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REPORT OF THE

Chetumal, Quintana Roo, Mexico
3-7 February 1988

THIRTEENTH SESSION
OF THE NORTH AMERICAN
FORESTRY COMMISSION



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

PREVIOUS SESSIONS OF THE COMMISSION

First Session	Mexico, D.F., Mexico	24-29 July 1961
Second Session	Ottawa, Canada	17-22 June 1963
Third Session	Washington, D.C., U.S.A.	18-22 October 1965
Fourth Session	Mexico, D.F., Mexico	2-7 October 1967
Fifth Session	Ottawa, Canada	15-20 September 1969
Sixth Session	Washington, D.C., U.S.A.	27-31 March 1972
Seventh Session	Mexico, D.F., Mexico	4-8 February 1974
Eighth Session	Ottawa, Canada	23-27 February 1976
Ninth Session	San Juan, Puerto Rico, U.S.A.	13-17 February 1978
Tenth Session	Pátzcuaro, Mich., Mexico	18-22 February 1980
Eleventh Session	Victoria, B.C., Canada	16-19 February 1982
Twelfth Session	El Paso, Texas, U.S.A.	21-24 February 1984

REPORT
of the
THIRTEENTH SESSION
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NORTH AMERICAN FORESTRY COMMISSION

held in Chetumal, Quintana Roo, Mexico
3-7 February 1986

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome, 1986

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SUMMARY OF RECOMMENDATIONS

A. ADDRESSED TO MEMBER GOVERNMENTS

The Commission:

1. Endorsed the report of the Committee of Alternates which covered the activities of the study groups and a suggestion that interaction of the North American Forestry Commission with other regional forestry commissions, particularly the Latin American Forestry Commission and the European Forestry Commission, be facilitated and stimulated (para. 28).
2. Emphasized the need for continuous and effective coordination of activities among the member countries in the field of forest tree improvement to avoid duplication and to benefit from exchange of information (para. 44).
3. Accepted the recommendation of the Committee of Alternates to disband the Study Groups on Remote Sensing, Wildlife and Multiple Use Forestry on the understanding that they be reactivated should the need arise in the future (paras. 48 and 58).
4. Suggested that collaborative studies on atmospheric deposition be taken up and continued by the member countries of the North American Forestry Commission (para. 56).
5. Requested Dr Lorenzo Maldonado of Mexico to prepare a detailed proposal for the formation of a Study Group on Forestry in the Struggle against Desertification and submit it for consideration and decision by the Committee of Alternates at its next meeting (para. 62).
6. Recommended that coordinated efforts be developed to strengthen cooperation between the member countries of the North American Forestry Commission, particularly for safeguarding endangered plant species and helping in their rational management (para. 63).

B. ADDRESSED TO FAO

The Commission:

1. Endorsed the report of the Committee of Alternates which covered the activities of the study groups and a suggestion that interaction of the North American Forestry Commission with other regional forestry commissions, particularly the Latin American Forestry Commission and the European Forestry Commission, be facilitated and stimulated (para. 28).
2. Agreed with FAO's programme of work in forestry for 1986-87 and its specific areas of emphasis. Urged FAO to follow up on the endorsement by the Twenty-third Session of the FAO Conference regarding higher priority for forestry in the future (para. 33).
3. Suggested that FAO provide more information about the work being done in the field of food and agriculture vocabulary to the Study Group on Multilingual (Forestry) Vocabulary to facilitate better coordination and ensure compatibility (para. 54).
4. Recommended that FAO facilitate the coordination of activities and exchange of information in the field of atmospheric pollution and deposition between the North American Forestry Commission and the European Forestry Commission (para. 56).

5. Referred a recommendation to the Committee on Forestry urging it to consider the issue of an increased share of the total resources available to FAO for the Organization's forestry activities, especially for properly identified action programmes and interdisciplinary activities, at its meeting in April 1986 and to make appropriate recommendations to the FAO Council (para. 64).
6. Recommended that the Committee on Forestry consider strategies for translating the awareness about the importance of forest genetic resource conservation and wise use into action by including this subject in the agenda of its ninth session in 1988 (para. 65).

C. ADDRESSED TO NAFC SUBSIDIARY BODIES

The Commission:

1. Commended the activities of the Study Group on Forest Tree Improvement and stressed the importance of genetic improvement in forestry development (para. 44).
2. Recommended that the Study Group on Forest Insects and Diseases collaborate with the Group on Atmospheric Deposition, especially with regard to the problem of acid rain as a predisposing factor for insect and fungal damages (para. 46).
3. Accepted the recommendation of the Committee of Alternates to disband the Study Groups on Remote Sensing, Wildlife and Multiple Use Forestry on the understanding that they be reactivated should the need arise in the future (paras. 48 and 58).
4. Requested the chairman of the Study Group on Forest Engineering to prepare a refined and specific programme of work for the Group, to be considered by the Committee of Alternates at its next meeting (para. 55).

OPENING OF THE SESSION

1. The Thirteenth Session of the North American Forestry Commission was held in Chetumal, Quintana Roo, Mexico, from 3 to 7 February 1986, at the kind invitation of the Government of the United States of Mexico. The session was attended by 45 delegates and observers from the three member countries of the Commission. The list of participants is given in Appendix B.
2. At the opening ceremony the delegates were welcomed by Ing. Efraín Rivero, on behalf of Lic. Eduardo Pesqueira Olea, Secretary of Agriculture and Water Resources.
3. Mr R. Duarte Torres, FAO Representative in Mexico, addressed the session and mentioned the support being provided by FAO to Mexico under its Technical Cooperation Programme.
4. Mr F. J. Keenan, Director of the Forest Industries Division of FAO, welcomed the delegates on behalf of the Director-General of FAO. He also thanked the Government of Mexico and the State of Quintana Roo for the excellent organizational arrangements and for their warm and generous hospitality. He reviewed some of the major events and trends in forestry in the North American region within the two-year period since the previous session, mentioning in particular the following:
 - a) acid rain and its detrimental effects on the forests of North America, including urban areas of Mexico;
 - b) international trade in sawnwood products and current discussions on prices and duties;
 - c) heightened public and political sensitivity to important forestry issues; significant events and activities included FAO's International Year of the Forest, the Manifesto of Mexico of the Ninth World Forestry Congress, and Mexico's activities in combating desertification.

