

**REPORT**

San Diego,  
California,  
USA,  
6-9 February  
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**North American  
Forestry Commission**  
Fifteenth session



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 July 1963
Third Session	Washington, D.C., USA	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., USA	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, USA	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, USA	21-24 February 1984
Thirteenth Session	Chetumal, Quintana Roo, Mexico	3-7 February 1986
Fourteenth Session	Sault Ste. Marie, Ontario Canada	14-17 October 1987

REPORT  
of the  
FIFTEENTH SESSION  
of the  
NORTH AMERICAN FORESTRY COMMISSION  
held in  
San Diego, California  
United States of America  
6-9 February 1990



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## SUMMARY OF RECOMMENDATIONS

### A. ADDRESSED TO MEMBER GOVERNMENTS

The Commission:

1. Recognizing the need to foster closer working relationships among forestry interests of North America to meet emerging issues such as global climate change, and that the exchange of personnel for temporary assignments would help meet this need, recommended that its member countries actively promote such exchange of personnel (para. 66).
2. Recognizing the excellent initiative taken by FAO through the Tropical Forestry Action Plan to call the attention of the world's highest decision-makers to the excessive rates of forest loss and degradation in the tropics, and that under FAO's leadership the TFAP process was mobilizing worldwide cooperation to improve the protection and management of tropical forests, urged the members of the Commission to increase their resolve to cooperate in the TFAP process (para. 76).
3. Recognizing the excellent efforts of Mexico to address its tropical forest problems, and noting that many of the activities Mexico planned to undertake in its tropical regions required the technical skills that NAFC countries had been exchanging for many years, recommended that the skills of Canada and the United States of America be made available to Mexico to the extent that such cooperation was required (para. 77).
4. Recommended that special support be provided for the successful implementation of the TFAP in Mexico (para. 77).

### B. ADDRESSED TO FAO

The Commission:

1. Commended the development of FAO's forestry programmes, but urged that the share of forestry within the overall budget of the Organization be increased further, in line with the new awareness of the significance of forestry's role in sustainable development (para. 45).
2. Noting the importance of ensuring the transfer to the users of the new methodologies and tools being developed and of intensifying the diffusion of computerized systems for improved communication, recommended that continuous attention be given by FAO to the development of the human and institutional base in member countries, particularly through training (para. 46).

### C. ADDRESSED TO NAFC SUBSIDIARY BODIES

The Commission:

1. Welcoming the news that the Study Group on Forest Tree Improvement was nearing completion of a five-language Glossary of Forest Genetics, urged that terminology in the glossary be consistent with that of the Multilingual Forestry Vocabulary which was being compiled by a separate NAFC study group (para. 51).
2. Endorsed the proposal of the Study Group on Silviculture to publish in 1990 an updated second edition of the Directory of Tropical Silviculturists. It further endorsed the proposal of this Study Group to complete the publication of 19 tree species in "Useful Trees of Tropical North America" by 1991 (para. 56).
3. Endorsed the Study Group on Silviculture's plan to conduct a Tropical Silvicultural Research Workshop to be held in the State of Campeche, Mexico, in October 1990 and agreed to provide the required financial and organizational support of its member countries (para. 58).
4. Agreed that the Study Group on Multilingual Vocabulary commence the conversion of the Spanish version of the terminology, which also contains variant terms used in Mexico, to computer-readable format. It further agreed that the procedures for transferring the maintenance, updating and operation of the database to the regular operating units of the participating forestry agencies needed to be developed and discussed in the coming year (paras. 59 and 60).

5. In approving the 1990 work programme of the Study Group on Forest Engineering, and while discussing the financing of seminars, recommended that the costs between countries be more evenly shared and that an effort be made to obtain contributions from the private sector both as actor and beneficiary (para. 64).
6. Recognizing that the originally defined purposes of the Study Group on Atmospheric Pollution and Deposition had been considerably broadened, recommended that the name of the Group be changed to "Atmospheric Changes and Forests" (para. 67).
7. Noting that the Study Group on Light-frame Structures had met in March 1988 to determine the best method of preparing a construction manual for wood frame housing, with emphasis on appropriate technology for Mexico, endorsed the Group's request for US\$ 40 000 to complete the manual and suggested that Canada and the United States of America contribute part of the funding but that the Group should also seek financial support from the private sector, with Mexico making important contributions in kind (para. 69).
8. Having reviewed the activities of the study groups, recommended that every group and sub-group maintain carefully the main cooperative focus among the three member countries, that every budget proposal be specific and concrete and that the coordination of study groups' publications be maintained through the Canadian focal point. It suggested, also, that each study group identify possible ways of providing technical support to the Tropical Forestry Action Plan implementation in Mexico (para. 72).



