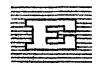
### UNITED NATIONS



## ECONOMIC AND SOCIAL COUNCIL



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### ECONOMIC COMMISSION FOR EUROPE

### TIMBER COMMITTEE

### REPORT OF THE THIRTY-NINTH SESSION

held at Geneva from 12 to 16 October 1981

### As approved by the Committee

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### Introduction

- 1. The Timber Committee held its thirty-ninth session at Geneva from 12 to 16 October 1981. The session was attended by representatives from the following ECE countries: Austria; Belgium; Bulgaria; Byelorussian Soviet Socialist Republic; Canada; Czechoslovakia; Finland; France; German Democratic Republic; Germany, Federal Republic of; Greece; Hungary; Ireland; Italy; Netherlands; Norway; Poland; Portugal; Romania; Sweden; Switzerland; Turkey; Ukrainian Soviet Socialist Republic; Union of Soviet Socialist Republics; United Kingdom of Great Britain and Northern Ireland; United States of America; Yugoslavia 1/.
- 2. The following United Nations and specialized agencies were represented: United Nations Conference on Trade and Development (UNCTAD); United Nations Industrial Development Organization (UNIDO); International Labour Organization (ILO); Food and Agriculture Organization of the United Nations (FAO).
- 3. The following intergovernmental organization participated: the European Economic Community (EEC).
- 4. The following non-governmental organizations were represented: European Confederation of Agriculture (CEA); International Organization for Standardization (ISO); Organization of European Sawmilling Industries (OES); Tropical Timber Traders Union of the European Economic Community (UCBT).
- 5. The Committee paid homage to the memory of Mr. Peter Sartorius, former Director of the ECE/FAO Timber Division, of Mr. D. Slachmuylders, for many years a delegate of Belgium, and of Mr. N. Dumitrescu, delegate of Romania and former Chairman of the Timber Committee.

### Adoption of the agenda (Item 1 of the agenda)

6. The provisional agenda (ECE/TIM/18), presented by the secretariat, was adopted.

### Election of officers (Item 2 of the agenda)

7. The Committee re-elected Mr. D. Hair (USA) Chairman, and Mr. A. Froncillo (Italy) and Mr. E. Nowicki (Poland) Vice-Chairmen.

### Matters arising out of the thirty-sixth session of the Commission (Item 3 of the agenda)

8. The Committee was informed of the Commission's discussion of its work and took note of the resolution and decisions of the Commission, on the basis of TIM/R.67. The Committee agreed to take account of these discussions, resolution and decisions in its session and notably when deciding on its programme of work.

## Activities of other international bodies relevant to the work of the Committee (Item 4 of the agenda)

9. The representative of FAO mentioned that the FAO Conference would be convened in Rome in November 1981. Also of specific interest to the Timber Committee was the twenty-second session of the FAO Advisory Committee on Pulp and Paper which took place in Rome in May 1981. The Committee was also informed that the FAO Committee on Forestry would meet in Rome in May 1982 and that the twentieth session of the FAO European Forestry

I/ Further information about participation may be obtained from the secretariat: Timber Section, ECE/FAO Agriculture and Timber Division, Palais des Nations, CH 1211 Geneva 10, Switzerland.

Commission would be held in Innsbruck, at the invitation of the Government of Austria, from 22 to 26 March 1982. Among the items to be dealt with were wood and energy; institutional and economic implications of the size of forest holdings on their management; the impact and role of tourism and recreation in regional planning in forestry; and national progress reports on the development of forestry.

- 10. The representative of UNCTAD drew the Committee's attention to the mandate which his organization had been given by the Fifth Preparatory Meeting on Tropical Timber held in July 1980. This mandate requested the secretariats of UNCTAD and FAO, in close consultation with the ECE Timber Committee, to undertake a study suggesting concrete proposals with a view to achieving an optimum flow of market information on tropical timber. This study would be considered at the meeting of the Intergovernmental Group of Experts on the Improvement of Market Intelligence for Tropical Timber under the Integrated Programme for Commodities which had been rescheduled for 23 to 27 November 1981. This Group of Experts would then suggest concrete proposals to the Sixth Preparatory Meeting on Tropical Timber which would take place from 29 March to 8 April 1982. Other activities of UNCTAD in the field of tropical timber included three regional seminars on research and development for tropical timber which would be convened in Geneva from 10 to 13 November 1981 and be followed by the meeting of the Intergovernmental Group of Experts on Research and Development for Tropical Timber (16 to 20 November).
- 11. The representative of the ILO informed the Committee that the third Tripartite Technical Meeting for the Timber Industry would take place in Geneva from 1 to 10 December 1981. This meeting should constitute an in-depth review of the social and economic questions of logging and draw up guidelines for national policies and international co-operation. The awareness of the economic and social interdependence of the industrialized countries and of the developing countries should form the background of that meeting. The Committee was further informed that the ILO had prepared three reports to serve as a basis for discussions. The general report presented some world trends and perspectives for the timber industry in the technical and social fields, the second report centred on problems of occupational safety and health, and the third dealt with the promotion of employment and vocational training, notably in developing countries.
- 12. The Committee was also informed of the activities of UNIDO in the field of the wood processing industries. These covered technical assistance projects, other supporting activities and the inclusion of the wood processing industry in the system of consultations. It was to be noted that the Industrial Development Board had decided that the first consultation on wood and wood products would take place in October/November 1983. The UNIDO system of consultations aimed to create a new distribution of world industry. UNIDO was most interested to associate the Timber Committee with its preparatory work for the first consultation on wood and wood products.
- 13. The representative of the International Organization for Standardization (ISO) informed the Committee that, in 1981, it had revised and published a bibliography of international standards on wood, wood products, pulp, paper and cork. ISO was also producing more standards on machinery for logging and wood-working purposes. Of interest to the Timber Committee was the updating carried out by ISO of a considerable number of standards concerning coniferous and broadleaved timber.

14. The Committee was informed of the activities of the Forestry Committee of the European Confederation of Agriculture (CEA), mainly in the field of the European market for roundwood and forest products and in the field of labour (wages, social costs and productivity). In this particular field the CEA was prepared to co-operate with the Joint FAO/ECE Working Party on Forest Economics and Statistics and would welcome a mutual attendance of experts in their respective meetings. The General Assembly of CEA in Portugal was dealing with problems emerging from the need to stimulate Europe's wood supply. The CEA was of the opinion that, in order to raise the output of timber from the European forest resource, it was indispensable to lessen the existing obstacles of a fiscal and administrative nature arising as a result of government interference in the economic process. The possibility of coping successfully with the European timber supply problem would depend essentially on the extent to which the governments would adopt this viewpoint. The CEA was prepared to make concrete and detailed proposals in this respect.

### Joint FAO/ECE Working Party on Forest Economics and Statistics (Item 5 of the agenda)

- 15. The Chairman of the Working Party, Mr. E. Clicheroux (Belgium), presented the report of its thirteenth session, held in Geneva in June 1981 (TIM/EFC/WP.2/10). He outlined the main recommendations relating to the classification and definitions of forest products, forest resource assessment, forest labour statistics, conversion factors, forest fire statistics, statistics on wood and energy and the structure and capacity of wood-working industries. He mentioned particularly the discussion at the session on economic aspects of the fuller use of the forest biomass and economic aspects of the introduction of new forest machines and equipment. Problems remained, however, in the area of collection and dissemination of statistics. In particular, the importance of prompt return by countries of questionnaires was stressed by the Working Party. Special attention was given to possible methods of improving the quality of information on stocks and end uses. Mr. Clicheroux also drew attention to the value of transferring the results of the Working Party's activities to other regions and of supporting direct collaboration with other regions as well as the participation of their respresentatives in the Working Party's meetings.
- 16. The Committee expressed satisfaction at the comprehensive way in which the Working Party was carrying out its programme of work and stressed the importance of its findings to the work of the Committee. The wider coverage of the present programme, which now included investigation of economic as well as statistical subjects, was particularly welcomed. It was considered especially satisfactory that the results included suggestions and proposals to the Committee which would be of value for its further work as well as essential recommendations on the collection of statistics. The delegate of the USSR mentioned that the Working Party's findings on fuller use of the forest biomass would be an important input to the seminar on reducing forest biomass losses, to be held in the USSR in December 1982 under the auspices of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers.
- 17. The Committee endorsed the recommendations of the Working Party and its programme of work, as set out in Annex I to its report.

### Market trends and prospects (Item 6 of the agenda)

### (a) <u>Developments</u> in 1981 and prospects for 1982

18. The Committee heard a brief statement from each delegation on recent developments in its country's economy and in the main forest products markets, which supplemented countries' written statements. The Committee took note, during its discussions, of the Annual Forest Products Market Review (Supplement 1 to Volume XXXIV of the <u>Timber Bulletin for Europe</u>), prepared by the secretariat, and of the brief comments by the secretariat

on more recent developments, in TIM/R.68/Add.1. It drew up tables of countries' estimates for 1981 and 1982 of domestic requirements, production, imports and exports of sawn softwood, coniferous logs, hardwood logs and sawnwood, particle board, plywood, fibreboard and pulpwood. A summary table is presented in Annex I.

### General introduction

- 19. The downturn in the markets in Europe for sawnwood and wood-based panels, which has become evident by the time of the Committee's session in October 1980, persisted during the twelve months up to its present session. In North America, after the steep falls that occurred in 1980, these markets have remained subdued in 1981, as have those in many other parts of the world, including Japan.
- 20. Up to the autumn of 1981 at least, pulp and paper markets worldwide have not been seriously affected by the factors which caused the recession in the mechanical wood products sector, and levels of production and consumption of pulp and paper have generally remained near those in 1980.
- 21. A number of factors have contributed to a decline in demand for mechanical wood products during 1981 in Europe and North America appreciably larger than foreseen by the Committee in October 1980. One was the impact on the economies of countries in these regions of the rise in real prices for oil in 1979/80; another factor has been the measures taken by the authorities in many countries to dampen inflation by means of a tight money policy, involving the application of high interest rates as the principal tool. Efforts have also been made to limit public sector spending. These developments have had a serious impact on fixed investment in general and on new housing construction in particular, as well as on the cost of stock holding. The number of new dwellings being built in Europe and North America in 1981 is the lowest for many years.
- 22. The continuing volatility of currency exchange rates was referred to as an important factor creating uncertainty in the international markets for forest products.
- 23. The countries of eastern Europe, including the USSR, have not remained unaffected by the economic slowdown in the west, particularly with regard to their external trade positions. In addition, some production and distribution problems have occurred, notably in the agricultural and forestry sectors as a result of poor weather conditions during the winter of 1980/81.
- 24. While the signals from recent economic indicators have been conflicting, there is some basis for believing, the Committee felt, that the trough of the world economic recession may have been reached in the autumn of 1981. However, great uncertainties remain as to the trends over the coming year or so, and the timing and strength of the upturn referred to in many countries' statements. Much will depend on the policies pursued by the authorities in the United States and other market economy countries, especially towards the problems of unemployment and inflation. For example, should there be some changes of policy to ease unemployment through selective or general stimulation of the economy, especially the reduction of interest rates, this could result in an upturn in demand for forest products greater than the modest and hesitant recovery being forecast by the Committee. A continuation of existing policies, on the other hand, could further postpone the recovery.
- 25. Notwithstanding the difficult period through which the forest products market is currently passing, and the uncertainties with regard to the short-term prospects, the Committee stressed that the outlook for the sector in the medium term remained promising, given such factors as unsatisfied demand for housing, furniture and other products of wood in many countries and the intrinsic merits of wood and its derivatives.