Mr Keenan also reviewed FAO's activities in forestry which were relevant to the North American region, such as the World Outlook Study for the Supply and Demand of Pulp and Paper and the provision of statistical and technical information on wood products, mountain logging, energy and sawmilling.

5. Lic. Pedro Joaquin Coldwell, Governor of the State of Quintana Roo, delivered a keynote address and formally inaugurated the session. In his address the Governor gave an account of the socio-economic and ecological importance of forestry in Quintana Roo. Describing the pilot forestry project for "ejidos" being implemented in the province, he elaborated on the gains in terms of environmentally sound multiple use management of the forest, with the active participation of the rural people.
6. The Commission designated the following as members of the Drafting Committee: G. A. Steneker (Canada), C. Gonzalez (Mexico) and W. Penoyar (USA). C. Chandrasekharan (FAO) acted as Secretary and M. Caballero Deloya (Mexico) as Rapporteur.

ADOPTION OF THE AGENDA

7. The Commission approved the Provisional Agenda, with minor modification (Appendix A). The list of documents considered by the Commission is given in Appendix C.

THE STATE OF FORESTRY IN NORTH AMERICA

a) Canada

8. The Commission was informed that following the federal election in 1984 the Canadian Forestry Service was transferred from Environment Canada to Agriculture Canada and the Service was elevated to a Ministry of State (Forestry). This elevation in status of the Canadian Forestry Service went hand in hand with a noted increase in emphasis on forestry at the national level, including the creation in 1985 of the Canadian Council of Forest Ministers (CCFM), specifically set up to more effectively coordinate federal and provincial policies on programmes in the forest sector.

9. Funding in support of resource development had steadily increased and cost-shared agreements had been entered into with all provinces. These agreements provided additional funding for forest renewal, research and development, technology transfer and communication to improve forest management and thus enhance timber supplies.

10. Atmospheric pollution was a matter of national concern. A nation-wide network of 125 permanent plots in representative ecosystems had been established in order to detect the possible damage to forest trees caused by acid rain and to monitor long-term vegetation and soil changes attributable to air pollutants.

11. The Commission noted that great emphasis was given, in Canada, to protection of forest resources from insect pests, diseases and fire. The Canadian Forest Fire Danger Rating System was being refined and expanded to provide more accurate guidelines for the evaluation of fire danger and the prediction of fire behaviour (rate of spread and fire intensity) for selected major Canadian fuel types. This overall system incorporated the Forest Fire Weather and Forest Fire Behaviour Prediction Systems. A Fire Management Technology Centre was to be developed in Quebec and will be a cooperative effort involving the Canadian Forestry Service, le Ministère de l'Énergie et des Ressources du Québec and la Société de Conservation de l'Outaouais.

12. Increasing emphasis was being placed on artificial regeneration in Canada to ensure adequate restocking of forest land. Research and application of genetics in the economic management of Canadian forests had increased rapidly to meet the new demands. Considerable progress had also been made in forest products research and development. The Canadian universities were providing a new focus on research in timber engineering and in the area of new polymers for wood protection. A number of studies in economics and policy were in various stages of completion. They included a study of the outlook for Canadian forest products trade to the year 2000, an analysis of Canada's wood supply situation, an assessment of the regional impact of the forestry sector in Canada and an assessment of wood use in residential construction.

13. The policy paper "Building a Forest for Tomorrow: The Forest Policy", published in Quebec in 1985, was built around three elements which formed the strategic objectives of: preserving the balance of nature; ensuring the development of forest lands; and adapting processing to the resource.

14. The Commission was informed that in September 1985 the Twelfth Commonwealth Forestry Conference was convened in Victoria, B.C. The Conference, with its theme of "Investment in Forestry", focused in particular on the need for public awareness, the importance of multiple use and the need for investment in forest renewal.

b) Mexico

15. Forestry in Mexico had its focus on the development of conifer forests, tropical forests and arid land vegetation. The Integrated Rural Development Programme and the National Programme for Temperate and Tropical Forests established policies, objectives and strategies for Mexican forestry. The three objectives of Mexican forestry were (i) to guarantee the supply of forest-derived goods and to reduce the negative balance of trade in forest products; (ii) to promote socio-economic welfare and (iii) to promote sustained forest harvesting and to ensure environmental protection.

16. Recent achievements had been encouraging. In 1984 total industrial roundwood harvest amounted to 9.44 million cubic metres. It implied a relative increase of eight percent over 1983's harvest. Another significant achievement in 1984 was an increase of 20 percent in the production of wood pulp over that of the previous year. In addition, the share of common or miscellaneous tropical woods in the total wood harvest had increased. Another item worthy of note was the efforts of the forest service in organizing and training rural populations, which included 285 "ejidos", 25 communities and 447 small ownerships. In order to re-establish forest vegetation on eroded lands, the Government undertook reforestation of 30,000 hectares in 1985. There was also considerable improvement in the effectiveness of forest protection.

17. The federal budget for the forestry sector in 1985 increased 340 percent, at current value, over the previous year. Much of this increase was directed to regional offices.

18. Some other important developments of Mexican forestry were: a programme of fiscal incentives, the administration simplification programme and a new forest law. Some strategic projects were also implemented, such as those to develop tropical forests, arid land forestry, re-vegetation of federal district and neighbouring forests; increase in pulp production and decentralized forestry institutions. In research, the achievements in transferring technologies to operational programmes and to producers were worth mentioning.

19. In future, efforts would be directed towards improving results with reduced public investment. To this end, state and municipal governments were being urged to increase their participation. Steps were being taken to incorporate private and social sectors in the protection and development of the forest resource. It was considered necessary to involve forest land owners' organizations not only in harvesting but also in industrialization and commercialization of forest products in an efficient manner.