## OPENING OF THE SESSION

1. The fifteenth session of the North American Forestry Commission was held in San Diego, California, at the kind invitation of the Government of the United States of America. The session was attended by 37 participants from the three member countries of the Commission and by an observer from the International Union of Forestry Research Organizations. The list of participants is shown in Appendix B.
2. At the opening ceremony the participants were welcomed by Mr. Steve Lerner, representing the Mayor of San Diego, and by Mr. Dale Robertson, representing the Government of the United States of America.
3. Mr. C. H. Murray, Assistant Director-General and Head of the Forestry Department of FAO, represented the Director-General of the Food and Agriculture Organization of the United Nations. In his statement, Mr. Murray thanked the Government of the United States of America, and particularly the Mayor of San Diego and the Supervisor of the Cleveland National Forest, for their generosity in hosting this session of the Commission.
4. Mr. Murray recalled that forestry was an integral part of overall agricultural development and thus had been part of FAO's work from the outset. Although the membership of FAO had more than trebled, most of its new members came from the developing countries. Nevertheless, Mr. Murray said, the Organization maintained a high level of interest and concern for forestry in the North American region, principally because of the composition and the advanced state of forestry development.
5. Referring to the Tropical Forestry Action Plan, Mr. Murray asserted that since its inception, almost five years ago, the Plan had received international acclaim and support and had captured the imagination of donors and recipient countries alike. He recounted the TFAF's main contribution in tangible and concrete terms and informed the Commission of the recently initiated independent and comprehensive review undertaken by FAO. The review would be completed by mid-May and its findings considered by the next session of the Committee on Forestry in September 1990.
6. Mr. Murray referred briefly to other initiatives and proposals to help developing countries conserve their forests and argued against restrictions on international trade in tropical timber. Such action was unlikely to make any positive contribution to the situation.
7. Mr. Murray then dwelt on the Forestry Department's plans for 1990-91, with particular reference to the North American region, and referred inter alia to a study under way of the phenomenon of global warming; the redirecting of FAO's work in forest industries to take account of non-wood products and the consequential renaming of the Forest Industries Division the Forest Products Division.
8. Major features in the programme of work and budget for forestry in 1990-91 were the redoubling of effort in policy and planning activities, the strengthening of research capability and institutions, and the addition of three new posts to the technical cadre of the Department.
9. Mr. Murray acknowledged the dynamism and commitment of the North American Forestry Commission and suggested that FAO follow more closely the work being done for the benefit of other member countries.
10. Continuing, Mr. Murray expressed his appreciation of the work done by the United States of America and Canada in the preparation of the North American study of forest products outlook. Future areas for cooperation related to studies on air pollution and tropical timber markets in North America.
11. In conclusion, Mr. Murray referred to the decisive role that North America played in support of forestry development in other regions through funds and expertise provided multi- and bi-laterally. The forestry sector was facing the boldest challenge and its greatest opportunity, and the opportunity must be seized with a determined spirit of enterprise. "Success" will be the greatest prize and would be a fitting tribute to Gifford Pinchot, who counselled that "forests should be managed for the greatest good for the greatest number in the long run."
12. The Commission designated the following as members of the Drafting Committee: G. Steneker (Canada), M. Olayo (Mexico) and S. Kunkle (USA). M.R. de Montalembert (FAO) acted as Secretary and D. Harcharik (USA) as Rapporteur.

## ADOPTION OF THE AGENDA

13. The Commission approved the provisional agenda (Appendix A). The list of documents considered by the Commission is given in Appendix C.

## STATE OF FORESTRY IN THE REGION

### a) Canada

14. In December 1988, the status of the Canadian Forestry Service was raised to a full Federal Department, now known as Forestry Canada. The official proclamation took place in February 1990.

15. The Forest Resource Development Agreements had been in existence since 1984 and were considered very successful overall. It was estimated that the Agreements had initiated the rehabilitation of 2.3 million hectares, representing a potential increase in annual harvests of about 2.4 million cubic meters.

16. Higher levels of forest management had been achieved. Site preparation doubled from 220,000 ha to 450,000 ha per year; tending operations increased from 118,000 ha to 320,000 ha; and the area planted annually increased from 190,000 ha to 400,000 ha. Nursery production increased and currently stood at about 800 million trees per year.

17. The 1989 fire season was one of the worst on record, particularly in Quebec and Manitoba, with 11,000 fires burning close to 6.4 million ha. This was well above the 10-year average of 2 million ha per year.

18. Further work had continued on the Canadian Forest Fire Danger Rating System with a user guide being published in 1987. Refinements had been made to the Fire Behaviour Prediction System and the Fire Occurrence Prediction System.

