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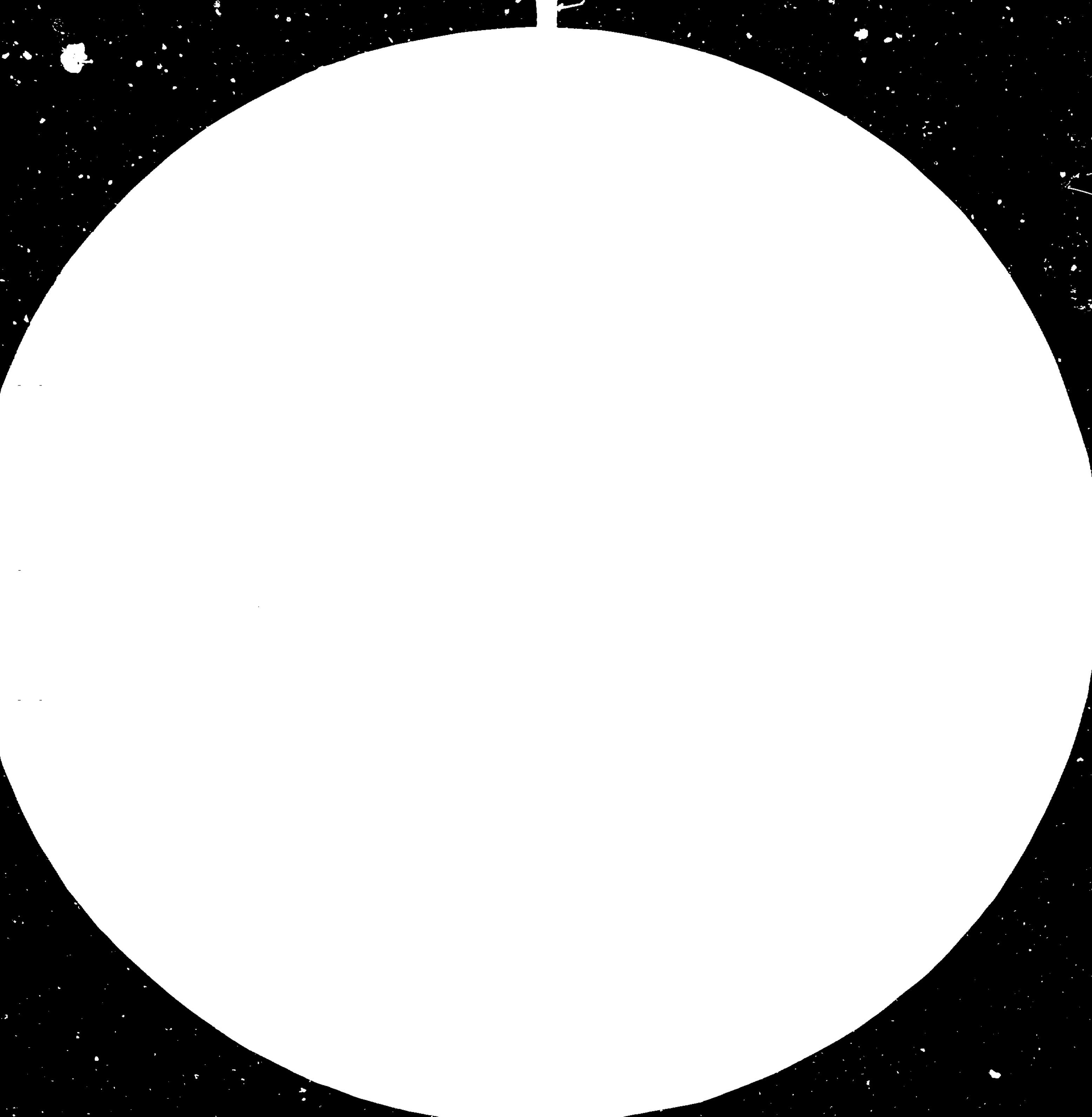