20. In July 1985 Mexico hosted the Ninth World Forestry Congress which was attended by 2,209 participants from 105 nations, with 68 official delegations, 21 ministers, 13 vice-ministers and heads of six international organizations. The Manifesto of Mexico, resulting from the Congress, emphasized the conviction that poverty can be overcome, that the wood needs in many countries can be supplied and that the destruction of the forest resources can be controlled with effective management of the forests and with organized participation of the people.

c) United States of America

21. In reporting on the recent trends in forestry, the need was reiterated for (i) balancing the uses and the protection of the natural resources of the United States of America; (ii) planning forestry development for future generations; and (iii) world-wide cooperation in controlling the rate of depletion of the natural resources.

22. Basic assessments of United States forest resources were under way and relationships between supplies and demands were better understood. Cooperation between national and state governments, private owners and the public were needed in creating the understanding required to stabilize the productivity and use of lands. The Commission was informed that legislation had been enacted which substantively resolved the question as to which land should be wilderness in the National Forest System. Decisions still had to be taken for most lands managed by the Bureau of Land Management. This would help protect basic soil resources and ensure the legacies of forested lands and vegetative cover.

23. Applying knowledge to the problems of insects, diseases and atmospheric deposition was a high priority in the United States, as also were measures to find and apply environmentally safe control measures. Research continued to provide answers, such as new treatments and technology to help increase yields, minimize resource losses and improve overall management.

24. During the previous two years, forestry programmes at all levels had felt the strain of reduced budgets. The United States Forest Service, as well as other federal, state and private organizations, had sought to accommodate this through improved management efficiency and consolidation. To stimulate and improve the long-term management and productivity of all forest resources on non-industrial private lands, the National Council on Private Forests was established in February 1985. In many parts of the country, studies had indicated that some marginal crop lands would provide a higher return on investment if the land were used to plant trees. If land owners were to take advantage of this opportunity, as provided in the recently enacted Farm Bill, it would become the biggest tree planting programme in the nation's history.

25. The last two years had been difficult and ironic ones for the United States timber industry. Demands for timber products increased significantly during the period as interest rates fell and housing starts increased. Consumption was at or near record levels; but prices had not increased as might be expected because most of the demand was met by imports.

26. The previous two years saw a great deal of forest fires and insect and disease activity, causing great losses. Concern had grown in the United States about acid precipitation. In 1985, the National Acid Precipitation Assessment Programme began with the Forest Service as a prime participant.

27. The Commission was informed that the goal of forestry in the United States was to use forests wisely today and far into the future in order to build better lives for the people. In making resource decisions, however, one of the main problems was in placing a value on non-commodity resources, such as wildlife habitat or watershed protection.

REPORT OF THE COMMITTEE OF ALTERNATES

28. During the period between the Twelfth (El Paso, Texas, USA, 1984) and the Thirteenth (Chetumal, Quintana Roo, Mexico, 1986) Sessions, the Committee of Alternates met twice. During these meetings it was agreed that the following conclusions and recommendations be referred to the Commissions:

- (i) the Study Groups on Remote Sensing, Wildlife, and Multiple Use be disbanded, considering the problems they faced and the poor expectations for them in the future;

- (ii) the required support be provided to the Study Groups recently established on Atmospheric Deposition, Multilingual (Forestry) Vocabulary, and Light-frame Structures, considering their importance and the interest shown in them by the participants;
- (iii) considering that the study groups on Fire Management, Insects and Diseases and Forest Tree Improvement had proven to be most active and productive, support to them should be continued and, if possible, increased;
- (iv) interaction of the North American Forestry Commission with other regional forestry commissions of FAO, particularly the Latin American Forestry Commission and the European Forestry Commission, should be facilitated and stimulated.

The Commission endorsed the report of the Committee of Alternates.

FAO FORESTRY ACTIVITIES

29. A summary was presented of FAO's objectives and strategies in forestry, activities carried out in the biennium 1984-85 and the important elements of the Programme of Work for 1986-87.

30. FAO's long-term objective in the forestry sector continued to be the provision of assistance to member countries in (i) increasing the outputs and services from their forests while maintaining production capacities; (ii) expanding socio-economic benefits from the use of forest resources; and (iii) achieving an equitable distribution of such socio-economic benefits in rural areas. In pursuit of the long-term objective, the implementation strategy included (i) making more productive but diversified use of forest land, as well as integrating forestry with other forms of land uses; (ii) broadening the range of forest products and promoting their full and effective use for development, and development of appropriate forestry enterprises; (ii) developing institutional and organizational frameworks for integrating the production, protection and social aspects of forestry and promoting increased participation of people in forestry programmes. These strategies were implemented through a structure of four technical programmes and 12 sub-programmes:

Forest Resources and Environment with sub-programmes on Development and Management of Forests; Tree Improvement and Plantations; and Conservation and Wildlife.

Forest Industries and Trade with sub-programmes on Development of Forest Industries; Trade and Marketing; and Logging and Transport.

Forest Investment and Institutions with sub-programmes on Training and Institutions; Investment Planning and Statistics; and Forest Policies and Information.

Forestry for Rural Development with sub-programmes on Community Forestry Development; Agro-Silvo-Pastoral Development; and Fuelwood.

31. The Commission was provided with detailed information on the activities taken up under the various programmes and sub-programmes, including field programme support and direct assistance to member countries, during 1984-85. Some of the highlights of the 1984-85 biennium included:

- Observance of 1985 as the International Year of the Forest, with a view to focusing world attention on the increasing threat to, and destruction of, forests in all ecological zones.
- FAO's contribution to, and cooperation with, the Government of Mexico in holding the Ninth World Forestry Congress in Mexico City in July 1985.
- Finalization of the Tropical Forestry Action Plan, as endorsed by the Seventh Session of the Committee on Forest Development in the Tropics, held in June 1985. The Plan was geared to accelerating implementation of actions identified in five priority areas, namely, (i) forestry in land use; (ii) forest-based industrial development; (iii) fuelwood and energy; (iv) conservation of tropical forest ecosystems; and (v) institutions.