19. Insect infestations had somewhat modified, with populations of spruce budworm and mountain pine beetle declining in general. Cooperative work on pinewood nematodes was continuing with some European countries as difficulties had been encountered with the export of some forest products.

20. The Canadian forest industry had been healthy in 1988 but slowed down somewhat in 1989. A major study on the industry commissioned by Forestry Canada was published in 1989. The report entitled "Canada's Forest Industry--the next 20 Years: Prospects and Priorities" was the most comprehensive of its kind. It examined future world markets for a wide range of forest products and assessed the Canadian industry's ability to compete globally on a product-by-product basis. The report noted that world markets were expected to grow significantly for forest products over the next 20 years and that Canada was in a strong position to take advantage of this growth.

### b) Mexico

21. The Commission was informed that, in the little more than a year which had elapsed since the inception of the new administration, the country was undergoing important political, economic and social changes. The perception of the importance of forestry in the country was related to this, and the forestry sector was receiving increasing attention as a national priority. Foresters must respond to this commitment. There was a modern forestry law which provided the framework for forestry action in the national development plan for 1989-94. The plan provided specific instructions for strategic programmes for forest resources.

22. The role of forest resources in relation to the environment, both at local and global levels, was an opportunity which must be taken to underline the importance of forestry.

23. In Mexico, 7 million ha were managed with a production of 9.0 million cubic meters per year. Of this, there were 1 million ha under modern silviculture methods, from which 30% of the volume was obtained.

24. The enterprises which were owned by the Government were in the process of being transferred to organized peasant groups and potential investors. There were pressures from environmental groups on forestry activities and, for that reason, it will be important that they participate fully in different actions in order to obtain their support.

25. Deficiencies in technical assistance were also recognized (i.e., training, financing, investment, organization of peasants and the protection and rehabilitation of infrastructures, among others) and this should still be corrected.

26. Underlying the national programme of reforestation was the effort to obtain the participation of the different social sectors, and the target for 1990 was to replant 100,000 ha. Another important programme was the prevention and control of fires, which must be developed and maintained.

27. Integrated forest management was another indispensable programme in order to generate direct employment and earnings for the local rural people.

28. The national forestry inventory was fundamental to keeping updated the information on forest resources and their condition. It was planned to regionalize forestry by hydrographic basins which will constitute the units for the planning and management of the forest resources and more broadly the land use systems.

29. Other actions in process which will allow the progress of the forestry sector were restructuring and strengthening the forest administration, formulation of a forestry sector programme, strengthening the activities related to organization and training of the forest owners, improving the road infrastructure, developing new markets, encouraging investments and financing and incentives. Monitoring the health of the forest should help prevent pests and diseases, as well as fires.

30. It was important to raise the awareness of society, as well as environmental groups, of the biological, economical and social importance of forest resources. Special emphasis must be placed on environmental programmes such as the management of forest/hydrological basins; the forestry commissions of North America and Latin America, with special emphasis on the TFAP; and the strengthening of the bilateral agreements with various countries.

31. The financing by the World Bank of a project for Chihuahua/Durango was being implemented; and support of the Inter-American Development Bank for a similar project for the States of Oaxaca and Guerrero was forthcoming.

#### c) United States of America

32. The report reviewed the major trends in forest resource management during the past two years. Environmental quality concerns, as well as increasing demand for forest products, had been affecting management and policy of the forest lands in the United States of America.

33. "New Perspectives on Forestry" was a term applied recently to management of the national forests in the United States of America. The term described the Forest Service's effort to respond to the recent shift in the public's attitude towards the national forests, especially the public's view that environmental amenities of forests were of highest concern. The Forest Service was developing forest management systems that can accommodate a wider value of environmental benefits; for example, deliberately leaving some large trees after timber harvest in order to maintain biological diversity.

34. Timber demands had been at an all-time high, and 1987 and 1988 saw record-breaking harvests. Tree planting also reached an all-time high, with 1.4 million ha planted in 1988, primarily by private forest owners. Federal and State programmes had been established to assist in this reforestation. The "Conservation Reserve Program," for example, provided incentives to farmers to plant trees on eroded lands with government assistance. The Commission was informed of President Bush's announcement of a major new thrust to plant one billion trees a year.

35. Natural disasters had caused major impacts during 1988 and 1989. Hurricane Hugo caused serious damage to the national forests in Puerto Rico and South Carolina, with three-quarters of all the forest vegetation seriously damaged in these areas. In 1988, the Yellowstone fire attracted attention and was especially spectacular; but, in total, over 72,000 fires burned over 5 million acres in western USA.