### Sawn softwood and coniferous logs

- 26. After reaching a new record level in 1979, domestic requirements of sawn softwood in Europe (excluding the USSR) fell slightly in 1980. The estimate for 1981 implies that the decline has accelerated, the forecast volume being 71.2 million m3, which is 6.5 million m3 or  $8\frac{1}{2}$  % less than in 1980. The sharpest decreases in domestic requirements are forecast by the leading sawn softwood importing countries, notably those in the European Economic Community, and European imports in 1981, at 23.0 million m3, are estimated to be 4.9 million m3 ( $17\frac{1}{2}$  %) less than in 1980.
- 27. Sawn softwood production in Europe is estimated to amount to 67.4 million m3 in 1981, or 5.8 million m3 (8 %) less than the all-time record produced in 1980. A major part of the drop is expected to be accounted for by lower output in the leading exporting countries, in particular Austria, Finland and Sweden, mainly in the second half of the year. Exports by Europe (excluding the USSR) in 1981 are forecast to reach 18.8 million m3 or 3.5 million m3 ( $15\frac{1}{2}$ %) less than in 1980. The USSR's exports, at 7.3 million m3, are expected to recover slightly from the 1980 figure, when the volume shipped was lower than foreseen.
- 28. From the markedly reduced volumes estimated for 1981, Europe's domestic requirements, production and trade of sawn softwood are forecast to make partial recoveries in 1982. Domestic requirements may rise by 2.0 million m3  $(2\frac{1}{2}\%)$  to 73.2 million m3 and imports by 2.3 million m3 (10%) to 25.3 million m3 respectively; production shows only a small increase, but exports one of nearly 1 million m3 (5%) to 67.6 and 19.7 million m3 respectively.
- 29. Given the grave uncertainties concerning the short-term outlook, referred to earlier, the Committee accepted the reservations expressed by many delegations regarding the reliability of their 1982 forecasts.
- 30. The same qualification should be attached to the forecasts for North America. After the further slight declines foreseen for 1981, domestic requirements in the United States and production in the United States and Canada are forecast to stage a moderate recovery in 1982 to 80.2, 59.2 and 43.0 million m3 (increases of 8 %, 8 % and  $6\frac{1}{2}$  % respectively), all being above the 1980 levels. The same pattern is expected for United States imports and Canadian exports.
- 31. Changes in the supply and requirements of coniferous logs in Europe in 1981 reflect the downward trend expected in sawn softwood production. However, for 1982, a further modest decline is forecast in avaialability of coniferous logs, in contrast to the slight upturn foreseen in sawn softwood production. In trade, the main change is seen in United States exports of coniferous logs, which are directed mainly to Japan. After falling steeply in 1980 and 1981, these are expected to stage a partial recovery in 1982.
- 32. In the course of detailed discussion, a number of points were raised which were considered as significant factors in the short- to medium-term development of the market.
- 33. Stocks of sawn softwood in the hands of European importers were reported to have fallen during 1981 to low levels. These levels were nevertheless considered to be adequate to meet current levels of demand, although they could become unbalanced with regard to certain specifications. Some countries import forecasts for 1982 reflected the intention to fill gaps in landed stocks, but generally speaking import demand will

correspond to the requirements of the consumer industries. Stocks in the distribution pipeline in importing countries are believed to be low, while producers' stocks in exporting countries are being reduced by cutbacks in production. The stock "cushion" all along the chain of supply has thus been shrinking, a development which the trade should take into account in setting purchasing policies for next year. Until there appeared some firm indications of a revival in demand from consumer industries, however, and while the cost of stock-holding remained high, forward buying for 1982 would be undertaken cautiously and business was likely to continue largely on a hand-to-mouth basis.

- 34. The urgent need to restore and then to maintain a better balance between supply and demand was emphasized in order to correct the current poor levels of profitability throughout the sector. However, this demanded flexibility on the part of producers to react promptly to changes in demand. In this respect, it appeared that some of the lessons learnt during the 1974/75 recession were being applied to good effect in the present downturn. It was suggested that the smaller mills, which were often more resistant to market distortions than those with heavy capital investments, had an important role to play through their ability to adjust their output at short notice to changes in the level of demand. Under conditions of weak demand, mills of any size could also react in a qualitative way by improving or varying their product specifications to enable them to enter new markets as well as to improve their hold on existing markets.
- 35. Attention was drawn to the trend over the past decade or so for exporters to diversify their overseas markets. In this respect, the tendency for the share of North African and Middle East markets to increase in the total shipments of European and Canadian exporters was noted. This diversification helped to cushion the impact of fluctuations in particular market areas.
- 36. The Committee also recognized that efforts to expand certain end-use sectors of sawn softwood were proving fruitful over the longer term. The example was cited of timber-framed houses in the United Kingdom, where their share of total new low-rise dwellings had increased dramatically in recent years to a significant proportion of the market. The home improvement and do-it-yourself markets were also still strong outlets in most countries.

### <u>Hardwoods</u> (temperate-zone and tropical)

- 37. European consumption of sawn hardwood in 1980 declined marginally from the peak level of 23.4 million m3 reached in 1979. The decline was accounted for entirely by a drop of nearly 10 % in Europe's imports of sawn hardwood, which in 1979 had recorded a historical peak of 6.7 million m3.
- 38. Imports have shown a declining trend since the second quarter of 1980 and continued to do so in 1981. For the whole of 1981, the Committee expects a drop in imports of sawn hardwood of just over 1 million m3 (17%) to 5.0 million m3, with tropical hardwoods accounting for over 60% of the decline. Europe's domestic requirements are forecast to fall by 1.5 million m3 ( $6\frac{1}{2}$ %) to 21.7 million m3, and production by half that volume (4%) to 19.1 million m3.
- 39. The fall in requirements is the result of the reduced level of activity in most of the hardwood-using industries. But it was stressed that the tendency of the trade, as well as the consuming industries, to reduce stocks made the drop in real consumption appear larger than it was.

- 40. Under the influence of the weaker demand, the previously firm price trend of the majority of sawn hardwood assortments was not maintained. Among temperate-zone species, this was generally more evident in the case of oak than of other hardwoods. Fixorts of oak from the United States may fall following the marked appreciation of the dollar in the first half of 1981.
- 41. Consumption of sawn hardwood in the United States declined by some 4 % in 1980, and is expected to decrease further but more moderately in 1981 (by  $2\frac{1}{2}$  %). Production of sawn hardwood of all species in the United States is expected to follow a similar trend, but both imports and exports are expected to increase slightly.
- 42. European consumption of hardwood logs increased modestly in 1980 compared to 1979, due to higher production. Imports also increased by some 0.4 million m3. For 1981, Europe's requirements are forecast to decline by 1.4 million m3 to 41.4 million m3 and production by less than half that volume (0.7 million m3 or 2%) to 36 million m3. Imports are expected to fall appreciably by over 1.1 million m3 or 13% to 7.7 million m3, the drop being largely in tropical hardwoods, and exports by 0.25 million m3 (9½%).
- 43. For 1982, the Committee expects an overall improvement in the hardwood sector, although in Europe, in contrast to the United States, the levels of 1980 would generally not be re-established. As for softwoods, however, the Committee underlined the problems of forecasting in the hardwood sector under the conditions of uncertainty surrounding trends in the economy.
- 44. Thus Europe's requirements of sawn hardwood are tentatively forecast to increase by 0.5 million m3 (2 %) to 22.1 million m3, and production by nearly as much (0.4 million m3 or 2 %) to 19.5 million m3. Imports and exports are also expected to rise, by 0.3 (6 %) (essentially tropical) and 0.2 million m3 (9 %) to 5.3 and 2.8 million m3 respectively.
- 45. Hardwood log requirements in Europe in 1982 are forecast to rise by 0.8 million m<sup>3</sup> (2 %) to 42.2 million m<sup>3</sup>, to which higher production contributes less than 0.3 million m<sup>3</sup> and higher imports 0.5 million m<sup>3</sup> (a 6 % increase). Exports are expected to drop slightly.
- 46. Availability of domestic hardwood logs in Europe for the 1981/82 season is expected to be adequate to meet anticipated demand. Early auction sales saw a much more cautious attitude of buyers and a weaker price trend than for several years past. This trend is explained by a generally less active development of the sawn hardwood market.
- 47. In the United States, requirements of sawn hardwood are forecast to rise in 1982 to 16.9 million m3, 0.6 million m3 above the level of 1981, of which 0.4 million m3 is met by higher production and 0.2 million m3 by higher imports.
- 48. It was emphasized that it was essential for the sawmilling industry to stimulate demand for its hardwood products through product development in active co-operation with the users of sawn hardwood.
- 49. The need was also stressed for the industry, as well as all the sectors which process and use hardwoods, to co-operate in efforts aimed at assuring the continuity of adequate supplies of hardwoods from both domestic and other sources. In this context, it was also pointed out that the hardwood timber resource in the United States has been improving and can support substantially increased harvests.

50. The Committee expressed its concern about the diminishing area of tropical forests to which cutting for export, local construction and firewood, as well as burning to obtain land for agricultural purposes, are contributing. The Committee emphasized the desirability of ECE Governments co-operating with countries in the tropical regions to reverse this trend.

### Wood-based panels

- 51. In contrast to the other main forest products dealt with by the Committee, developments expected for wood-based panels in 1981 and 1982 show different patterns in Europe and in the United States.
- 52. The forecasts for Europe expect a further fall in 1981, following the decline in 1980, and a recovery only in 1982. In the United States, the sharp declines recorded in 1980 are expected to be reversed in 1981 and 1982, although the volumes in the latter year will probably fall short of those recorded in 1979.
- 53. Domestic requirements of plywood in the United States are forecast to rise by 1.0 million m3 ( $6\frac{1}{2}$ %) in 1981, and by 1.3 million m3 (8%) in 1982 to reach 18 million m3, while production is expected to increase by 1.1 million m3 in both years. Plywood imports and exports are also forecast to rise, exports doubling to 0.5 million m3 in 1981, which would be a record level, and imports to 1.2 million m3 in 1981 and 1.4 million m3 in 1982, a volume still modest compared with imports of over 2 million m3 in several past years.
- 54. More modest rises are expected for United States domestic requirements and production of <u>particle board</u> and MDF (medium density fibreboard). Rises of a similar order are also forecast by the United States for <u>fibreboard</u> (hardboard and insulating board).
- 55. The rise in requirements for wood-based panels in the United States in 1981, which contrasts with the trend forecast for sawn softwood and sawn hardwood, is chiefly attributed to the expanding demand for repair and extension work and from the mobile home industry, which is taking an increasing share of the dwelling construction market.
- 56. It was noted that particle board consumption, rising more strongly than that of fibreboard, had exceeded the latter in volume terms for the first time in 1978 and since then continued to do so.
- 57. In this connexion, attention was drawn to the different ways in which new panel types such as waferboard, oriented strand boards (OSB), MDF and others, were classified in different countries. This made it increasingly difficult to follow trends in the wood-based panels sector with the desired degree of accuracy. The need was stressed for a uniform classification of similar types of panel and corresponding international consistency in statistical reporting.
- 58. For Europe, requirements of particle board are forecast to decline in 1981 by 1.5 million m3 (6%) to 22.5 million m3 and production by 1.1 million m3 ( $4\frac{1}{2}$ %). This is only the second occasion on which the European particle board mærket has dropped, the previous one having been in 1975. A decline is also expected for imports in 1981 but not for exports. It should be noted that a more optimistic forecast for exports than for imports of particle board has been a regular feature of the Committee's estimates in the past.