32. FAO's Programme of Work for the biennium 1986-87 followed the structure and broad strategies already indicated, but with some shifts in priorities and emphasis, in accordance with the wishes expressed by member countries.

33. The Commission noted that the Twenty-third Session of the FAO Conference held in November 1985, which approved the 1986-87 Programme of Work, stressed the critical importance of FAO's forestry programme in assisting member countries to overcome the disastrous effects, especially in tropical areas, of environmental degradation through rapid deforestation and over-exploitation and depletion of forest resources, including fuelwood, and endorsed a greater priority for this programme in the future. The Commission expressed agreement with FAO's programme of work in forestry for 1986-87 and noted the specific areas of emphasis. It urged FAO to follow up on the endorsement of the Twenty-third Session of the FAO Conference of a higher priority for forestry in the future.

34. The Commission noted with interest and satisfaction the actions proposed to be taken up under the Tropical Forestry Action Plan during 1986-87 and expressed support for the Plan. It expressed concern that in spite of the growing importance of forestry for rural development in providing employment and income through forest-based activities and in contributing to food security, the funds available for forestry activities as a percentage of regular programme funds had declined and were not commensurate with the magnitude of the problems involved. The Commission further expressed the view that this issue be brought to the attention of the Committee on Forestry for fuller consideration.

HARDWOOD UTILIZATION

a) Canada

35. Hardwoods in Canada accounted for approximately 25 percent of the timber inventory but only about nine percent of current harvest. Wherever the softwood supply was under pressure, the hardwood supply was actually increasing. Therefore, a great opportunity and challenge existed for increasing the utilization of hardwood resources in Canada. The low utilization of hardwoods in Canada was due to remoteness of the resource from markets, small tree size and high decay incidence. Under-utilization of hardwoods for pulp was the result of the high availability of good quality softwood pulp. However, promising prospects were seen in mixed hardwood/softwood pulping and increased integration of the sawmilling and pulp/papermaking sectors of the industry.

36. Less than three percent of Canadian lumber production came from hardwoods. Only poplars had found some use as construction grade lumber. Poplar was also used for veneer and plywood production and, over the years, commercial waferboard had been produced almost exclusively from poplar. Some recent developments for

improved use of hardwoods worth mentioning were: a spindleless lathe enabling plywood manufacturers to peel much smaller diameter logs; new processes that had improved dimensional stability of waferboard; improved systems of penetration of preservatives; improved sawmill operations; utilization of hybrid poplars; laminated veneer lumber; medium-density fibreboard; densification of low-density hardwoods.

37. Increased use of hardwood was foreseen in the areas of pallet lumber, oriented strand board, pulp, railway ties, construction lumber and wood chemicals.

b) Mexico

38. The main points covered in the report were:

- (i) the stand quality of humid tropical forests depended directly on the treatment derived from the degree of exploitation of the species making up the forest;
- (ii) fuller utilization of wood resources, including lesser known species, should be promoted and selective use of valuable species discouraged;
- (iii) species groups which could meet the essential market specification should be identified and promoted, rather than commercializing individual species for their superior quality and value;
- (iv) fuller exploitation and utilization of mixed tropical forests could be achieved by allocating the different species groups for different specific products/uses. A wood-based industrial complex could do this more effectively.

39. The Commission noted the experiences and achievements of the Quintana Roo Pilot Programme, over the previous three years, where land owners were persuaded to set apart a third of their land for permanent forestry and to make use of an increasing proportion of common or lesser known species. The enterprise Maderas Industrializadas de Quintana Roo was supporting integral exploitation of forestry resources and participation of land owners in exploitation. Increased use of common species was evident in several areas of Quintana Roo.

c) United States of America

40. The Commission was informed that the overall outlook for hardwood supply and demand in the United States appeared to be very favourable for the foreseeable future. However, there would be some shortages of the more desirable species in the short term because of the condition of current inventories and growing demand for the products made from them. Several other hardwood species were currently very abundant and presented an excellent opportunity for increased utilization.

41. The net volume of hardwood growing stock in the United States grew about 43 percent between 1952 and 1977, and continued to grow about one percent each year into the 1980s. However, if present demand trends were to continue, removals should equal growth within the next decade.

42. Prices for most hardwood products were not expected to increase dramatically during the next decade or two. This outlook could change somewhat if the demand for fuelwood were to grow beyond current projections, or if technological breakthroughs created major new uses and markets for low-valued trees or more of the under-utilized hardwood species. Examples of new technologies which could influence future prices included expanded use of processes such as SYSTEM-6 for

producing high-grade furniture stock from low quality logs, the saw-dry-rip process for making structural grades of lumber from low to medium density hardwoods, the press-drying process for making super-strong linerboard from low quality oaks and other under-utilized species, and the increasing use of reconstituted structural panel products such as waferboard and oriented strand board.

REVIEW OF STUDY GROUP ACTIVITIES

a) Study Group on Forest Tree Improvement

43. The objectives of the Group were (i) to promote the exchange of information, (ii) to promote cooperation among member countries and (iii) to coordinate forest tree improvement programmes. The Group had six ongoing projects - seed collection, experimental taxonomy, endangered germplasm, combating problems of urban environment, energy plantations and a glossary on forest genetics. The Study Group on Silviculture was collaborating with the activities of this Group. The Commission was informed about the activities of the Mexican Centre for Forest Genetics and the University of Chapingo in this field.