36. A programme of "Conservation Partnerships" continued to be effective, and a "Challenge Cost-Share Program" allowed the Forest Service to match funds with outside sources, especially for work in recreation and fish and wildlife of the national forests.

37. International forestry received much greater attention in 1989, and the Forest Service had increased funds for work in tropical forestry. This work included cooperation with FAO in several areas. It was pointed out that the Forest Service planned to expand its cooperation with FAO and will support several workshops, training courses and other FAO activities during 1990.

## REPORT OF THE COMMITTEE OF ALTERNATES

38. The Chairman of the Committee of Alternates (COA) summarized the activities of the Committee since the fourteenth session and reviewed the activities of the study groups, noting accomplishments in terms of publications, meetings and special missions of experts which provided assistance in disaster follow-up. The report briefly noted the progress of the eight study groups, describing three NAFC publications produced in 1988 and 1989 and noting five others at the preparation stage, including a terminology database, a directory of tropical silviculturists, a chainsaw maintenance handbook, a manual on forest technology and a wood construction manual for Mexico.

39. The Chairman of the COA also summarized the bilateral programmes between individual countries, noting the following programmes between the United States of America and Mexico: aviation and fire, pest management, information, land management, planning, timber, watershed management, wildlife management and recreation. The programmes between Canada and the United States of America included experiments on fires, atmospheric pollution and acid deposition. Canada and Mexico cooperated in the areas of forest productivity, fire management, wood use in housing and pulp.

40. Discussion evolved around the value of using NAFC to provide expertise for FAO's needs, for example in the area of remote sensing. The question also was raised as to the scope of NAFC to consider establishing study groups on certain topics of high importance to FAO, such as environmental monitoring and remote sensing.

41. The next meeting of the COA was scheduled for December 1990.

## FAO FORESTRY ACTIVITIES OF INTEREST TO THE REGION

42. Mr. Murray, Assistant Director-General, highlighted FAO's forestry activities completed during the biennium 1988-89 and those foreseen for the new biennium 1990-91. It was stressed that the presentation referred only to the Regular Programme and that the many activities carried out under the Field Programme with extra-budgetary resources were not included.

43. FAO's Regular Programme activities were severely constrained during the biennium 1988-89 by the stringent financial situation which affected the Organization. It resulted in the freezing of vacant posts and in the incapacity to carry out activities as planned. Special efforts were made, however, to maintain the level of activities directly related to FAO's responsibility for the coordination and implementation of the Tropical Forestry Action Plan (TFAP).

44. Some important features of the Programme for 1990-91 were stressed, in particular the creation of three new positions and the related increase in activities in forest protection, forest research and non-wood forest products, the renewed emphasis on the policy and planning advice functions and the continuous importance attached to people's participation and the social dimension of forestry. Recognition of the economic importance of the variety of products from the forest led to the Forest Industries Division being renamed Forest Products Division. TFAP was the priority for forestry within FAO and the progress in its implementation so far was the subject of an independent review the conclusions of which will be presented to the Director General of FAO and then to the forthcoming session of COFO. Another major activity was the Forest Resource Assessment 1990 which was under way; the Assessment's preliminary results for the tropical countries will be made available soon.

45. The Commission commended the development of FAO's forestry programmes but urged that the share of forestry within the overall budget of the Organization be increased further, in line with the new awareness of the significance of forestry's role in sustainable development.

46. The Commission noted the importance of ensuring the transfer to the users of the new methodologies and tools being developed and of intensifying the diffusion of computerized systems for improved communication. The Commission recommended that continuous attention be given by FAO to the development of the human and institutional base in member countries particularly through training.

47. The Commission emphasized the importance of environmental aspects of forest management and of sustainability which must be an inherent dimension of all forestry development efforts. It welcomed the attention given to these aspects by FAO, its cooperation with other UN agencies and particularly its active involvement in the preparation of the 1992 UN Conference on Environment and Development.

48. The delegate of Mexico confirmed his country's willingness to host a meeting of rural leaders, also from neighboring countries, to discuss opportunities and constraints for rural people to participate in forest management.

## REVIEW OF STUDY GROUP ACTIVITIES

### a) Study Group on Forest Tree Improvement

49. The Commission considered the report of the Study Group, with special reference to its various achievements, and commended the Group for successfully completing 21 of the 25 tasks that it had undertaken since its creation in 1965.

50. In particular, the Commission noted the excellent work under way by the Study Group in studying the taxonomic variation of North American white pines, closed cone pines and spruce taxa. It also welcomed new initiatives by the Study Group to promote the conservation of threatened or endangered tree species.

51. The Commission further welcomed the news that the Study Group was nearing completion of a five-language Glossary of Forest Genetics. It urged the Group to ensure that terminology in the glossary be consistent with that of the Multilingual Forestry Vocabulary, which was being compiled by a separate NAFC study group.