- 59. In 1982, European requirements and production of particle board are expected to recover by just over half the volume decrease of 1981 to 23.2 and 24.2 million m3 respectively. For imports, a further modest decline is forecast, against an increase for exports of 0.2 million m3 (4%).
- 60. European requirements of plywood in 1981 are forecast to fall by 0.4 million m3  $(7\frac{1}{2}\%)$ , equally accounted for by a drop in production and in imports; and those of fibreboard to decline by 0.3 million m3  $(6\frac{1}{2}\%)$ , in which lower production accounts for two-thirds and lower imports for the remainder.
- 61. For 1982, Europe's plywood requirements are expected to recover half the volume fall of 1981 to reach 5 million m3, but those of fibreboard to remain practically at the level of 1981, 4.4 million m3.
- 62. The fall in demand and production of wood-based panels is causing serious problems for many mills whose capacity remains substantially under-utilized. Some mills have been closed, others are working reduced schedules, while a number are being converted to other products, for instance from particle board to MDF. The Committee discussed the possible influences on demand and market patterns which the introduction of MDF and other new wood-based panels could have over the medium-term. In several c ountries new MDF production capacity is at present being built or planned.
- 63. The need for the panels industries to adjust to new or changing needs and requirements was stressed. For example, several countries have introduced regulations concerning the level of emission of formaldehyde by particle board.

### Pulpwood

- 64. Conditions on the pulpwood market are largely determined by those on the markets for pulp and paper which were not as satisfactory in 1981 as in 1980, although these products fared better than those forest products linked to the construction sector. In many countries demand for and production of pulp weakened during 1981 after a fairly satisfactory start. An important factor was the rise in the first half of 1981 in the value of the United States dollar in which pulp prices are quoted. This development encouraged papermakers in some countries to turn to domestic pulp rather than to imports, and increased income per ton of pulp for pulp exporters outside North America.
- 65. The Committee forecasts for domestic requirements of pulpwood in 1981 show practically no change over 1980 for Europe as a whole (165.4 million m3) and a 2.5 % increase for the United States, to 191.6 million m3. Within the European total, however, France forecasts a rise in domestic requirements for 1981 of just under 0.9 million (8 %), as domestic pulp recovered some of the market share it had lost to imports in previous years. In the Federal Republic of Germany, on the other hand, domestic requirements are expected to fall by 5 % to 13.7 million m3 and in the United Kingdom by nearly 30 %, due to plant closures.
- 66. European domestic supply of pulpwood, especially removals of round pulpwood, is expected to increase in 1981, notably due to the rise in pulpwood prices which occurred in many countries in 1980. In 1981, European domestic supply is forecast to rise by 3%, to just under 160 million m3. Domestic supply of round pulpwood is expected to rise by 14% in Sweden to 25.4 million m3, by nearly 7% in Finland to 23.8 million m3, and by 10% in France to 9.5 million m3. In many European countries there is a sharp contrast between forecasts for supply of roundwood and for supply of residues and chips. The former is expected to rise, sometimes strongly, while the latter is forecast to drop or to rise considerably more slowly. This is no doubt due to rising prices for round pulpwood and a decline in availability of sawmill residues, caused by the depressed conditions in the sawnwood markets. In some countries, such as Sweden and the United States, lower grade logs, which would otherwise have been sawn, were chipped, because of weak demand for sawnwood.

- 67. The trade in pulpwood is expected to fall in 1981. In Europe, after two years of rapid growth in trade, probably due to supply problems for locally produced pulpwood, a slight drop is expected in imports and exports of pulpwood (20.7 million m3 and 14.4 million m3 respectively). Exports of pulpwood by the United States, the USSR and Canada are also expected to drop very sharply in the case of the United States (22 %), whose chip exports are expected to fall from 7.8 to 6.1 million m3. These exports go mostly to Japan whose pulp industry has announced production cuts and marked drops in pulpwood requirements for 1981/82, following the reductions in pulpwood consumption in 1980. There is also lower availability of chips as a result of reduced sawmill activity in the United States.
- 68. For 1982, the Committee forecasts a 1.4 % rise in European domestic requirements of pulpwood to 167.8 m3 but a slightly stronger rise (2.7 % to 164 million) in domestic supply. Sweden expects an increase in domestic supply of  $6\frac{1}{2}$  % to over 37 million m3 in 1982. The United States also forecasts a 2 % rise in 1982 in domestic requirements and supply, to 195.5 million m3 and 198.9 million m3 respectively. Europe's trade in pulpwood is forecast to continue its fall, by 9 % for exports and 1.7 % for imports, while increases are forecast for exports from Canada and the United States and a slight fall for the USSR.
- 69. During an interesting and wide-ranging discussion, the Committee noted that pulp-wood prices had stabilized in 1981 in many countries, although further price rises had been reported in the Nordic countries. The price level was considered crucial in determining the degree of mobilization of the resource, as harvesting costs continue to rise, partly because of an increasing share of small-sized wood. Rising raw material costs, however, also threatened the profitability of the pulpwood using industries, especially in the present period of marked uncertainty as regards the overall condition of the sector, exacerbated by sharp swings in the value of major currencies.
- 70. Demand for fuelwood had continued to be strong in many countries, in some cases affecting the market for pulpwood, notably broadleaved pulpwood. Better information on the fuelwood markets was necessary, however, before satisfactory analysis of this sector as possible.

### (b) Medium-term survey of trends in the sawnwood and sawlog sector

- 71. The Committee was informed of the results of the medium-term survey of trends in the sawnwood and sawlog sector, which was being published as Supplement 2 to Volume XXXIV of the Timber Bulletin for Europe. The medium-term surveys are in-depth analyses of developments in the sector over a longer period than is possible in the context of the current market reviews and compare medium-term trends with the longer-term forecasts in European Timber Trends and Prospects, 1950 to 2000 (ETTS III). They are intended to provide early warning of deviations from projected trends that could have implications for national policies in the timber and forestry sector.
- 72. Among the main findings and conclusions of the 1981 survey were :
  - Europe's apparent consumption of sawnwood at the end of the 1970s was well within the range of forecasts in ETTS III, despite the fact that not all of the underlying assumptions, notably regarding economic growth, had proved fully accurate, and that new housing construction had tended to stagnate in Europe;
  - A strong rise occurred in Europe's imports of sawn hardwood (in contrast to those of hardwood logs), primarily of tropical species from South East Asia; tropical species were estimated to account for over 20 % of Europe's total consumption of sawn hardwood in 1980;

- Removals of coniferous logs rose markedly in North America and Europe, which contrasted with a relative stagnation in removals of hardwood logs;
- Exports of coniferous logs from North America (primarily the United States) to Japan and some other countries in the Asian region showed a strongly rising trend:
- A marked expansion also took place in the production and exports of sawn softwood in North America.

The Committee took note of the findings of the survey, which had its general support, and expressed its appreciation for the study.

- 73. The secretariat also presented crally the draft report of the team of specialists on sawmilling questions, whose first meeting was held in Geneva from 1 to 2 October 1981, under the Chairmanship of Mr. P. Miettinen (Finland). The Committee noted the importance of the activities of the team of specialists and agreed that its main task should be to draw up a draft enquiry on the structure of the sawmilling industry. The Committee noted the team's preliminary suggestions regarding the topics to be included in the enquiry, the frequency of enquiries, the desirability of including industry capacity data in the survey, of obtaining information on existing national surveys, of definitions and of collecting data on end-uses. The Committee requested the team to submit a draft enquiry for consideration at its session in October 1982.
- 74. The Committee approved the team's proposals for its methods of work and the suggestion that Mr. Z. Tamminen (Sweden) be invited to act as team leader to direct the team's future activities and to provide the necessary liaison with the secretariat.
- 75. It agreed to invite countries to provide to the team information on national industrial censuses which include the sawmilling sector and on specific sawmill surveys, as well as definitions of the basic terms used in such surveys. It also welcomed the suggestion of the team that a seminar be arranged on methodologies of data collection on the sawmilling sector, which would be of particular interest to developing countries seeking to establish such systems.
- 76. The Committee noted the provisional offer of Mr. Miettinen to hold the second meeting of the team of specialists in Finland in May or June 1982.
- (c) Organization of the market discussions
- 77. The Committee considered that in general the present organization of the market discussions was satisfactory. However, a number of suggestions for improvement were made, including the following:
  - to spread the discussion more evenly over Tuesday and Wednesday;
  - to give higher priority and more time to sawn softwood;
  - to discuss logs together with pulpwood, so that the roundwood market could be reviewed as a whole;
  - to clarify the definitions of the various categories of wood-based panels;
  - to consider other factors affecting the market, such as public opinion.
- 78. The Committee requested the secretariat to examine these suggestions and report to the meeting of the Office-holders in April 1982. The Office-holders would decide whether the format for discussion at the Committee's fortieth session should be modified.

79. The Committee stressed once again the importance of Japan on the world forest products markets, as a major consumer and importer, whose situation strongly affected developments in the ECE region. The Committee considered that it would be most valuable for a Japanese delegation to attend Timber Committee sessions and requested the secretariat to invite the Japanese authorities to send delegates to its sessions. In addition, delegations of countries which traded with Japan could assist the secretariat in drawing the attention of appropriate Japanese agencies to the Committee's interest in Japanese participation.