44. The Commission commended the Group for its valuable contributions and stressed the importance of genetic improvement in forest development. It emphasized the need for continuous and effective coordination of activities of the research institutions in the field of forest tree improvement, to avoid duplication and to benefit from exchange of information. The next meeting of the Group was scheduled to be held in Victoria, B.C., Canada, in June 1986.

b) Study Group on Fire Management

45. This Group was involved in the exchange of information and promoting cooperation between member countries of the Commission in the field of forest fire management. The important activities of the Group were training workshops and seminars on fire prevention and control, exchange of experiences and visits, promoting the use of improved equipment and tools, extension of fire protection measures/methods and creating public awareness. The Commission noted that these important activities would be continued and strengthened during the coming years. The next meeting of the Group was planned for October 1986, in Mexico.

c) Study Group on Forest Insects and Diseases

46. The Group had held two meetings - in 1984 and 1985 - since the last session of the Commission, and reviewed two major topics: "Air pollution and its relationships with insects and forest diseases" and "Silvicultural treatments as tools for the prevention and/or control of forest pests and diseases". The Group had seven ongoing projects related to: Cone and Seed Insects and Diseases, Shoot and Bud Insects of North American Conifers, Catalogue of World Scolytidae, Pine Wood Nematode, Quarantine Requirements and Procedures and Training/Exchange Visits. The Commission noted the cooperation between this Group and those on Atmospheric Deposition and Silviculture. It also noted that the next meeting of the Group was scheduled to be held in Atlanta, Ga., USA, in October 1986. The report of the Group evoked interesting discussions and comments. The Commission recommended that this Group collaborate with the Group on Atmospheric Deposition, especially with regard to the problem of acid rain as a predisposing factor for insect and fungal damages.

d) Study Group on Remote Sensing

47. The Group had presented an exhibit at the Ninth World Forestry Congress in Mexico City in July 1985. The exhibit included examples of remote sensing platforms and applications of remote sensing in timber management, pest management, forest inventory, fire protection/control and other uses. The exhibit was well received.

48. The Committee of Alternates had recommended that this Group's work be discontinued since it had no further plans for exchange activity. The Commission discussed this recommendation and agreed to temporarily terminate this Study Group, on the understanding that it be reactivated should the need arise in the future.

e) Study Group on Silviculture

49. This Group had continued its emphasis on the tropics, as requested by the Commission. In 1984 the Group met in Durango, Mexico, jointly with the Group on Forest Tree Improvement. There, it had agreed to share with that Group certain aspects of energy plantation practices, selection of trees for urban uses and review of seed distribution practices and problems. The Group also agreed to develop a list of timber tree species of the tropics meriting genetics research. The 1985 meeting of the Group, proposed for Victoria, B.C., Canada, had to be postponed following the earthquake in Mexico.

50. The Directory of Tropical Silviculturists of North America was in press, containing a list of 473 persons, cross-referenced by country of residence, field of expertise, geographic area of experience and species of trees used. The list was compiled with the assistance of six members of the Group from all three countries. The silvicultural descriptions of 28 tropical tree species of significance to Mexico and the United States were about one-third completed, and were to be published in 1986.

51. At the request of Mexico a week-long workshop on silviculture of secondary forests was planned to be held, probably in the Yucatan peninsula, late in 1986 or early in 1987. The proposal was to invite specialists from countries where there had been experience in these activities, such as Mexico, Puerto Rico, Surinam, Trinidad and Colombia. A brief meeting was proposed for the spring of 1986 in New Orleans, USA, to complete the silvicultural descriptions, plan the workshop, list species for genetic improvement and consider tasks in energy production and urban forestry.

f) Study Group on Multilingual Vocabulary

52. A report was given on the objectives and activities of this Group. The objective of the Group for the immediate future was to bring its work into the mainstream of international terminology and information developments through (a) devising a machine-readable input format and making it compatible with international standard formats and (b) producing homologated multilingual tapes capable of producing a variety of lexicographical outputs.

53. The Group sponsored the Forestry and Forest Products Vocabulary by Mirja Ruckonen, an English language vocabulary published by the Commonwealth Agricultural Bureaux in 1985. A French language vocabulary, derived from the above publication, existed on computer tape. A Spanish language version was being done at the Instituto Nacional de Investigaciones Forestales in Coyoacán. The Group planned to maintain all three translations of this vocabulary as a homogenized, computer-manipulatable file. This file would be available at several locations.

54. The Commission noted the work being done by FAO in the field of food and agriculture vocabulary and suggested that FAO provide more information to the Group to facilitate better coordination and ensure compatibility. However, the Commission felt that the ongoing activities of the Group should not be slowed or delayed.

h) Study Group on Forest Engineering

55. The Commission was informed that the Group met once in 1985 and organized a study tour in Mexico. It made recommendations on the work programme for 1985-86, which included a directory of institutions involved in harvest technology, fuel efficient wood stoves, training for wood workers, a study on using wood processing residues for pulp, mechanical saws and improvement of sawmill technology and extension handbooks. The Commission noted that technology adopted in forestry tended to reflect specific country situations and would need adaptations to suit social, economic, ecological and developmental needs. Accordingly, the Group needed to redefine the nature and direction of its activities, considering the differences in technological levels of the member countries. The Commission requested the Chairman of the Study Group to prepare a refined and specific programme of work for the Group, to be considered by the Committee of Alternates at its next meeting.

i) Study Group on Atmospheric Deposition

56. The objective of the Group was to encourage collaboration of the member countries of the North American Forestry Commission in expediting the solution to common air pollution problems, including ozone damage to tree species. The Group intended to coordinate its activities with the programmes of the European Forestry Commission in this field. The Commission was informed that a full range of research programmes was being carried out in the member countries on atmospheric deposition. Critical examination of the acid rain phenomenon showed that it was complex and needed continued study. The Commission pointed out that air pollutants might predispose plants to attacks by insect pests and diseases, and welcomed the cooperation of this Group with that on Forest Insects and Diseases. The Commission suggested that collaborative studies be taken up and continued by the member countries of the North American Forestry Commission. It also recommended that FAO facilitate the coordination of activities and exchange of information in this field between the North American Forestry Commission and the European Forestry Commission.

j) Study Group on Light-frame Structures

57. This Group's main activity was development of a demonstration house for the July 1985 Ninth World Forestry Congress. Representatives of Mexico and the United States planned the house, using the truss-frame wood construction system proposed by the United States Forest Products Laboratory. Mexico furnished materials and constructed the house. The United States, Canada and Mexico shared the cost of exhibit space. The exhibit was well received. Some aspects of transportation problems of truss-frame wood construction were discussed. The Commission noted the programme of meetings of this Group proposed to be held in 1986.

