro-propagation of somatic embryos for commercial production and genetic conservation; and a Mexican network of germplasm banks.

Voluntary papers considered: *in situ* and *ex situ* measurement problems in countries with economies in transition; conservation and utilization of natural tree populations in Yugoslavia; international partnership and resource mobilization on bio-active compounds and *ex situ* conservation; a model integrated strategy for seed procurement, tree improvement and gene conservation;

natural evolutionary processes versus species preservation; the domestication and conservation potential of homestead forests in Bangladesh; a species-specific *ex situ* approach to genetic resource conservation; provenance variation in such species as Douglas fir, Romanian pine, chestnut, neem and cedar; *circa situ* conservation; regeneration of rubber in coppices and high forest; genetic control of cone production in black pine; genetic variation and correlation in branching and crown trials in Turkish red pine; stability of foreign genes in genetically-modified aspen; and bio-genetically developed poplar clones for pulp and paper.

PRODUCTIVE FUNCTIONS OF FORESTS

Afforestation and Plantation Forestry: A special paper considered the environmental, economic and social sustainability of plantation forests and the dichotomy between simple plantations and complex "community forestry" forms. A second special paper focused on biological sustainability as defined by the sustainability of wood production for the tropics, and highlighted a lack of data and inadequate research funding. Data was presented to suggest that up to three timber harvest rotations were sustainable and do not threaten broader sustainability goals. A third paper targeted improving tropical plantation productivity through proper land-use policies, C&I and monitoring and databanks.

Voluntary paper topics included: selection of leaf types for multi-purpose plantation crops; mechanization techniques for industrial plantations to meet Turkish wood needs; effects of different reaping materials for varieties of pine; trials of exotic coniferous species for industrial plantations; forest product quality from planted stands of quick-growing species in tropical countries; dynamics of naturally regenerating young populations of pine in Argentina; leaf-growth strategies of eucalyptus clones in water stressed situations; teak timber production in intensively managed plantations in the tropics; industrial timber plantation policy in Indonesia; and impediments to sustainable development of forests for the pulp and paper industry in India.

Wildlife, Tourism and Other Products from Wildlands: A special paper described the importance of conservation and tourism in Africa. It outlined the threats to wildlands and stressed the importance of involving local communities in planning and managing parks and of sharing the benefits accruing from parks.

Voluntary papers described: strategies for integrating forestry operations into wildlife conservation and management in central Africa; hunting management for big game in Spain; the effects of selective logging on fruit-eating birds in lowland Malaysian forests; the effects of vegetational succession on wildlife herbivory in Sudan's Dinder National Park; pre-planning for development of eco-tourism in Iran; and eco-rehabilitation in response to declining forest cover and ecotourism in the Himalayas.

ECONOMIC CONTRIBUTION OF FORESTRY TO SUSTAINABLE DEVELOPMENT

Processing and Forest Industries: A special paper detailed: the necessity of management for desirable forest conditions; opportunities for profits from wood removal to finance forest management costs; the interdependence of environment and economy; and future environmentally friendly technologies that will emphasize conservation of wood resources.

Voluntary papers discussed: the relationship between stand management and lumber quality in the US; bark extraction as an adhesive component for particle board; the relationship between log quality grades and sawnwood quality grades; management strategies to meet changing demand for wood products in Russia; the use of glue to strengthen wood in Turkey; polystyrened bamboo's resistance to pests in Indonesia; and fiber morphology and chemical composition of eucalyptus grown in Turkey.

The Role of the Private Sector, Economies in Transition and Issues of Privatization in Forestry: A special paper on forests in countries with economies in transition focused on recent revisions of policy and legal frameworks, changes of forest ownership and areas of assistance and capacity-building needs. Another special paper detailed the private sector's role in sustainable management of humid tropical forests.

Voluntary papers examined: private European forests and sustainable development; small forestry plots in southern Europe; and finance of private forests.

SOCIAL DIMENSIONS OF FORESTRY'S CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

Forests, Quality of Life and Livelihoods: A special paper outlined the various services provided by forests and emphasized recreation, tourism and NWFPs as increasingly important in maintaining sustainable livelihoods of forest dwellers. Another special paper used the Dutch case to highlight the complexity of forest management in densely populated areas.