Review of Timber Committee activities between its thirty-eighth and thirty-ninth sessions (Item 7 of the agenda)

- (a) Meeting of the team of specialists on wood/energy questions
- 80. The Committee was informed of the activities of the team of specialists on the basis of TIM/R.69 and Add.1. It endorsed the recommendations intended to improve the information base on energy derived from wood drawn up by the team of specialists, and approved by the Joint FAO/ECE Working Party on Forest Economics and Statistics (TIM/R.69, para.6). In particular it requested delegations to check the estimates presented for their country in TIM/EFC/WP.2/R.42/Add.1, notably in table 1, and to inform the secretariat of any necessary corrections. Furthermore, as these estimates appeared to be the best available indications of the quantities of wood used as a source of energy, the secretariat should use them as a basis for modifying the time series shown in the FAO Yearbook of Forest Products.
- 81. The Committee also accepted with pleasure the invitation of the Government of the Federal Republic of Germany to act as host to the seminar on energy conservation and self-sufficiency in the sawmilling industry, and endorsed the proposals set out in TIM/R.69/Add.1. It noted that a preparatory meeting was scheduled for November 1981 to draw up final plans for the seminar and to establish a list of potential authors of papers. The seminar is scheduled to take place from 13 to 17 September 1982, probably in Bonn.
- 82. In view of the great potential impact of developments in the energy sector on the forest sector, the Committee reaffirmed its decision that the next long-term timber trends study (see item 11 (a) (ii) of the agenda) should pay particular attention to energy aspects. An <u>ad hoc</u> meeting to discuss these potential effects in depth should therefore be convened at an early stage in the preparation of the study, along the lines proposed by the team of specialists (TIM/R.69, para. 10 and TIM/R.73, para. 15).
- (b) Stress grading and finger-jointing of coniferous sawn timber
- 83. The report of the <u>ad hoc</u> meeting on this subject (TIM/WP.3/AC.3/10) was presented by its Chairman, Mr. W.E. Townsley (Canada). The meeting had drawn up for the Committee's approval revised versions of the ECE recommended standards on stress grading and on finger-jointing of coniferous sawn timber, as well as forms which could be used to gain approval by an importing country of graded or finger-jointed structural sawnwood produced in another country. Unfortunately, however, as the main documents for the meeting had not been issued in Russian beforehand, the delegation of the USSR had been compelled to register reservations and to transmit comments after the meeting. In the circumstances, the Committee agreed that the <u>ad hoc</u> meeting should be convened again as soon as possible after the documentation was complete in all official languages to discuss the USSR comments on the recommended standards as proposed in the annexes to TIM/WP.3/AC.3/10. The <u>ad hoc</u> meeting could authorize immediate publication of the standards and approval forms if it considered that it was not necessary for them to be resubmitted to the Committee. In the meantime, Mr. Townsley, in consultation with the

secretariat and other interested experts should review the follow-up activities mentioned in paragraph 15 of TIM/WP.3/AC.3/10, with a view to implementing without delay those which could already be carried out, notably the exploration of possibilities of reconciling differences between European and North American standpoints.

- 84. The Committee deplored the loss of time and resources caused by the unavailability of translated documents and urged the secretariat to do all in its power to ensure that such a situation did not recur.
- 85. The Committee reaffirmed its intention to transfer the recommended standards to ISO for issuance as international standards, but considered that it was not yet appropriate to take this step in view of the continuing uncertainties about the final version of the standards.

### (c) Study tour in the USA

- 86. The Committee was informed of the study tour on the West Coast of the USA, which was held from 13 to 23 September 1981. The tour passed through the States of Washington and Oregon, visiting stands of Douglas fir, intensively managed forests, Ponderosa pine forests and the redwoods in northern California, to end in San Francisco. The participants also visited sawmills, plywood plants, research laboratories, seed orchards and nurseries.
- 87. The Committee warmly thanked the Government of the USA and particularly the Department of Agriculture Forest Service for an extremely well organized and particularly interesting study tour and for the generous and friendly hospitality extended to the participants.

### Timber Committee Yearbook (Item 8 of the agenda)

- 88. The Committee welcomed the publication of the 1980 Yearbook (Supplement 9 to Volume XXXIII of the <u>Timber Bulletin for Europe</u>), and considered it very useful in making the Committee's work known to a wider circle of interested experts. The Committee decided therefore that the Yearbook should be published annually and endorsed its objectives as set out in TIM/R.70, para. 3. It also welcomed the general format and presentation. Among the suggestions for minor modifications were the following:
  - a more professional layout;
  - use of a smaller format;
  - a more detailed bibliography;
  - distribution shortly after the Committee session;
  - more information on the continuing and long-term items of the work programme, in order to place the meetings, seminars, etc. in context.

The Committee also welcomed the fact that the Yearbook had been translated by countries into several other languages than the three official languages.

89. Mr. A. Skeppstedt (Norway) informed the Committee that a seminar on international organizations for Nordic forest and forest industries public information officers had taken place in March 1981 in Geneva and Rome. The participants had been able to review in depth the activities of the international organizations concerned with forestry and forest industries, including the Timber Committee. A booklet based on the presentations to the seminar was being prepared and would be available free to interested experts from the Timber Committee secretariat or the Nordic organizers. He expressed appreciation on behalf of the participants to the international organizations which had contributed to the seminar.

90. The Committee welcomed this initiative as contributing to the widening of the flow of information between countries, and noted the secretariat's offer to contribute to a further similar seminar, if a group of countries expressed interest in such an idea.

### Special lecture (Item 9 of the agenda)

- 91. As agreed by the Timber Committee's office-holders, the special lectures presented to the Committee covered the topic of the chemical processing of wood (other than for pulp and paper) and the potential of the use of wood for chemical products.
- 92. Mr. K. Forss (Finland) presented the wood chemical situation in his country, particularly as regards the utilization of pulping liquors which provided the feedstock for a wide variety of products including tall oil, lignosulphonates, turpentine, ethanol and proteins. He pointed out the importance of giving attention to the marketing of these specialty chemicals.
- 93. The presentation by Mr. J. Puls (Federal Republic of Germany) reviewed the perspectives on the production of chemicals from wood and notably the main chemical conversion technologies of wood. He pointed out that potential existed for the production of a variety of chemicals from wood and other forest biomass. He concluded that further research and development could certainly do much also to improve their competitive position.
- 94. In his lecture, Mr. V.P. Nemtsov (USSR) dealt with questions of technologies and techniques of processing raw material from mature and fresh timber after the application of paraquat and put forward economic aspects of the application of old and innovative technological processes for the preparation of feedstocks for wood chemicals.
- 95. The secretariat presented the results of an enquiry on the "use of wood for chemical processing: estimation of relative importance of sector at present" (TIM/R.71). The main finding of this enquiry was that there had been no significant long-term increase in the production of wood chemicals with the exception of some interesting developments in the pulp sector. In view of the fact that the information collected by the secretariat would be used in the forthcoming long-term study to be undertaken by the Timber Committee, countries were invited to provide data and more accurate estimates of the situation in the chemical sector and to eheck the data in TIM/R.71 for their country. Answers to three specific questions would be particularly useful in this connexion: what were the chemical products produced from wood; what quantities were produced; and how much wood was consumed?
- 96. The Committee thanked the lecturers warmly for their most interesting presentations and, in view of the value of the lectures, it requested the secretariat to explore the possibility of publishing them as a supplement to the <u>Timber Bulletin for Europe</u>.
- 97. The Committee was also informed of the relevant activities of the Chemical Industry Committee, including forthcoming studies on non-waste technologies in the production of organic chemicals and trends in raw material for organic chemicals, and a possible seminar on the role of bio-technology in the chemical industry. Wood-based chemicals would be considered in all these.

## Activities of other Principal Subsidiary Bodies of ECE of interest to the Timber Committee (Item 10 of the agenda)

98. The Committee was informed on the basis of document TIM/R.72 of the activities of other Principal Subsidiary Bodies of ECE dealing with problems of concern to it. The Committee took note of the document and agreed to take the information presented into account when discussing its own programme of work.

### Programme of work for 1982-1986 (Item 11 of the agenda)

- (a) Activities scheduled for 1982
  - (i) Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers, fourteenth session
- 99. The Committee was informed of preparations for the fourteenth session of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers to be held in Sandefjord from 22 to 25 June 1982 at the invitation of the Government of Norway. The session would be preceded by a study tour in Norway (14-17 June) and a seminar on the planning and techniques of transport and its relation to forest operational activities (17-22 June), organized in collaboration with the International Union of Forestry Research Organizations (IUFRO). The Committee took note of the provisional agenda for the fourteenth session of the Joint Committee (TIM/EFC/WP.1/11), which had been drawn up by the Steering Committee.
- 100. The Committee was also informed of the following two seminars to take place in 1982 under the auspices of the Joint Committee:
  - Seminar on the management of forest worker training, which will be held at Dumfries (Scotland) from 10 to 14 May at the invitation of the Government of the United Kingdom and will include two days of study visits; and
  - Seminar on reducing forest biomass losses in logging operations, to be held in Moscow from 6 to 11 December at the invitation of the Government of the USSR, which will include a two-day study tour.
  - (ii) Preparations for the next long-term study of timber trends and prospects
- 101. The secretariat submitted its proposals for the scope and method of carrying out the next long-term study (TIM/R.73). Regarding the scope, the Committee decided that the study should take European Timber Trends and Prospects, 1950 to 2000 (ETTS III) as a starting point, re-appraise the conclusions of that study in the light of events since it was prepared and examine in greater detail aspects which had not been given sufficient attention or which had since grown in importance.
- 102. It recommended that the study review the economic and demographic assumptions on which the ETTS III projections were based; projection methodology; factors underlying demand in the main end-use sectors; the influence of environmental, economic and institutional factors on wood supply; energy; and inter-regional trade.
- 103. The Committee noted that to prepare the study within the timespan indicated in TIM/R.73 would place a considerable workload on the secretariat. Accordingly,
- (1) it strongly urged countries to consider how they could contribute to the work in terms of expert or financial assistance along the lines suggested in TIM/R.73, paragraph 18 (v) and (vi);

- (2) it invited countries to nominate small teams of correspondents charged with the task of assisting the secretariat by collecting in their countries the information needed for the study and of discussing relevant questions with the secretariat;
- (3) it invited its office-holders to consider a temporary reallocation of resources amongst the projects in its programme of work in order to release more for the project in question (see also para. 110).
- 104. The Committee invited countries to make their experience in carrying out national long-term studies available to the secretariat. In view of the paucity of information in the areas of end-uses of wood products and of energy, it invited countries to carry out investigations in these two fields, and to make results available for use in the study. The investigations on energy should build on the work being carried out by the team of specialists on wood and energy questions (see para. 80).
- 105. The interest of the FAO Advisory Committee on Pulp and Paper for a new study of the outlook in that sector and the work of FAO on developing a projection methodology for supply and demand for forest products were mentioned. It was also recommended that close collaboration be maintained with the International Institute for Applied Systems Analysis (IIASA) in the development of the study.
- 106. The Committee agreed that once intensive work on the study began, it would be desirable that it be completed without delay. The timetable suggested by the secretariat, with the objective of preparing a draft for review in 1985 by an ad hoc meeting, and final publication in 1986, was therefore regarded as realistic.
- 107. The Committee requested the secretariat to bring its proposals to the attention of the FAO European Forestry Commission, which was co-sponsoring the study; and to report on progress to its fortieth session.

### (iii) Study tour in Czechoslovakia

108. The Committee was informed of the programme for the study tour, which would take place from 26 September to 2 October 1982, and visit forest industries in eastern Bohemia, southern Moravia and western Slovakia (production of sawnwood, wood-based panels and furniture).

### (b) Review and revision of the draft programme of work

- 109. The Committee considered its programme of work on the basis of a draft prepared by the secretariat (TIM/R.74) which took into account the programme the Committee had approved at its thirty-eighth session, the resolution, decisions and discussions of the Commission at its thirty-sixth session, and the results of the meetings of the Committee's subsidiary bodies. The Committee also took into account its discussions under other items of the agenda.
- 110. In the context of the preparations for the forthcoming long-term study under project 14.1.1. (see paras. 101 to 107 above), and in view of the necessity of freeing secretariat resources to prepare the study, the Committee considered that one project which might be suitable for suspension during the period of preparing the study, was the surveys of medium-term trends in the markets for specific forest products (project 14.1.3.). The study of long-term trends would duplicate to a certain extent the medium-term surveys.