### b) Study Group on Fire Management

52. This Study Group was involved in many important areas, including training, exchanges of expertise and equipment, and coordination of suppression activities during major fire incidents. Some of the more important activities were:

- coordination in suppressing fires in the United States of America, Canada and Mexico;
- enactment of legislation by the United States of America that authorizes cross-border fire suppression activities and the reimbursement of expenses borne by other countries when combating fires in the USA;
- organization of a major international conference in Boston, Massachusetts, on "Meeting Global Wildland Fire Challenges";
- development of fire prevention and response systems for potential fire problems as a result of Hurricane Gilbert in the Yucatan Peninsula;
- scheduling of the fifth Spanish-speaking fire training course to be held in Spain;
- exchange of and training of firefighters in the southwestern United States of America and Mexico.

53. The Commission endorsed the following proposed future programme of work:

- continuation of joint training programmes between Mexico and the United States of America, including consideration of expanding fire prevention training to include Latin America;
- assistance in purchasing firefighting tools for Mexico;
- development of a tripartite agreement between Canada, Mexico and the United States of America to mobilize regional responses to major fires;
- encouragement to FAO to republish an updated Glossary of Forest Fire Terms;
- continued publishing of "Forest Fire News"; and
- coordination of fire research activities between Canada, Mexico and the United States of America.

c) Study Group on Forest Insects and Diseases

54. The Study Group had been very active since the fourteenth session of the NAFC (October 1987) as they met three times in that period (in each of the member countries). The subject areas of the meetings targetted bark beetle management, air pollution and forest health, and integrated pest management. Work continued on the Quarantine Import Requirement of Canada, Mexico and the United States of America. The book "Cone and Seed Diseases of North American Conifers" was in process of being reprinted by Canada. In 1988, the Study Group formed three sub-study groups, each designed to improve the flow of technology between the member countries in the areas of information technology, forest pest control and biotechnology. There were 14 technical exchanges in the previous two years and an equal number planned before the sixteenth session.

d) Study Group on Silviculture

55. The Commission considered the report of the Study Group with reference to its various tasks and achievements, and commended the group for its valuable contributions to tropical silviculture.

56. The Commission endorsed the proposal of the Study Group to publish in 1990 an updated second edition of the Directory of Tropical Silviculturists, but requested that the Chairman determine whether publication costs could be absorbed by the US Agency for International Development. If the answer were negative, the US Forest Service would be agreeable to printing the Directory for a total cost of US \$ 3 000, to be shared equally by the three member countries.

57. The Commission endorsed the proposal of the Study Group to complete the publication of 19 tree species in "Useful Trees of Tropical North America" by 1991 (NAFC Publication Number 3) at a revised cost of US \$ 24 700, to be shared equally by the three member countries.

58. The Commission endorsed the Study Group's plan to conduct a Tropical Silvicultural Research Workshop to be held in the State of Campeche, Mexico, in October 1990 and agreed to provide the required financial and organizational support of its member countries. Mexico will provide a workshop leader and facilities for the meeting location and support for instructors and participants from within the country. The United States of America and Canada will respectively provide US \$ 16 300 and CAN \$ 12 000 financial support for a workshop co-leader and expert instructors and participants from outside the country. Canada will endeavour to obtain some of their funds from CIDA projects in the region.

e) Study Group on Multilingual Vocabulary

59. The Group was ready to begin the conversion of the Spanish version of the terminology, which also contains variant terms used in Mexico, to computer-readable format. Once the Spanish-language tape is merged with the French and English tapes, the basic task of the Group will have been completed. Editorial work remained to be done, including the elimination of morphological and grammatical discrepancies among terms in the three languages.

60. Procedures for transferring the maintenance, updating and operation of the database to the regular operating units of the participating forestry agencies needed to be developed and discussed in the coming year.

61. The Commission agreed that the Group should attend to these two tasks in the coming year.

f) Study Group on Forest Engineering

62. The main mandate of this Study Group was to act in an advisory capacity to the forest industry in areas of training, work methods and operational planning, with the main concentration being directed towards the needs of Mexico.

63. This work was being done through the dissemination of information, visits to work sites and support of seminars.

64. The 1990 work programme was presented to the Commission, which approved its broad lines. However, a possible overlap of interests with the bilateral agreement of the United States of America and Mexico was indicated. It was suggested that a sawmill technologist be made available through this agreement. The financing of seminars was discussed and it was recommended that the costs between countries be more evenly shared and that an effort be made to obtain contributions from the private sector both as actor and beneficiary.

g) Study Group on Atmospheric Pollution and Deposition

65. The Study Group was in its fifth year of activity. During the reporting period, the Group held its third meeting at Sault Ste. Marie, Ontario, Canada, in October 1988, in conjunction with the Study Group on Forest Insects and Diseases, and held its fourth meeting at Fort Collins, Colorado, United States of America, in September 1989. A fifth meeting was planned for October or November 1990 in Morelos, Mexico.