Voluntary papers addressed: the impact of social pressure on spatial planning; cultural heritage preservation in historic forest reserves; a method for determining natural areas for national park status; and the developmental impacts of urban migration in the Black Sea region.

The Vision and Role of Community Forestry in Sustainable Development: A special paper outlined challenges to the process of linking conservation with rural development. A guest presentation provided an overview of forest policy in Indonesia. Another special paper on forest policy in Nepal noted a change towards community empowerment.

Voluntary papers were presented on: community forestry in Gambia, Turkey, Mozambique and Nepal; research into municipal forests in Sweden; wasteland afforestation in India; community butterfly conservation in Papua New Guinea; joint forest management in India; social forestry in Indonesia; market pressures on community forestry in India; regional forest agreements in Australia; and SFM in Scotland.

Better Addressing Conflicts in Natural Resource Use Through the Promotion of Participatory Management from Community to Policy Level: A special paper on community conflicts proposed that conflict was an opportunity for change, and noted that conflicts often arise from gaps between government policies and their implementation.

Voluntary papers were presented on: conflict resolution through development; conflict leading to community participation in Mali; an inter-regional project on community participation; and urban forest use in Turkey.

A report of the Satellite Meeting on Conflict Management and Community Forestry was presented, outlining its proposed recommendations on: policy harmonization; collaboration and cooperation; community empowerment; participation; capacity-building and training; communication; and resource planning and management.

The Role of NGOs and Special Groups: A special paper suggested that the role of NGOs has evolved from wilderness protection to a solution-based approach. It concluded that the influence of NGOs is likely to increase. A special report on the role of Turkish NGOs proposed 55 forest conservation principles. It urged governments to protect old growth forests, create protected areas and adopt timber certification.

Voluntary papers were presented on: the role of a Turkish NGO; women's involvement in forestry in Bangladesh; the Latin American Forest Network's participation in international debates; women's participation in Indonesia; NGO tree planting in Turkey; and small forest owners in Chile.

Communication Methods, Extension and Public Awareness Raising: A special paper on development communication proposed three roles of communication: making things visible; promoting public awareness; and facilitating a platform for stakeholder negotiation. Voluntary papers were presented on a cross-cultural approach to development communication and an environmental education plan in Venezuela.

POLICIES, INSTITUTIONS AND MEANS FOR SUSTAINABLE FORESTRY DEVELOPMENT

New Trends in Public Forestry Administration: A special paper outlined external trends such as globalization; recent organizational arrangements; and pros and cons of different models of forestry administration. Another special paper documented forestry administration reform in Slovenia. Voluntary papers covered: opportunities for activities implemented jointly in Costa Rica; the possible need for a world forestry organization; benefits of joint implementation for tropical forest management and international policy coordination; and trans-border forestry cooperation in Europe.

Forestry Sector Planning: Voluntary papers considered: the use of a social accounting matrix to examine income distribution effects of alternative forest management regimes in the US Great Lakes states; Pacific Rim wood fiber demand and supply prospects; scenario modeling as a tool for assessing C&I for SFM of European forests; and functional planning in the rational use of forest resources.

ECO-REGIONAL REVIEW

Humid Tropical Forests: A special paper described primary forest functions, forests' contributions to sustainable development and factors that influence forestry policy and compared forest management systems.

Voluntary papers discussed: promotion of sustainable management systems in Indonesia; a model to determine current and optimal forest cover in Côte d'Ivoire; the contributions of remote sensing mapping to forestry inventory in Venezuela; and management of naturally unstable forests in Venezuela.

Dry Tropical Forests: A special paper emphasized: the emergency situation in dry tropical areas and the need for forest protection; the importance of training, research, aid and investment; and the use of journalism to bridge the gap between scientists and policy-makers.

Voluntary papers highlighted: pilot initiatives for participatory forest management in Benin; the application of a scientific and progressive approach to local participation in dry tropical forest management in Burkina Faso; the use of controlled fire and grazing in managing Sudano-Guinean dry forests; transfer of responsibility for forest stand management to waterside populations to improve fuelwood exploitation management in Niger; simplified management of silvo-pastoral land based on local knowledge in Mali; and the need for data-gathering and further research to address effective conservation and utilization of African dry forests.