- 111. The Committee invited the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers to consider whether projects 14.3.1.2.4. Terrain classification from the wood harvesting point of view and 14.3.1.2.5. Compatibility of harvesting methods and equipment with silviculture and the environment should be merged, given the relationship between the two topics.
- 112. The Committee endorsed the office-holders' proposal that teams of specialists should be established to advise the Committee on the scope and method of carrying out activities under projects 14.3.3. - Economic and technical developments in the furniture industry and 14.3.4. - Modernization in the wood-based panels industries. The teams should take as a basis for their work the proposals of a number of countries set out in annex III of TIM/R.74 as well as suggestions offered by the USSR delegation. For project 14.3.3., this delegation suggested that a seminar be held on trends in furniture styles and their influence on the consumption of wood products in furniture. might be held in conjunction with the 1984 international furniture exhibition in Yugoslavia. Another seminar could be held at a later date on development of the technological methods of designing furniture, in which field Czechoslovakia had offered expert assistance. For project 14.3.4., the USSR delegation also suggested the organization of two seminars: one on developments in the use of wood-based panels, which would be a follow-up to, and in accordance with the recommendations of the 1980 symposium in Helsinki (Finland), and a second on the use of wood-based panels in the construction sector, a field in which the Federal Republic of Germany was well advanced.
- 113. The delegation of the United Kingdom informed the Committee that its authorities were considering the possibility of extending an invitation for the Committee study tour in 1983.
- 114. It was suggested that the secretariat consider the possibility of including in the document setting out the proposals for its programme of work a record of what had been done since its previous session, with a view to providing a historical background to the activities proposed.
- 115. The Committee approved its programme of work for 1982-1986 as set out in annex II.

### Other business (Item 12 of the agenda)

116. The Committee heard a message delivered on behalf of the Director-General of FAO, Mr. Edouard Saouma, on the occasion of the first World Food Day. The Committee recognized the immense importance of the subject and transmitted its members' best wishes for the success of the vital work of FAO in this area.

### Adoption of the report of the Committee's ession (Item 13 of the agenda)

117. The draft report presented by the secretariat was adopted, with some modifications which have been incorporated in the present document.

### Date of next session

118. The Committee agreed that its next session should be held from 11 to 15 October 1982, subject to the availability of conference services for that period.

Europe (excl. USSR) : Summary table of market forecasts for 1981 and 1982 (million m3) Annex I

	Domest	Domestic requirements	ements	Ċή	Production	7		Imports			Exports	:
	1980 (actual)	H	981 1982 (estimates)	1980 (actual)	1981 1980 (estimates)	1982 nates)	1980 (20 tual)	1981 1982 (estimates)	1982 ates)	1980 (actual)	1981 198 (estimates)	1982 tes)
Sawn softwood	77:74	71.20	73.16	73.22	67.39	67.62	27.85	23.00	25.28	29.17a/	26.06a/	27.07a/
Coniferons logs	128:65	120,16	118.41	126.15	118.96	116.50	6.04	5.31	5.30	4.01	3.39	3.22
Sawn hardwood	23.20	21.66	22.12	19.87	19.11	19.53	6.07	5.02	5.31	3.13	2.57	2.79
- temperate zone							2.80*	2.43%		2.90*	2.36%	2,56*
- tropical							3.27*	2.59*	2,87*	0.23*	*[~	0.03%
Hardwood logs	42.84	41.40	42,22	76.67	35.97	36.22	8.86	7.72	8.21	2.56	١٤٠٥	00:0
- temperate zone							2.89*	2:70*	2:74%	2,45%	2,24*	*60.0
- tropical							5.97*	5.02*	5.47*	*11*0	**********	72.7 % K L 70
Particle board	24.00	22.47	23.23	24.40	23.33	24.23	4.72	4.44	4.47	0	CO	) C
Plywood	5.21	4.82	5.01	3.63	3.41	3.55	3.02	2.84	2:91	1.48	0V. C	7 · L
Fibreboard	4.66	4:35	4.37	4.45	4.30	4.38	1.46	1.35	1.39	1.22	1.23	90.4
rulpwood - mandinos	165.96		167.75	154.96	159.72	164.04	21.66	20.66	20.30	20.60a/	20:07a/	18.59a/
- roundwood confilerous	81.47*		•	73.39*	78.70%	•	10.16*	9.45%	:	6.56	6.71	
residues, ching and	\$7.50*	58.53*	0	35.96*	37.42*		7.23*	6.83*	•	4.72	4.39	:
particles	46.99*	44.13*	•	45.60*	43.60*	:	4.27*	4.38*	•	3.58	3.27	

including USSR.

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#### ANNEX II

#### ·TIMBER COMMITTEE PROGRAMME OF WORK FOR 1982-1986

### WORK AREA 14.1: MEDIUM AND LONG-TERM TRENDS AND PROSPECTS

Estimated Estimated duration termina(in years) tion year

14.1.1. Review of projections made in the study "European Timber Trends and Prospects, 1950 to 2000" in relation to actual developments

<u>Description</u>: The Committee will keep under review long-term trends in production, trade, consumption and prices of forest products, comparing them with projections made in the long-term study, both to check the accuracy of the analyses presented in the study and in order to provide early warning of changes in trends, thus enabling Governments to review their long-term forest policies in the light of recent developments.

Method of work: The Committee will compare, on a continuing basis, real trends with the projections of the long-term study, as an integral part of its analyses of specific aspects of the forest products sector (notably under projects 14.1.2., 14.1.3., 14.2.1.). In addition, the secretariat will prepare an overall study which will compare real trends up to 1980 with projections. One aspect to which this study would pay particular attention is the effects of developments in the energy sector on supply and demand of forest products. An <u>ad hoc</u> meeting on this aspect of the study will be held in 1982 or 1983. A draft of the long-term study will be prepared with target dates of 1985 for review by an <u>ad hoc</u> meeting and 1986 for final publication. A progress report will be presented to the Committee's fortieth session.

cont.

- 14.1.2. Medium-term trends in the structure and capacity of the wood-processing industries
- 14.1.2.1. The wood-based panels industries

<u>Description</u>: The Committee will review the structure and capacity of the wood-based panels industries in order to enable Governments to form their own industrial policies for the wood-based panels sector in the light of information on international conditions.

Method of work: Surveys will be undertaken at three-yearly intervals (next survey in 1983). The results of the survey, including the effectiveness of the revised form of enquiry, will be reviewed by the fourteenth session of the Joint Working Party on Forest Economics and Statistics.

cont.

Estimated Estimated duration termina- (in years) tion year

### 14.1.2.2. The sawmilling industry

Description: The Committee will review the structure and capacity of the sawmilling industry in order to enable Governments to form their policies for the sawmilling industry in the light of information on international conditions.

Method of work: The Committee will undertake surveys at regular intervals (next survey in 1984). A team of specialists will prepare a draft enquiry for approval by the fortieth session of the Committee.

cont.

## 14.1.3. Medium-term trends in the markets for specific forest products

<u>Description</u>: The Committee will review medium-term (3-5 years) trends in the production, consumption, trade and prices of major forest products so that Governments may be continuously informed of structural trends in the forest products markets of the ECE region.

Method of work: The secretariat will prepare one study annually, on a three-year rotation of subjects, as follows: Sawnwood and sawlogs in 1984, 1987, etc.; pulpwood, wood for energy and miscellaneous roundwood in 1982, 1985, etc.; wood-based panels in 1983, 1986, etc. The secretariat will prepare at intervals as will be decided, a review of trends in roundwood production and supply.

cont.

### 14.1.4. Trends, prospects and policies in southern Europe

<u>Description</u>: The forest and forest industry policy and environmental problems facing countries in the Mediterranean area will be reviewed in the light of the long-term outlook for their forest economies, as depicted in <u>European Timber Trends and Prospects</u>, 1950 to 2000.

Method of work: The Committee will convene an ad hoc meeting in (year to be decided) on the production and marketing of products of specific interest to Mediterranean forestry, including cork and resin, and other such meetings, as the need is identified. All activities under this project will be carried out in co-operation with the FAO European Forestry Commission:

cont.

## WORK AREA 14.2: CURRENT MARKET DEVELOPMENTS AND SHORT-TERM PROSPECTS, INCLUDING PROBLEMS RELATING TO INTERNATIONAL TRADE

Estimated Estimated duration termin— (in years) tion year

## 14.2.1. Review of production, trade, consumption and prices of forest products

Description: The Committee will analyse on a continuous basis, short-term trends in the production, trade, consumption and prices of forest products and forecast short-term prospects, with a view to providing Governments and the forest products sector with accurate and up-to-date information and assessments, necessary for an orderly development of the supply/demand mechanism.

Method of work: The secretariat will prepare and publish annually a review of trends in forest products markets over the previous year, based on data supplied by Governments in connexion with project 14.5.1. The secretariat will present to the Committee's annual session the most recent available data on trends in the market for forest products, obtained from questionnaire returns, with a brief analysis of the situation. The Committee will review, at its annual session, short-term trends and prospects in the production, trade, consumption and prices of major forest products (sawn softwood, hardwoods; including tropical, pulpwood, coniferous logs and wood-based panels) on the basis of estimates prepared by delegations, for the current and following years. After the session, the secretariat will prepare and publish an analysis of short-term market trends and prospects, based on the Committee's discussions.

cont.

## 14.2.2. Rationalization of the flow of forest products from the forest to the consumer, including transport and handling problems

Description: The Committee will review the distribution chain for forest products from the forest to the consumer, including transport and handling problems, and identify areas where it might recommend any action which it considers necessary to rationalize the flow of products and to increase efficiency with a view to facilitating international trade.

Method of work: The Committee's coordinator on transport and handling problems will make recommendations to the Committee for work in this field, as and when appropriate.

#### 14.2.3. Review of standardization activities

<u>Description</u>: The Committee will review regularly needs and priorities for standardization in the field of forest products as well as progress in its own standardization projects (14.2.4., 14.2.5.). On the basis of this review, it will decide what activities it should undertake, with a view to facilitating international trade in forest products by removing non-tariff barriers, and to furthering the rational and economic use of wood.

Method of work: The Committee will base its annual review on a report, and if necessary, recommendations by its co-ordinator in the field of standardization. Co-operation will be maintained with ISO and its appropriate Technical Committees.

Estimated Estimated duration termina- (in years) tion year

### 14.2.4. Standardization of stress grading and fingerjointing of coniferous sawn timber

Description: The Committee will encourage the incorporation of the provisions of the revised ECE Recommended Standards on stress grading of coniferous sawn timber and on finger-jointing in structural conifercus sawn timber into national standards, and undertake further work to extend their international acceptability and application with a view to ensuring the rational and economic use of, and to facilitating trade in, coniferous sawn timber.

Method of work: An ad hoc meeting will be convened in 1982 to prepare the final version of the recommended standards on stress grading and finger-jointing of conifer us sawn timber, and the approval forms for structural timber. The standards and forms will be published after the ad hoc meeting unless it considers it necessary to submit them to the fortieth session of the Timber Committee. The team of specialists on this subject will prepare concrete proposals for the implementation of the recommendations in TIM/WP.3/AC.3/10, para. 15.