66. Early meetings of the Study Group focused on exchanging information and establishing operating procedures. Activities which will focus more on actual work in the forests of North America were now beginning. The Study Group recognized: 1) the need for coordinated methodologies and protocols to monitor the health, productivity and diversity of North American forest ecosystems in a changing atmospheric environment; 2) that this monitoring should be applicable to all North American forest conditions; and 3) that the best way to begin to fulfill this need was to establish at least one site in each country as the basis for a network. Also, recognizing the need to foster closer working relationships among forestry interests of North America to meet emerging issues such as global climate change, and that the exchange of personnel for temporary assignments would help meet this need, the Commission recommended that its member countries actively promote such exchange of personnel.

67. It was recognized both by the Committee of Alternates and by members of the Study Group that the originally defined purposes of the Group had been considerably broadened during the past few years by growing interest in the effects of global climate change, stratospheric ozone depletion, and other measured and predicted atmospheric changes in the health, productivity and diversity of forest ecosystems. It was therefore recommended that the name of the Study Group be changed to "Atmospheric Changes and Forests."

h) Study Group on Light-frame Structures

68. In presenting the report of this Study Group, the need was stressed for improved housing for the rural population and for low-income families in urban areas of Mexico in particular. Wood construction was not widely accepted in Mexico and other Latin American countries, while the United States of America and Canada had a long history of wood house construction. The technology transfer objective of the study group remained a high priority need.

69. The Study Group met in March 1988 in Mexico to determine the best method of preparing a construction manual for wood frame housing with emphasis on appropriate technology for Mexico. A field trip acquainted the study team with wood frame construction practices used in one area of Mexico. A detailed plan for preparing the construction manual was prepared with the assistance of FAO, and possible funding of the project was requested from UNIDO. Progress had been delayed, as the project had not been funded. The Commission endorsed a request by the Study Group for US \$ 40 000 to complete the manual. It suggested that Canada and the United States of America contribute part of the funding but that the Study Group should also seek financial support from the private sector, with Mexico making important contributions in kind.

70. The Commission was informed that drafts of two reports had been completed. Study Group members will review reports on 1) acceptance of wood frame houses in Mexico and 2) construction of a wood frame house with an engineered truss system. The Commission was requested to support the publication of the reports so that they would be widely available for use in Mexico.

71. The Commission was further informed that there continued to be a need to encourage the acceptance of wood frame houses in Mexico. Also, there was a need to coordinate the Group's activity with USA and Canadian efforts to market wood products in Mexico.

## General

72. Having reviewed the activities of the study groups the Commission recommended that every group and sub-group maintain carefully the main cooperative focus among the three member countries, that every budget proposal be specific and concrete and that the coordination of study groups' publications be maintained through the Canadian focal point, Mr. G. Steneker. The Commission suggested, also, that each study group identify possible ways of providing technical support to the Tropical Forestry Action Plan implementation in Mexico.

## TECHNICAL ITEMS

### a) Tropical deforestation

73. This subject was introduced by Juan José A. Reyes Rodríguez (Mexico) based on the document "Tropical Deforestation". The paper provided an insight into the composition, location and coverage of the tropical forests of Mexico, the evergreen forests, the moist tropical forests, the deciduous forests and the dry open forests.

74. The major benefits and uses of the forests were highlighted, and special emphasis was placed on appropriate uses and correct values of non-wood products such as rubber and other latexes, pharmaceuticals, spices and fruits. The serious deforestation taking place was mainly caused by the conversion of forests to pasture and to a lesser degree by shifting cultivation. Although some forests were cleared through planned development schemes, often supported by international development banks, much of the deforestation was caused by unplanned slash-and-burn activities as a result of urgent needs for new land for food production. The deforestation and degradation affecting the forests threatened not only their actual and future productivity but also the survival of little-known animal and plant species of potential value to man.

75. The paper gave information on the actions needed to recuperate and/or manage the forests in the 28 sub-regions affected in the seven southern Mexican states concerned. The Government had introduced fiscal incentives for commercial management of the tropical forests, either by enterprises or farmer associations. However, the major thrust of forest development was channelled through the recently initiated TFAP exercise. Forestry was here related to the need of other natural resource sectors in the country, and due respect will be paid to appropriate land use practices. The plan will include clearly defined goals and activities in four major areas: land use, commercial forest management and industrialization, conservation and rural-based forest development. Some of the specific forest development goals were highlighted in the paper.