Disbanding of Study Groups

58. The Commission then considered the recommendation of the Committee of Alternates to disband the Study Groups on Wildlife and Multiple Use Forestry. The Commission accepted the recommendation on condition that these (as also the Study Group on Remote Sensing) be reactivated as found necessary in the future.

TECHNICAL ITEMS

a) Agro-forestry

59. A detailed account was given of the different types of agro-forestry systems, their characteristics and benefits. A special reference to agro-forestry systems used in Mexico was given, namely, taungya plantations; wood production associated with agricultural crops; fruit trees associated

with agricultural production; shade-producing trees; live fencing; trees for wind breaks; trees associated with agriculture and cattle production; multiple use plots; homestead production units; forage production in forest lands; and agro-silvo-pastoral methods. Emphasis was given to the basic research needs of this discipline in order to make it a sustainable land use system amenable to ecologically sound management.

b) Arid land development

60. The Commission was provided with a synopsis of the meeting of the Expert Consultation on the Role of Forestry in Combating Desertification, held in Saltillo, Mexico, 24-28 June 1985. The Consultation had reviewed and evaluated the current state of information on forestry in arid zones, discussed research needs and the need for exchange of ideas and experiences, and outlined the action required to guide future development of programmes at regional, national and global levels. The action proposals covered three areas: production and utilization; conservation and restoration; and policy, institutions and socio-economic aspects.

61. A greater participation by institutions, organizations and trained people in arid land development was required. Sustained production systems should be established for different arid land types. Forest operations should be for the people, with the people, and within the framework of ecological protection.

62. Considering the importance of this topic, it was suggested that a new study group on "Forestry in the Struggle against Desertification" be formed. The Commission requested Dr. Lorenzo Maldonado (Mexico) to prepare a detailed proposal for the formation of such a study group and to submit it for consideration and decision by the Committee of Alternates at its next meeting.

c) Gene resource conservation

63. An account was given of genetic conservation, both in situ and ex situ, in the three countries of the Commission. The region had one of the richest diversity of forest genetic resources, particularly for conifers. Forest gene resources conservation had been a major concern for the countries of the North American Forestry Commission. The Commission noted that in Mexico there was urgent need for the development of a coordinated plan to attack the genetic erosion of tropical hardwood forests. The Commission recommended that coordinated efforts be developed to strengthen cooperation between the member countries, particularly for safeguarding endangered plant species and helping in their rational management.

MATTERS TO BE REFERRED TO THE ATTENTION OF THE COMMITTEE ON FORESTRY

a) Increased share of resources to forestry

64. The Commission decided to refer the following to the attention of the Committee on Forestry:

RECOGNIZING the importance of forestry in meeting human needs for fuel and numerous wood products, as a provider of wildlife and fish habitat and as a source of protection from erosion by water and wind; and realizing the crisis facing forestry in many parts of the world due to deforestation, environmental degradation, fuelwood and food scarcity and loss of genetic resources, including wild relatives of many food plants,

APPRECIATING the initiative of the FAO Committee on Forest Development in the Tropics in formulating the Tropical Forestry Action Plan for promoting action in priority areas such as (i) forestry in land use; (ii) forest-based industrial development; (iii) fuelwood and energy; (iv) conservation of tropical forest ecosystems; and (v) institutions, in developing tropical countries,

STRESSING the role of forestry in food security and its contribution to rural employment and income,

REITERATING the concern and emphasis contained in the Manifesto of Mexico issued by the Ninth World Forestry Congress and the call made at various other forestry fora for adequate funding for forestry activities at national and international levels,

NOTING a decline in the relative share of FAO's budget devoted to forestry over the past 10 years, and

APPRECIATING that the Twenty-third Session of the FAO Conference had endorsed a greater priority for the forestry programme,

The Commission strongly urges FAO's Committee on Forestry to consider the issue of an increased share of the total resources available to FAO for the Organization's forestry activities, especially for properly identified action programmes and inter-disciplinary activities, at its meeting in April 1986 and to make appropriate recommendations to the FAO Council.

b) Forest genetic resources conservation

65. Recognizing the great significance of genetic resources to the future development of forestry and to forestry's contribution to overall human welfare in terms of food, medicines and other vital products, and noting that FAO had contributed considerably to the creation of awareness about the importance of genetic resource conservation and wise use, the Commission recommended that the Committee on Forestry consider strategies for translating the awareness into action by including this subject in the agenda of its ninth session in 1988. Background materials for COFO discussion may be obtained through the FAO Panel of Experts on Forest Gene Resources, supported, if necessary, by an expert consultation.

BUSINESS OF THE COMMISSION

a) Other business: None

b) Election of Officers

66. The following officers were elected by the Commission to hold office during the forthcoming biennium, the Vice-Chairmen being nominated in accordance with Rule II.1 of the Commission's Rules of Procedure:

Chairman:	R. J. Herring (Canada)
First Vice-Chairman:	R. Max Peterson (USA)
Second Vice-Chairman:	L. J. Gastaños (Mexico)

The Commission appointed Mr G. Steneker (Canada) as Rapporteur and Chairman of the Committee of Alternates. Mexico nominated Mr M. Caballero Deloya as its representative on the Committee, and the United States nominated Mr J. Ohman.

c) Date and place of next session

67. Canada invited the Commission to hold its next session in Sault Ste Marie, Ontario. The Commission thanked Canada for the kind invitation and agreed that the exact dates be determined in consultation with the Director-General, preferably in October-November 1987.

d) Adoption of the Report

68. The draft report of the session was adopted by the Commission subject to minor amendments and editing by the Secretary.

CLOSING OF THE SESSION

69. The heads of the Canadian and United States delegations thanked the Government of Mexico and the State of Quintana Roo for the excellent arrangements made for the session, the field trip and hospitality offered. Mr F. J. Keenan expressed thanks on behalf of the Director-General of FAO. The Chairman thanked FAO, the conference staff and the delegates for their contribution to the success of the session.