## 14.2.5. Reduction of the number of standard dimensions of sawnwood entering international trade

<u>Description</u>: The Committee will formulate proposals for the reduction of the number of standard dimensions of sawnwood entering international trade, on the basis of ISO International Standard 3179 and in collaboration with ISO, with a view to facilitating international trade in sawnwood.

Method of work: The Committee will keep under review progress in the work being undertaken by other organizations, notably ISO, with a view to collaborating in such work as and when it considers it appropriate.

### 14.2.6. Problems of classification and definitions

Description: The Joint FAO/ECE Working Party on Forest Economics and Statistics, in co-operation with the Conference of European Statisticians, will keep under review and co-operate in the work of harmonizing multi-sector classifications and definitions (e.g. the CCC Harmonized System, ICGS, SITC, ISIC), developments in technology and in industrial and trade practice, to ensure that the appearance of new products and changes in organizational structures are taken into account.

Method of work: The FAO/ECE Classification and Definitions of Forest Products will be published. A review will be undertaken of the parts of the ISIC and the ILO ISCO relating to forestry and forest industries with a view to formulating proposals for their possible revision.

cont.

3

1984

## SELECTED ECONOMIC, TECHNOLOGICAL AND MANAGERIAL PROBLEMS

Estimated Estimated duration termina-(in years) tion year

### 14.3.1. Forest working techniques and training of forest workers

This project is covered by the activities of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers, which normally meets biennially (1982, 1984, etc.). Its task is to foster international collaboration on technical, economic and organizational aspects of forest working techniques and training of forest workers in logging and other forest operations; special attention is given to increasing the efficiency of labour, the reduction of the physical efforts of the worker, prevention of accidents, reduction of waste and the establishment of an adequate balance between technical, social and economic requirements and protection of the environment.

The project components are set out below under three main headings:

- 1. Silvicultural operations and general management aspects:
- 2. Wood harvesting and transport; and
- 3. Human aspects of forest operations.

## 14.3.1.1. <u>Silvicultural operations and general management aspects</u>

## 14.3.1.1. Development and use of machinery and methods for stand establishment, including planting stock and equipment

<u>Description</u>: The Joint Committee will promote the exchange of information and further rational regeneration methods which do not damage the forest ecosystem, by regularly reviewing machines, techniques and planting stock applied in afforestation and reforestation, with emphasis on site clearing, soil preparation and planting.

Method of work: Seminars and/or study tours will be organized at intervals. A seminar on machines and techniques in plant production will be held in 1983 in Czechoslovakia.

cont.

### 14.3.1.1.2. Forest fire prevention and control

<u>Description</u>: The Joint Committee will examine techniques and equipment used in forest fire control, as well as preventive measures, with a view to assisting Governments in these fields.

Method of work: A seminar will be held in Portugal in 1985. Proposals by the seminar in 1981 in Poland on forest fire prevention and control will be considered by the Joint Committee's fourteenth session.

Estimated Estimated duration termina(in years) tion year

### 14.3.1.1.3. Methods of measurement of labour productivity

Description: The Joint Committee will review methods of assessing productivity of man and machines, and methods of measurement of standard times whereby to determine the relationship between changes in labour input and machine input and assess the effects and implications of replacing labour by machines.

Method of work: Proposals by the Steering Committee regarding future work will be considered by the Joint Committee's fourteenth session.

1982

### 14.3.1.1.4. Planning and management of forest operations

<u>Description</u>: The Joint Committee will study methods of planning forest operations, especially in the long term, taking into account the impact of environmental and social constraints on the planning and method of work; it will also examine methods of assessing technical and economic accessibility of forest resources, so as to assist Governments in the planning and rational utilization of the resource.

Method of work: Proposals formulated by the Steering Committee at its fifth session will be considered by the Joint Committee's fourteenth session.

### 14.3.1.1.5. Development of methods and equipment for silvicultural operations and multiple use forestry under Mediterranean conditions

Description: The Joint Committee will promote the exchange of information and further the development of methods and techniques applicable to silvicultural operations and multiple use forestry under the particular conditions found in countries in the Mediterranean area, with a view to assisting the countries concerned in these fields.

Method of work: (a) A team of specialists will prepare a publication on methods and equipment for afforestation operations under Mediterranean conditions and will submit a progress report to the Joint Committee at its fourteenth session in 1982;

(b) A seminar will be held in 1984 in Turkey on machines and techniques for the conversion of degraded and low productivity woodlands to productive forests.

cont.

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Estimated Estimated duration termina- (in years) tion year

## 14.3.1.1.6. Standardization activities in the field of forestry, including standardization of concepts and terms used by the Joint Committee

Description: The Joint Committee will keep under review standardization activities in the field of forestry, notably forest machinery with a view to assisting countries in the development and safety in use of equipment and methods; and will establish definitions of currently used technical and economic concepts and terms, in order to facilitate exchange of information during meetings and on other occasions.

Method of work: (a) The Joint Committee will review at each session, on the basis of a report which ISO should be invited to submit, standardization work being carried out, and will maintain active co-operation with the responsible ISO subcommittees and other bodies concerned with standardization;

(b) For each seminar convened by the Joint Committee, lists of basic concepts and terms, with definitions, will be prepared by the host country and issued in the three official languages with the assistance of the rapporteur, and will subsequently be completed and disseminated within the framework of the Joint Committee.

### cont.

### 14.3.1.2. Wood harvesting and transport

### 14.3.1.2.1. Development and use of logging machinery

Description: The Joint Committee will keep under review trends and prospects in the development and use of logging machinery taking into account specific conditions and cost/price relationships so as to encourage rational logging methods in flat, hilly and mountainous regions from the economic, ergonomic and environmental points of view.

Method of work: Seminars on selected items will be held at intervals: in 1982 in the USSR, on reducing forest biomass losses in logging operations; in 1983 in the German Democratic Republic, on silvicultural, technological, economic and other problems connected with the mechanization of thinning operations; in 1985 in the USSR, on mechanization of logging operations in mountainous regions (subject to the decision by the Joint Committee at its fourteenth session) (see also 14.3.1.2.3.).

#### cont.

### 14.3.1.2.2. Maintenance of forest machinery

<u>Description</u>: The Joint Committee will promote the exchange of information on systems of maintenance of forest machinery, and further the rational use of such machines.

Method of work: The Joint Committee's fourteenth session will decide on further activities in this field in the light of the results of the seminar on maintenance of forest machinery in large- and small-scale operations held in 1981 in Sweden.

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Estimated Estimated duration termina- (in years) tion year

### 14.3.1.2.3. Forest roads and transport of wood raw material

<u>Description</u>: The Joint Committee will promote the exchange of information on methods of construction of forest roads and on the transport by road or other means of wood raw material, with a view to assisting countries to rationalize their transport systems and reduce costs.

Method of work: A seminar and study tour will be held in Norway in 1982, in conjunction with the fourteenth session of the Joint Committee, on the planning and techniques of transport and its relations to operational activities in forestry; a seminar will be held in 1984 or 1985 in Finland, on wood transport and road construction in swampy areas (subject to the decision by the Joint Committee at its fourteenth session) (see also 14.3.1.2.1.).

cont.

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## 14.3.1.2.4. Terrain classification from the wood harvesting point of view

<u>Description</u>: The Joint Committee will review studies on terrain classification and forest accessibility, with a view to facilitating international comparisons on accessibility of forest resources.

Method of work: A team of specialists will prepare a draft of a primary, descriptive terrain classification, in collaboration with IUFRO and taking into account the work of the European Economic Community, and submit it to the fourteenth session of the Joint Committee in 1982, which will decide on further action.

1982

## 14.3.1.2.5. Compatibility of harvesting methods and equipment with silviculture and the environment

<u>Description</u>: The Joint Committee will review harvesting methods and equipment and compare these with the methods applied in silviculture so as to determine compatibilities and incompatibilities, taking into account environmental aspects.

Method of work: A preliminary descriptive list of harvesting methods and equipment will be prepared by a team of specialists from the point of view of compatibility with silvicultural methods and the environment for submission to the Joint Committee at its fourteenth session in 1982, when further action will be decided.

1982

### 14.3.1.2.6. Harvesting of wood for energy purposes

<u>Description</u>: The Joint Committee will review methods and equipment suitable for the production and harvesting of wood specifically destined for energy production, so as to determine the potential of the forest or special plantations to contribute economically to total energy supply.

Method of work: A review of developments, including the activities of other international organizations, such as the International Energy Agency, will be submitted by a team of specialists to the Joint Committee at its fourteenth session in 1982.

Estimated Estimated duration termina-14.3.1.3. Human aspects of forest operations (in years) tion year 14.3.1.3.1. General questions of vocational forestry Description: The Joint Committee will assist Governments in planning their national vocational training policies by keeping under review developments and trends in vocational training in forestry to raise the efficiency of forest operations and improve working practices with regard to safety and health. Method of work: (a) Seminars will be organized at intervals on selected problems: in 1982 in the United Kingdom on the management of forest worker training; in 1984, in .... on vocational training problems specific to southern Europe; cont. (b) A team of specialists will be established to follow up the recommendations of the seminar on vocational training and extension services for small-scale forest owners and farmers (held in 1980) and report to the fourteenth session of the Joint Committee in 1982; 1982 (c) A report on vocational training systems in forestry will be prepared by ILO and submitted to the fourteenth session of the Joint Committee in 1982. 1982 14.3.1.3.2. Specific problems of vocational training in forestry Description: The Joint Committee will provide Governments with guidance in connexion with their services dealing with specific problems of vocational training. Method of work: (a) A team of specialists will prepare a report on possibilities and methods of rehabilitating injured, disabled or older forest workers and submit it to the fourteenth session of the Joint Committee in 1982; 1982

(b) A team of specialists will start work after

the fourteenth session of the Joint Committee and submit a report on further training of professional forest workers to the fifteenth

session of the Joint Committee in 1984.

<sup>1/</sup> Host country to be decided.

Estimated Estimated duration termina- (in years) tion year

## 14.3.1.3.3. General questions of applied ergonomics, safety and health in forest operations

Description: The Joint Committee will help Governments in their national health and employment planning by keeping under review developments and trends in ergonomics applied to forestry, occupational safety and health, with a view to promoting safer working habits, preventing occupational injuries and diseases, increasing work performance and forest workers' satisfaction with their job.

Method of work: (a) Seminars or training courses will be organized at intervals on a selected problem in the field of ergonomics applied to forestry: in 1983, in ...1/ on occupational safety and health in forest work; in 1985, in ....1/ on vocational rehabilitation;

cont.

3

(b) A team of specialists will start work in 1983 and submit a report on occupational health services in forestry to either the sixteenth session of the Joint Committee or another meeting (subject to the decision by the Joint Committee at its fifteenth session in 1984).

1986

## 14.3.1.3.4. Specific problems of applied ergonomics, safety and health in forest operations

<u>Description</u>: The Joint Committee will study specific problems related to ergonomics, safety and health in forest operations with a view to improving working methods and recommending safety standards in various operations.

<u>Method of work:</u> A team of specialists will start work after the fourteenth session of the Joint Committee and submit a report on chemicals in forestry - health hazards and protection, to the fifteenth session of the Joint Committee in 1984.