76. The Commission noted that tropical deforestation was one of the major environmental problems facing the world today. It recognized the excellent initiative taken by FAO through the Tropical Forestry Action Plan to call the attention of the world's highest decision-makers to the excessive rates of forest loss and degradation in the tropics. It further recognized that under FAO's leadership the TFAP process was mobilizing worldwide cooperation to improve the protection and management of tropical forests. It urged the members of this Commission to increase their resolve to cooperate in the TFAP process.

77. The Commission also recognized the excellent efforts of one of its own member nations, Mexico, to address its tropical forest problems. It noted that many of the activities Mexico planned to undertake in its tropical regions required the technical skills that NAFC countries had been exchanging for many years. Mexico, for example, had planned to do an inventory of its tropical forests and to expand watershed protection, wildlife management, reforestation and a number of other activities. The Commission strongly recommended that the skills and experience of Canada and the United States of America be made available to Mexico through the NAFC to the extent that such cooperation was required. In order to mobilize early and efficient support to the TFAP process and follow-up action in Mexico, and to demonstrate the effectiveness of cooperation in the NAFC framework, the Commission entrusted the Committee of Alternates with the tasks of i) maintaining the liaison with Mexico and FAO, ii) identifying the specific needs for support and possible responses by Canada and the United States of America and iii) providing adequate information to the authorities concerned for early decision. The Commission recommended that special support be provided for the successful implementation of the TFAP initiative in Mexico.

### b) Pollution and Atmospheric Deposition

78. This item was introduced based on the document "Regional Air Pollution Impacts on the Forests of North America" by the author, P. A. Addison (Canada). It gave an account of the state of knowledge of air pollution levels in the region and related damages.



79. There had been a great deal of concern raised over forest damage in North America, but most of the forests were neither exposed to significant pollution levels nor responding abnormally. Although air pollutants at sufficiently high levels can impact forests, it had been extremely difficult to make definitive linkages between the pollution and forest response in most cases. The only exceptions to this had been the cases of ozone damaged forests in southern California and Mexico. In general, the overall impact of air pollution was rather small relative to damages caused by fires and pests, but it was a stress that could be avoided.

80. The concern over the impact of pollutants on forests revolved around both recreational and aesthetic values as well as the intrinsic value of forests as part of the world's environment. In all three countries in North America, therefore, air pollution must be considered a social issue, driven by people's desire to have both industrial development and a clean environment.

81. In the discussion that followed it was indicated that proper management of damaged stands was needed, but that adequate knowledge was not yet available to permit precise prescriptions and further research was needed in this field.

#### c) Global climate change

82. This subject was introduced by David Radloff (United States of America) based on the document "Climate Change and North America's Forests" prepared by L. A. Joyce, M. A. Fosberg and J. M. Comanor of the United States of America. The paper dealt with the uncertainties related to the environmental changes that may occur if predicted climatic changes take place.

83. The paper gave a brief introduction to the subject of global climatic change with respect to forests and forest management. Although it focused on the United States of America, it applied equally to all of North America. Confirmed increases of concentrations of carbon dioxide, methane and other so-called greenhouse gases in the atmosphere had taken place since initiation of the industrial age and sharp increases in deforestation, and were likely to continue into the next century. In theory this increase will cause a significant rise in the global temperature within a few decades. Although these predictions were still to be confirmed, the implications may cause dramatic changes in forest coverage and composition and further interactions between vegetation, ecosystems and the climate. However, the nature of the responses and their magnitude or timing were not known, and much research will be needed to be able to predict changes in species composition and migration and other forest responses. Forest managers will have to address these questions over the next several decades and, to do so, preparations will have to be made to answer such questions.

84. The Commission was informed about the Expert Consultation on Climatic Change and Forests to be held at FAO Headquarters from 5 to 7 March. The Consultation, which will be held with the financial support of the US Forest Service, will produce a basic document and clear recommendations as to what FAO can do for its member countries regarding the issue of climatic change and forests.

#### FOLLOW-UP TO THE RECOMMENDATIONS OF THE FOURTEENTH SESSION

85. The Secretariat presented the report on the actions taken on the recommendations of the fourteenth session. The Commission expressed satisfaction with these follow-up actions. It reiterated the importance to be attached to the diffusion of new information and documentation to the users who need it immediately.