70. The session was formally closed by Lic. Eduardo Pesqueira Olea, Secretary of Agriculture and Water Resources. In his closing address the Secretary emphasized the role of forestry in promoting rural development and the need for conserving and managing forest resources for the benefit of the people. People's participation was vital in this essential task. The Secretary also informed the Commission that a Presidential Decree had been issued, effective 7 February 1986, establishing a high-powered National Forestry Commission, with Secretaries of Agriculture, Rural Development and Ecology as members to coordinate and implement forestry development programmes in Mexico.

AGENDA

1. Opening of the Session
2. Adoption of the Agenda
3. The state of forestry in North America
 - a) Canada
 - b) Mexico
 - c) United States of America
4. Report of the Committee of Alternates
5. FAO forestry activities: Review biennium 1984-85 and Programme of Work and Budget for 1986-87
6. Hardwood utilization
 - a) Canada
 - b) Mexico
 - c) United States of America
7. Review of Study Group activities
 - a) Study Group on Forest Tree Improvement
 - b) Study Group on Fire Management
 - c) Study Group on Forest Insects and Diseases
 - d) Study Group on Remote Sensing
 - e) Study Group on Silviculture
 - f) Study Group on Multilingual Vocabulary
 - h) Study Group on Forest Engineering
 - i) Study Group on Atmospheric Deposition
 - j) Study Group on Light-frame Structures
8. Technical items
 - a) Agro-forestry
 - b) Arid Land Development
 - c) Gene Resource Conservation
9. Matters to be referred to the attention of the Committee on Forestry
10. Business of the Commission
 - a) Other business
 - b) Election of Officers
 - d) Date and place of next Session
 - d) Adoption of the Report
11. Closing of the Session

LIST OF DELEGATES AND OBSERVERS

Chairman	L. J. CASTAÑOS M. (Mexico)
First Vice-Chairman	R. J. HERRING (Canada)
Second Vice-Chairman	R. Max PETERSON (United States of America)
Secretary	G. CHANDRASEKHARAN (FAO)
Rapporteur	M. CABALLERO DELOYA (Mexico)

MEMBERS OF THE COMMISSION

CANADA

Delegate

R. J. HERRING
Assistant Deputy Minister
Canadian Forestry Service
Government of Canada
Ottawa, Ontario K1A 1G5

Alternate

G. A. STENEKER
Director
International Forestry Branch
Canadian Forestry Service
Government of Canada
Ottawa, Ontario K1A 1G5

Adviser

R. LORD
Conseiller aux Relations Inter-
ministerielles
200 Ch. Ste Foy
Quebec G1R 1X7

Adviser

A. PLAMONDON
Dean
Faculté de Foresterie et
Goedésie
University of Laval
Quebec City, P.Q.

MEXICO

Delegate

L. J. CASTAÑOS
Asesor
Secretaría de Agricultura y Recursos
Hidráulicos (SARH)
Vertiz 726
Colonia Narvarte
México, D.F.

Alternate

M. CABALLERO DELOYA
Vocal Secretario
Instituto Nacional de Investigaciones
Forestales y Agropecuarias
Insurgentes Sur 694, 9^o Piso
México, D.F. 03100

Adviser

J. B. CARDEÑA RODRIGUEZ
Director General de Normatividad Forestal
Secretaría de Agricultura y Recursos
Hidráulicos (SARH)
México, D.F.

Adviser

S. CASTRO ZAVALA
Representante del Grupo de Estudio de
Ingeniería en México
Progreso No. 5
Coyoacán
México, D.F.

Adviser

D. CIBRIAN TOVAR
División de Ciencias Forestales
Universidad Autónoma de Chapingo
Chapingo 56230

Adviser

T. EGUILUZ
Centro de Genética Forestal, A.C.
Chapingo 56230

Adviser

C. GONZALEZ
Subdirector General
INIFAP-Forestal
Av. Insurgentes No. 694
México, D.F.

Adviser

L. J. MALDONADO
Director del Centro de Investi-
gaciones Forestales del
Noreste, INIFAP
A.P. 150
Saltillo, Coahuila

Adviser

M. A. OLAYO GONZALEZ
Subdirector de Manejo Forestal
Integral
Subsecretario de Desarrollo y
Fomento Agropecuario y Forestal
Progreso No. 5
México (21), D.F.

Adviser/Liaison Officer Thirteenth
Session North American Forestry
Commission

J. J. A. REYES RODRIGUEZ
Dirección de Conservación y
Restauración Forestal - SARH
Av. Progreso No. 5 - Edificio 3
04100 México, D.F.

Adviser

R. VILLARREAL CANTON
Subdirector del Inventario
Nacional Forestal
Av. Progreso No. 6
Coyoacán 21
México, D.F.

Observer

C. ACOPA LEZAMA
Coordinador del P. Piloto Forestal
Viveros Los Mangos, Km. 3
Carretera Chetumal - Escarcega

Observer

M. ALVERDI CARMONA
Director General del Grupo Maderero
Nacional Financiera N.C.
Tolstoi 22, 4º Piso
México, D.F.

Observer

A. ACEVEDO
Jefe del Programa Forestal en el Estado
de Quintana Roo
Secretaría de Agricultura y Recursos
Hidráulicos (SARH)
Km. 3.5 Carretera Chetumal - Escarcega

Observer

L. A. ARGUELLES SUAREZ
SARH - Plan Piloto Forestal
Carretera Chetumal - Escarcega km. 3

Observer

B. AZARCOYA
Asistente Ejecutivo del Director General
del Grupo Maderero de Nacional Financiera
Tolstoi 22, 4to Piso Col. Anzures
México, D.F.

Observer

J. L. AZUARA SALAS
Sub-Teniente Lopez
MIQRO
Chetumal, Quintana Roo

Observer

O. CEDENO SANCHEZ
Director de Apoyo a la Actividad Forestal -
Dir. Gral. de Normatividad Forestal, SARH
Progreso No. 5
Coyoacán
México, D.F.