<sup>1/</sup> Host country to be decided.

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Estimated Estimated duration termina- (in years) tion year

### 14.3.2. <u>Utilization of tropical hardwoods</u>

Description: The Committee will review the utilization of tropical hardwoods with a view to analysing patterns and trends in the demand for these products and to Identifying opportunities for expanding trade with developing countries.

Method of work: Co-operation will be maintained with UNCTAD and FAO in their activities relating to markets for tropical timber.

cont.

## 14.3.3. Economic and technical developments in the furniture industry

<u>Description:</u> The Committee will further the exchange of information on economic and technical developments in the furniture industry, with a view to assessing in quantitative and qualitative terms the use of forest products in that industry and the trends and prospects in the demand for forest products for that sector.

Method of work: A team of specialists will prepare a draft programme of activities in this field, based on proposals submitted to the Committee, for approval at the Committee's fortieth session.

1983

### 14.3.4. Modernization in the wood-based panels industries

<u>Description</u>: The Committee will further the exchange and dissemination of scientific, technological and economic information on modernization in the wood-based panels industries.

Method of work: A team of specialists will prepare a draft programme of activities in this field, based on proposals submitted to the Committee, for approval at the Committee's fortieth session.

1983

## 14.3.5. Review of progress made in the chemical processing of wood (other than for pulp and paper) and the potential of the use of wood for chemical products

Description: In conjunction with the Chemical Industries Committee, the Committee will keep under review, from the technical and economic point of view, progress made in the chemical processing of wood (other than for pulp and paper) with a view to improving the utilization of by-products of the wood processing industries, and to assessing potential demand from the chemical industry for wood raw material, as well as the effect any increase would have on the supply/demand balance of forest products in the ECE region and the availability of raw material for traditional wood-using industries.

Method of work: The secretariat will explore the possibility of revising and publishing the special lectures and study presented to the thirty-ninth session. The Committee will thereafter keep under review developments in the sector, undertaking periodic surveys when this appears necessary.

cont.

Estimated Estimated duration termina- (in years) tion year

### WORK AREA 14.4: ENVIRONMENTAL AND RESOURCE CONSERVATION PROBLEMS

(All the Committee's activities in this work area will be carried out in co-operation with the Senior Advisers to ECE Governments on Environmental Problems).

## 14.4.1. Quantification and evaluation of the environmental benefits of forests

<u>Description</u>: The Joint FAO/ECE Working Party on Forest Economics and Statistics will examine methods of quantifying and evaluating the environmental benefits of forests with a view to assessing forests' contribution to society, to calculating compensation for the environmental services of forests and to facilitating comparisons between countries.

Method of work: An enquiry will be circulated on the role of forests in supplying environmental and other non-wood goods and services. The results will be analyzed, with the assistance of correspondents nominated by countries, and a preliminary report presented to the Working Party's fourteenth session.

1985

4.

### 14.4.2. Energy conservation and self-sufficiency in the mechanical wood-processing industries

<u>Description</u>: The Committee will encourage the exchange of information in this field, with a view to furthering the conservation of energy and, where appropriate, the increase of self-sufficiency in the mechanical wood-processing industries.

Method of work: A seminar on energy conservation and selfsufficiency in the sawmilling industry, will be held in 1982, in the Federal Republic of Germany. The Committee will decide on the basis of the results of the seminar on further activities in this field.

Estimated Estimated duration termina- (in years) tion year

# WORK AREA 14.5: COLLECTION, EXCHANGE AND DISSEMINATION OF INFORMATION, INCLUDING IMPROVEMENT AND HARMONIZATION OF STATISTICS (IN CO-OPERATION WITH FAO)

### 14.5.1. <u>Timber Bulletin for Europe</u>

<u>Description</u>: The Committee will collect statistics on production, trade and prices of forest products, with a view to providing Governments and the forest products sector with data on the basis of which to formulate policies and make decisions.

Method of work: The secretariat will publish, twice a year, the <u>Timber Bulletin for Europe</u>, containing annual and quarterly statistics on production, trade and prices of forest products, collected from Governments by means of quarterly questionnaires, and will publish a supplement, four times a year, of monthly prices of forest products and related data. Country forest and forest products profiles will be prepared by the secretariat in collaboration with the Governments of the countries concerned, and published.

## 14.5.2. Selected problems of economics and statistics of forestry and forest products

This project, together with projects 14.5.3. and 14.5.4. is carried out by the Joint FAO/ECE Working Party on Forest Economics and Statistics which normally meets biennially (1983, 1985, etc.). It co-operates with the Conference of European Statisticians.

### 14.5.2.1. Organization and periodicity of statistical data collection and dissemination

Description: The Working Party will review periodically the Committee's programme of collection and dissemination of statistical data, to ensure that it corresponds with the needs of Governments.

Method of work: Periodic reviews will be undertaken by the Working Party, which will formulate proposals for improving the Committee's programme of collection and dissemination of statistical data, with regard to its organization, method of collection, periodicity, and the improvement of the accuracy and comparability of data obtained from and used by Governments.

### 14.5.2.2. Conversion factors

<u>Description</u>: The Working Party will review the conversion factors for forest products applicable to individual countries, in order to facilitate international comparison of yields and to ensure that the conversion factors used by the secretariat in its analyses reflect current technology.

Method of work: The Working Party will review at four-yearly intervals (the next in 1985) conversion factors communicated by Governments in reply to a questionnaire. The results of the 1981 review, including the study on methods of measurement of wood raw material, will be revised and published.

cont.

cont.

cont.

### 14.5.2.3. Forest resource analysis

Description: The Working Party will review methods of forest inventory used by Governments and by the secretariat to ensure that all parameters relevant to measuring actual productive potential of the forest, as well as parameters measuring change, both for wood and non-wood benefits, are taken into account and that the methods adopted correspond as closely as possible to the needs of all users.

Method of work: An enquiry on the forest resource, including forest biomass, will be circulated, in conjunction with project 14.4.1. - Quantification and evaluation of the environmental benefits of forests. Results will be analyzed, with the assistance of correspondents nominated by Governments, and a preliminary report will be submitted to the fourteenth session of the Working Party.

1985

### 14.5.2.4. Labour statistics

Description: The Working Party, in co-operation with the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers, will study labour input, average wage rates and earnings in forestry, with a view to providing more data on cost trends and a basis for comparison of employment and earnings.

Method of work: Under the leadership of the Finnish Forest Research Institute, a study will be undertaken on labour productivity in countries at different stages of development in mechanization of forestry and harvesting operations, and a preliminary report submitted to the Working Party's fourteenth session.

1983

### 14.5.2.5. Forest fire statistics

<u>Description</u>: The Working Party will improve the exchange of information on forest fires, their causes and methods of prevention and protection and the costs involved.

Method of work: The Working Party will carry out surveys at two-yearly intervals (1983, 1985, etc.). A team of specialists will be established to prepare proposals, in co-operation with the European Economic Community, for improvements to the form of enquiry and to formulate guidelines for the estimation of losses from forest fires.

cont.

### 14.5.2.6. Information base on the use of wood for energy

<u>Description</u>: The Working Party will review the information base for the use of wood for energy, with a view to providing Governments with a more accurate and complete assessment of the present situation and recent trends. This review will cover levels and patterns of consumption and prices for conventional fuelwood, industrial residues, synthetic fuels and other wood-derived energy.

Method of work: Steps will be taken to implement the recommendations of the team of specialists on wood/energy questions as they relate to the information base. The team will explore the possibility of drawing up guidelines for countries on methodologies for the collection of data on wood/energy matters.

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Estimated duration termina-(in years) tion year

1983

1983

### 14.5.3. Studies of selected economic problems

## 14.5.3.1. Economic aspects of the fuller use of forest biomass

<u>Description</u>: The Working Party will study the economic aspects of the fuller use of the forest biomass with a view to determining the potential for the forest resource to meet the demand for raw material from the different wood-using industries and consumption sectors.

Method of work: Under the leadership of specialists in the USSR, the report submitted to the thirteenth session of the Working Party will be improved and extended to incorporate information supplied by other countries. The work on this project will be drawn to the attention of the seminar organized by the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers on reducing forest biomass losses in harvesting operations (project 14.3.1.2.1.), and a revised report will be submitted to the Working Party's fourteenth session which will decide on further action.

### 14.5.3.2. Economic aspects of afforestation and reforestation

<u>Description</u>: The Working Party will study the economic aspects of afforestation and reforestation with the object of comparing the efficiency of different methods and the relative costs and returns in different countries under different conditions.

Method of work: Taking account of the relevant work of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers and collaborating where appropriate (see project 14.3.1.1.1.), a team of specialists will collect and review information on the economics of afforestation and reforestation and present a report to the fourteenth session of the Working Party.

### 14.5.3.3. Economic aspects of the introduction of new forest machines and equipment

Description: The Working Party will study the economic aspects of the introduction of new forest machines and equipment with the object of assessing their productivity and return on investment in different countries and under different operating conditions.

Hethod of work: Under the leadership of specialists in the USSR, the report submitted to the thirteenth session of the Working Party will be improved and extended to incorporate information supplied by other countries in conjunction with the work on project 14.5.2.4. - Labour statistics. The work on the project will be drawn to the attention of the seminar being convened by the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers on the management of forest worker training (project 14.3.1.3.1.). A revised report will be submitted to the fourteenth session of the Working Party, which will decide on further action.

1983

2

Estimated Estimated duration termina- (in years) tion year

## 14.5.4. Transfer of economic and statistical methods and experience in the forest and forest products sector

<u>Description</u>: The Working Party will contribute to the building up of statistical services in countries inside and outside the ECE region through the transfer of know-how and experience in methods of data collection, assembly and dissemination in the forest and forest products sector.

Method of work: Participation of representatives of countries of other regions will be specifically invited, particularly at Working Party meetings with subject matter relevant to their interests. Member countries of the Working Party's parent bodies are invited to support such participation through provision of fellowships, where feasible. Publication of results of the relevant parts of the Working Party's output will be promoted to make them readily available to countries of other regions. Under the leadership of Norway, information on methods and procedures in the collection of statistics on forestry and forest industry in the Nordic countries will be reported to the fourteenth session of the Working Party. An informal list of country correspondents from other regions will be established to provide contact with the FAO Forestry Statistics and Economics Analysis Unit on forestry economics and statistical questions.

cont.

## 14.5.5. Dissemination and exchange of general information and experience

Description: The Committee will further the dissemination and exchange of information and experience on selected themes within its area of competence and by organizing annual study tours at the invitation of the countries concerned with a view to making available to Governments and the forest products sector experience gained in individual countries.

Method of work: A study tour will be held in Czechoslovakia in 1982. 1/ A Yearbook describing briefly the Committee's activities over the past year will be issued annually.

cont.

<sup>1/</sup> Host countries to be decided for the years from 1983 to 1986 inclusive.