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

86. The Commission decided that the following concerns and recommendations, which already appear elsewhere in the report, be brought to the attention of the Committee on Forestry:

- (i) the value of using NAFC's expertise and particularly of establishing study groups on certain topics of high importance to FAO, such as environmental monitoring and remote sensing (para. 40);
- (ii) the need to increase further the share of forestry within the overall budget of the Organization in line with the significance of forestry's role in sustainable development (para. 45);

- (iii) the continuous attention to be given by FAO to the development of the human and institutional base in member countries, particularly through training (para. 46);
- (iv) the importance of the TFAP process for mobilizing worldwide cooperation to improve the protection and management of tropical forests and the need for the members of this Commission to increase their resolve to cooperate in the TFAP process (para. 76);
- (v) the active role that this Commission intends to play to provide exemplary support to Mexico's efforts to address its tropical forest problems and, more particularly, to the successful implementation of its TFAP initiative (para. 77);
- (vi) the reiterated importance of FAO ensuring effective distribution of new documentation and diffusion of information to the real users (paras. 46 and 85).

#### BUSINESS OF THE COMMISSION

- a) Other business: None
- b) Election of officers

87. 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:	M. Gurría Ordoñez (Mexico)
First Vice-Chairman:	J. C. Mercier (Canada)
Second Vice-Chairman:	F. Dale Robertson (United States of America)

The Commission invited Mexico to nominate the Chairman and Rapporteur of the Committee of Alternates, and the Mexican delegate indicated that they would officially inform the Secretary of the persons so designated. Canada nominated G. Steneker and the United States of America nominated A. West as their representatives on the Committee.

- c) Date and place of next session

88. Mexico invited the Commission to hold its next session in Campeche. The Commission thanked Mexico for its kind invitation and agreed that exact dates, in the first quarter of 1992, be determined in consultation with the Director-General of FAO.

- d) Adoption of the report

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

#### CLOSING OF THE SESSION

90. The heads of the Canadian and Mexican delegations thanked the Government of the United States of America and the City of San Diego for the excellent arrangements made for the session, the field trip and the hospitality offered. Mr. C. H. Murray expressed thanks on behalf of the Director-General of FAO, and the Chairman thanked FAO, the secretariat and the delegates for their contribution to the success of the session.

AGENDA

1. Opening of the Session
2. Adoption of the Agenda
3. State of forestry in the region
  - (a) Canada
  - (b) Mexico
  - (c) United States of America
4. Report of the Committee of Alternates
5. FAO forestry activities of interest to the region
6. 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 Silviculture
  - (e) Study Group on Multilingual Vocabulary
  - (f) Study Group on Forest Engineering
  - (g) Study Group on Atmospheric Pollution and Deposition
  - (h) Study Group on Light-frame Structures
7. Technical items
  - (a) Tropical deforestation - Mexico
  - (b) Pollution and atmospheric deposition - Canada
  - (c) Global climate change - United States of America
8. Follow-up to the recommendations of the Fourteenth Session of the Commission
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
  - (c) Adoption of the report
11. Closing of the Session

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LISTA DE PARTICIPANTES

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LIST OF DOCUMENTS

<u>Agenda Item</u>	<u>Code</u>	<u>Title</u>
2	FO:NAFC/90/1	Provisional agenda
3 (a)	FO:NAFC/90/2(a)	Report of state of forestry in Mexico
(b)	FO:NAFC/90/2(b)	Report of state of forestry in Canada
(c)	FO:NAFC/90/2(c)	Report of state of forestry in USA
4	FO:NAFC/90/3	Report of the Committee of Alternates
5	FO:NAFC/90/4	FAO forestry activities of interest to the region
6 (a)	FO:NAFC/90/5(a)	Report of Study Group on Forest Tree Improvement
(b)	FO:NAFC/90/5(b)	Report of Study Group on Fire Management
(c)	FO:NAFC/90/5(c)	Report of Study Group on Forest Insects and Diseases
(d)	FO:NAFC/90/5(d)	Report of Study Group on Silviculture
(e)	FO:NAFC/90/5(e)	Report of Study Group on Multilingual Vocabulary
(f)	FO:NAFC/90/5(f)	Report of Study Group on Forest Engineering
(g)	FO:NAFC/90/5(g)	Report of Study Group on Atmospheric Pollution and Deposition
(h)	FO:NAFC/90/5(h)	Report of Study Group on Light Frame Structures
7 (a)	FO:NAFC/90/6(a)	Tropical deforestation
(b)	FO:NAFC/90/6(b)	Pollution and atmospheric deposition
(c)	FO:NAFC/90/6(c)	Global climate change
8	FO:NAFC/90/7	Follow-up to the recommendations of the Fourteenth Session of the Commission

Information documents

FO:NAFC/90/Inf.1	Information Note
FO:NAFC/90/Inf.2	Provisional Timetable
FO:NAFC/90/Inf.3	List of documents



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