Observer

J. CHAVELOS POLITO
Instituto Nacional de Investigaciones
Forestales y Agropecuarios
Apartado Postal No. 182
San Felipe Bacalar, Quintana Roo

Observer

G. DAVALOS MEJIA
Jefe de Programa Forestal Delegación SARH
Av. Lopes Mateos Esq. Chaca
Fracc. Bosques de Campeche
Campeche

Observer

J. GUADIANA ALBERTO
Delegación SARH en Quintana Roo
Afraín Aguilar 414
Chetumal, Quintana Roo 77030

Observer

V. M. JUAREZ GUTIERREZ
Director del Centro de Investigaciones Forestales del Trópico Húmedo
Apartado Postal 600
Campeche 24000

Observer

R. MENDEZ RENTERIA
Subdirector de Programas Especiales
Av. Progreso No. 5 Viveros de Coyoacán
Distrito Federal
México, D.F.

Observer

H. PAOILLA GARCIA
Jefe del Programa Forestal en el Estado de Chiapas
Delegación Estatal de la SARH
Fraccionamiento Los Laguitos
Tuxtla Gutierrez
Chiapas

Observer

E. REYES AGUILAR
Director Técnico
Unidad de Administración Forestal No. 2
Primero de Marzo No. 69
Sn. Cristobal, L.C.
Chiapas

Observer

E. REYES BRAVO
Jefe del Departamento de Organismos Especializados en Agricultura y Alimentación, SARH
Carolina No. 132
Col. Nochebuena
México, D.F.

Observer

E. RIVERO MARTIN
Delegado de la SARH en Quintana Roo
Km. 3.5 Carretera
Chetumal - Escarcega

Observer

G. RODRIGUEZ ELIZARRARAS
Asesor MIQRO
Chetumal, Quintana Roo

Observer

A. SANCHEZ MARTINEZ
Jefe de Centro Experimental
Apartado Postal No. 1, Escarcega
Campeche

Observer

E. ZAMUDIO SANCHEZ
Subdirector de Productividad
Progreso No. 5, Coyoacán
México

Observer

J. M. ZAPATA E.
Representante del Gobierno del Estado en Comisión Forestal del Estado de Quintana Roo
Calle 22 de Eolero, Edif. 7 de Dic.
Chetumal, Quintana Roo

UNITED STATES OF AMERICA

Delegate

R. M. PETERSON
Chief, Forest Service
Department of Agriculture
P.O. Box 2417
Washington, D.C. 20013

Alternate

H. NOLDAN
Chief of Forestry
Bureau of Land Management
Department of Interior
18th & C. Streets, N.W.
Washington, D.C. 20240

Alternate

J. (Les) WHITMORE
International Forestry Staff
Forest Service
Department of Agriculture
P.O. Box 2417
Washington, D.C. 20013

Adviser

Orrel DANIEL
6147 S. Lakeview Street
Littleton
CO - 80120

Adviser

T. H. ELLIS
Director
Southern Forest Experiment Station
US Department of Agriculture
T-10210 Postal Service Building
701 Loyola Avenue
New Orleans, LA 70114

Adviser

H. L. JONES
Forester
J. M. Jones Lumber Co. Inc.
P.O. Box 1368
Natchez - 39120
Miss.

Adviser

J. C. LEE
Head, Department of Forest Science
Texas A and M University
College Station
Texas 77840

Adviser

S. MUNIZ
Regional Forester
Southwestern Region
US Forest Service
517 Gold Ave. S.W.
Albuquerque, N.M. 87102

Adviser

W. PENOYAR
Assistant Director Cooperative
Forestry
Forest Service
Department of Agriculture
P.O. Box 2417
Washington, D.C. 20013

Adviser

F. H. WADSWORTH
Research Forester
Institute of Tropical Forestry
Forest Service
Department of Agriculture
P.O. Box 21390
Rio Piedras
Puerto Rico 00928

LIST OF DOCUMENTS

<u>Agenda Item</u>	<u>Code</u>	<u>Title</u>
2	FO:NAFC/86/1	Provisional Agenda
3(a)	FO:NAFC/86/2(b)	Report of State of Forestry in Canada
3(b)	FO:NAFC/86/2(c)	Report of State of Forestry in Mexico
3(c)	FO:NAFC/86/2(a)	Report of State of Forestry in U.S.A.
4	FO:NAFC/86/3	Report of Committee of Alternates
5	FO:NAFC/86/4	FAO Forestry Activities: Review Biennium 1984-85 and Programme of Work and Budget for 1986-87
6(a)	FO:NAFC/86/5(b)	Hardwood Utilization in Canada
6(b)	FO:NAFC/86/5(c)	Hardwood Utilization in Mexico
6(c)	FO:NAFC/86/5(a)	Hardwood Utilization in U.S.A.
7(a)	FO:NAFC/86/6(a)	Report of Study Group on Forest Tree Improvement
7(b)	FO:NAFC/86/6(b)	Report of Study Group on Fire Management
7(c)	FO:NAFC/86/6(c)	Report of Study Group on Forest Insects and Diseases
7(d)	FO:NAFC/86/6(d)	Report of Study Group on Remote Sensing
7(e)	FO:NAFC/86/6(e)	Report of Study Group on Silviculture
7(f)	FO:NAFC/86/6(f)	Report of Study Group on Multilingual Vocabulary
7(h)	FO:NAFC/86/6(h)	Report of Study Group on Forest Engineering
7(i)	FO:NAFC/86/6(i)	Report of Study Group on Atmospheric Deposition
7(j)	FO:NAFC/86/6(j)	Report of Study Group on Light-frame Structures
8(a)	FO:NAFC/86/7(a)	Agro-forestry
8(b)	FO:NAFC/86/7(b)	Report of the World Consultation on the Role of Forestry against Desertification
8(c)	FO:NAFC/86/7(c)	Conservation of Forest Genetic Resources in North America

Information Documents

FO:NAFC/86/Inf. 1	General Information
FO:NAFC/86/Inf. 2	Provisional Timetable
FO:NAFC/86/Inf. 3	List of Documents

MEMBERS OF THE COMMISSION

Canada
Mexico
United States