Tabular presentation of Timber Committee programme of work for 1982-1986

1986		ibly 1985), revision	Wood-based panels	Wood-based panels								
1985		Preparation of draft of study, review by ad hoc meeting (possibly 1985), revision and publication (possibly 1986)	3	Pulpwood,wood for energy and miscellaneous round- wood	of specific interest to be decided)				al Committees			
1984		Preparation of draft of study, and publication (possibly 1986)	Savmilling industry	Savnwood and sawlogs	Ad hoc meeting on the production and marketing of products of specific interest to Mediterranean forestry (year and host country to be decided)	INCLUDING PROBLEMS RELATING TO INTERNATIONAL TRADE			co-operation maintained with ISO and its appropriate Technical Committees			7 and forest industries
1983	_	4.1.2., 14.1.3., 14.2.1.) 1983 on policies and prospects	Wood-based panels industries	Wood-based panels	Ad hoc meeting on the produ Mediterranean for	_1		recommendations of co-ordinator	co-operation maintained with			ILO ISCO relating to forestry
1982	TERM TRENDS AND PROSPECTIS	Continuous (cf. projects 14.1.2., 14.1.3., 14.2.1.). Ad hoc meeting in 1982 or 1983 on policies and pros concerning wood and energy	Recommendations of team of specialists to fortieth session of the Committee on 1984 survey of sawmilling industry	Pulpwood, wood for energy and miscellaneous roundwood		CURRENT MARKET DEVELOPMENTS AND SHORT-TERM PROSPECTS	Continuous	As decided by Committee on recom	Continuous, at annual session;	Ad hoc meeting	Committee to keep under review	Review of parts of ISIC and the ILO ISCO relating to forestry and forest industries
Project	WORK AREA 14.1: MEDIUM AND LONG-TERM TRENDS AND PROSPECTS	study "European Timber Prends and Prospects, 1950-2000" in A Frashin to actual developments	Medium-term trends in the structure and capacity of wood-processing industries	Medium-term trends in the markets for specific forest products	Trends, prospects and policies in southern Europe	WORK AREA 14.2: CURRENT MARKET	Beview of production, trade, consumption and prices of forest products	Rationalization of the flow of forest products from the forest to the consumer, including transport and handling problems	Review of standardization activities	Standardization of stress grading and finger-jointing of conferous sawn timber	Reduction of the number of standard dimensions of sawn- wood entering international trade	Problems of classification and definitions
Project number		14.1.1.	14.1.2.	14.1.3.	14.1.4.		14.2.1.	14.2.2.	14.2.3.	14.2.4.	14.2.5.	14.2.6.

Tabular presentation of Timber Committee programme of work for 1982-1976 (cont.)

1986		; Workers	Sixteenth session in $\cdots$		•					Review by Joint Committee on basis of report from ISO		
1985		Activities of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers				Seminar in Portugal						Seminar in USSR on mechanication of logging operations in mountain- ous regions (subject to decision by Joint Committee in 1982)
1984		nittee on Forest Working Tec!	Fifteenth session in Turkey						Seminar in Turkey on machines and techniques for the conversion of degraded and low- productivity woodlands to productive forest	Review by Joint Committee on basis of report from ISO each seminar		;
1983	. SW	of the Joint FAO/ECE/ILO Com			Seminar in Czechoslovakia on machines and techniques in plant production	to 1981 seminar to be decided by oint Committee			Completion of publication ation on afforestation methods and equipment under Mediterranean conditions	prepared in conjunction with		Seminar in German Democratic Republic on silvi- cultural, technological, economic and other problems connected with the mechanization of thinning operations
1982	FECHNOLOGICAL AND MANAGERIAL PROBLE	Activities	Fourteenth session in Norway			Follow-up activities to 1981 semins Joint Committee	Future of project to be reviewed by Joint Committee in light of its Steering Committee's proposals	Joint Committee to consider Steering Committee's proposals	Progress report to Joint Committee by team of specialists	Review by Joint Committee on basis of report from ISO on basis of I ist of basic concepts and terms prepared in conjunction with each seminar		Seminar in USSR on reducing forest biomass losses in logging operations
Project	WORK AREA 14.3: SELECTED ECONOMIC, TECHNOLOGICAL AND MANAGERIAL PROBLEMS	Forest working techniques and training of forest workers		Silvicultural operations and general management aspects	Development and use of machinery and methods for stand establishment, including planting stocks and equipment	Forest fire prevention and control	Methods of measurement of labour productivity	Planning and management of forest operations	Development of methods and equipment for silvicultural operations and multiple use forestry under Mediterranean conditions	Standardization activities in the field of forestry, incl- uding standardization of concepts and terms used by the Joint Committee	Wood harvesting and transport	Development and use of logging machinery
Project		14.3.1.		14.3.1.1.	14.3.1.1.	14.3.1.1.2.	14.3.1.1.3.	14.5.1.1.4.	14.5.1.1.5.	14.3.1.1.6.	14.3.1.2.	14.5.1.2.1.

1/ Host country to be decided.

Tabular presentation of Timber Committee programme of work for 1982-1986 (cont.)

1986						Seminar in $\frac{1}{2}$ on			
1985	inland on wood transport ampy areas (subject to in 1982)							Seminar in]/ on vocational rehabilitation	
1984	Seminar in 1984 or 1985 in Finland on wood transport and road construction in swampy areas (subject to decision by Joint Committee in 1982)	by Joint Committee	by Joint Committee	1 by Joint Committee		Seminar in]/ on vocational training problems specific to southern Europe	team of specialists on onal forest workers		team of specialists on th hazards and protection
1983		Further activities as decided by Joint Committee	Further activities as decided by Joint Committee	Further activities as decided by Joint Committee			Report to Joint Committee by team of specialists on further training of professional forest workers	Seminar in1/ on occupational safety and health in forest work	Report to Joint Committee by team of specialists on chemicals in forestry - health hazards and protection
1982	Joint Committee to decide on fur- ther activities in light of results of 1981 seminar Seminar and study four in Norway on the planning and techniques of forest transport and its relations to operational activities in forestry	Report to Joint Committee by team of specialists	Report to Joint Committee by team of specialists	Report to Joint Committee by team of specialists		(a) Seminar in United Kingdom on the management of forest worker training (b) Report to Joint Committee by team of specialists on follow-up of recommendations of Seminar on vocational training and extension services for small-scale forest owners and farmers (c) Report to Joint Committee by ILO on vocational training systems	Report to Joint Committee by team of specialists on relab- ilitation of injured, disabled and older forest workers		
Project	Maintenance of forest machinery Forest roads and transport of wood raw material	Terrain classification from the wood harvesting point of view	Compatibility of harvesting methods and equipment with silviculture and the environment	Harvesting of wood for energy purposes	Human aspects of forest operations	General questions of vocational training in forestry	Specific problems of vocational training in forestry	General questions of applied ergonomics, safety and health in forest operations	Specific problems of applied ergonomics, safety and health in forest operations
Project number	14.3.1.2.2. N	14.5.1.2.4.	14.3.1.2.5.	14.3.1.2.6.	14.5.1.3.	14.5.1.5.1.	14.3.1.3.2.	14.3.1.3.3.	14.3.1.3.4.

1/ Host country to be decided.

Tabular presentation of Timber Committee programme of work for 1982-1986 (cont.)

Project	Project	1982	1983	1984	1985	1986
14.3.2.	Utilization of tropical hardwoods	Review in co-operation with UNCTAD	AD and FAO		,	
14.3.3.	Economic and technical development in the furniture industry	Team of specialists to prepare draft programme of activities for approval at the Committee's fortieth session	Further activities as decided by Timber Committee	y Timber Committee		-
14.3.4.	Modernization in the wood-based panels industries	Team of specialists to prepare draft programme of activities for approval at the Committee's fortieth session	Further activities as decided by	by Timber Committee		
14.3.5.	Review of progress made in the chemical processing of wood (other than for pulp and paper) and the potential of the use of wood for chemical products	Possible publication of special lecture Timber Committee to keep develop	Possible publication of special:	and undertake periodic surveys		
	WORK AREA 14.4: ENVIRONMENTAL AND R	ENVIRONMENTAL AND RESOURCE CONSERVATION PROBLEMS			_	
14.4.1.	Quantification and evaluation of the environmental benefits of forests		Preliminary report on results of enquiry to be presented to Working Party	Further activities, as decided by Wo	as decided by Working Party, linked with project 14.5.2.3	3.
14.4.2.	Energy conservation and self- sufficiency in the mechanical wood processing industries	Seminar on energy conservation and self-sufficiency in the sawmilling industry, in the Federal Republic of Germany				
	WORK AREA 14.5: COLLECTION, EXCHANG	EXCHANGE AND DISSEMBLANTION OF INFORMATION,	N, INCLUDING IMPROVEMENT AND HARMONIZATION OF STATISTICS	WONIZATION OF STATISTICS		
14.5.1.	Timber Bulletin for Burope Selected problems of economics and statistics of forestween and formet	Continuous (publication twice year Together with projects 14.5.3. and	early of Bulletin and four times ; and 14.5.4., activities of the Jo	times yearly of price supplement, preparation of couthe Joint FAO/ECE Working Party on Forest Bonomics	Continuous (publication twice yearly of Bulletin and four times yearly of price supplement, preparation of country forest and forest products profiles) Together with projects 14.5.3. and 14.5.4., activities of the Joint FAO/ECE Working Party on Porest Boonomics and Statistics	; profiles)
	products		Fourteenth session of Working Party		Fifteenth session of Working Party	
14.5.2.1.	Organization and periodicity of statistical data collection and dissemination	Continuous. Review at regular s	sessions of Working Party			
14.5.2.2.	Conversion factors	Revision and publication of the results of the 1981 review		Four-yearly survey at fifteenth session and publication	sion and publication	
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Tabular presentation of Timber Committee programme of work for 1982-1986 (cont.)

Project number	Project	1982	1983	1984	1985	1986
14.5.2.3.	Forest resource analysis		Preliminary report on results of enquiry to be submitted to fourteenth session	Further activities, as decided by Working Party, linked with projects 14.1.1 and 14.4.1.	ed by Working Party, linked	with projects 14.1.1
14.5.2.4.	Labour statistics		Preliminary report on results of study on abour productivity to be submitted to fourteenth session			
14.5.2.5.	Forest fire statistics	Biennial survey for review at fourteenth session and publication	ourteenth session and	Biennial survey for review at fifteenth session and publication	t fifteenth session and	
14.5.2.6.	Information base on the use of wood for energy	Progress report by team of spec session	team of specialists to fourteenth	Further activities as decided by Working Party	d by Working Party	-
14.5.3.	Studies of selected economic problems					
14.5.3.1.	Economic aspects of the fuller use of the forest biomass		Revised report to be submitted to fourteenth session			
14.5.3.2.	Economic aspects of afforest- ation and reforestation		Report to fourteenth session by team of specialists			
14.5.3.3.	Economic aspects of the intro- duction of new forest machines and equipment		Revised report to be submitted to fourteenth session (linked with project 14.5.2.4.)			
14.5.4.	Transfer of economic and statistical methods and exper- ience in the forest and forest products sector		Information on methods and procedures in collection of statistics on forest and forest industry to be reported to fourteenth session			
14.5.5.	Dissemination and exchange of general information and experience	Study tour in Czechoslovakia	Study tour in $1$	Study tour in $1/$	Study tour in $1/\sqrt{1}$	Study tour in
		Publication of Timber Committee Yearbook (annual)	Yearbook (annual)			