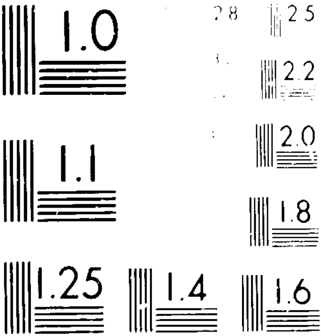
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United Nations Industrial Development Organization

Global Preparatory Meeting for the
First Consultation on the Wood and
Wood Products Industry

Vienna, Austria, 24-26 January 1983

ISSUES FOR POSSIBLE CONSIDERATION AT THE FIRST CONSULTATION *

prepared by the
UNIDO secretariat

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CONTENTS

INTRODUCTION

1. The Second General Conference of the United Nations Industrial Development Organization (UNIDO), held at Lima, Peru, in March 1975, recommended that UNIDO should include among its activities a system of continuing consultations between developed and developing countries and among developing countries themselves with the object of raising the developing countries' share in world industrial output through increased international co-operation. This recommendation was endorsed by the General Assembly at its Seventeenth Special Session in September 1975. It is being implemented under the guidance of the Industrial Development Board, the policy-making organ of UNIDO.

2. The Industrial Development Board, at its fifteenth session in May 1981, decided to include the First Consultation on the Wood and Wood Products Industry in the programme of consultation meetings for the biennium 1982-83.

3. In accordance with the above-mentioned decision and the established work programme, the First Consultation on the Wood and Wood Products Industry will be convened in Helsinki, Finland, from 19 to 23 September 1983.

4. As a step in the preparations for the First Consultation, the Executive Director has decided to convene a Global Preparatory Meeting to seek the advice of participants from about 20 developed and developing countries selected with due regard to an equitable geographical distribution.

5. The purpose of the Global Preparatory Meeting is to advise UNIDO on the selection of the priority issues that might be considered at the First Consultation.

Previous preparatory activities carried out by UNIDO

6. In 1981 the secretariat initiated the preparation of regional analysis of the performance of developing countries in this sector and of the obstacles they face in increasing their share in world industrial output. The main subjects to be included in the regional survey papers, which were to be used as background material for the regional meetings, and the methodology to be used in its preparation, were discussed and agreed upon at an *ad hoc* expert group meeting, held in October 1981.

7. During 1982 regional preparatory meetings for Asia, Africa and Latin America were held in March, June and October respectively, in order to:

(a) Discuss the present situation of the wood and wood products industry in each one of the regions;

(b) Identify constraints to the further development of primary and secondary processing in each one of the regions;

(c) Draw up proposals to improve international co-operation so as to overcome the identified constraints;

(d) Select specific issues for further elaboration to be discussed at the Global Preparatory Meeting.

Issues that might be considered at the First Consultation

8. On the basis of the conclusions and recommendations of the regional preparatory meetings and of the work carried out by the secretariat UNIDO has selected the following issues which can be regarded as a basis for the deliberations of the Global Preparatory Meeting:

Issue 1: Forest management policies in developing countries

Issue 2: Promotion of commercially less accepted species

Issue 3: Development of primary and secondary processing

Issue 4: Transport problems, especially those related to shipping

Issue 5: International co-operation, including new forms of mutually beneficial contractual arrangements and redeployment of productive facilities.

9. UNIDO has prepared background information on the five issues above for the Preparatory Meeting to consider. Participants may suggest other issues that might be considered at the Consultation. However, only a limited number of issues will finally be selected by UNIDO in order to allow for thorough discussion of each issue at the Consultation.

10. This document summarizes the discussions on these issues at the regional preparatory meetings and on the conclusions contained in the documents prepared for the meeting.

11. The Meeting is invited to examine these five issues, and advise UNIDO on their priority and on specific measures to increase international co-operation which might be agreed at the First Consultation.

I. FOREST MANAGEMENT POLICIES IN DEVELOPING COUNTRIES 1/

12. Developing countries possess considerable forest resources, both in the temperate and in the tropical zones. These forests fulfill many functions and assume an ever greater importance for the neighbouring populations, as well as for the national communities as a whole.

13. However, the growing encroachment on productive forest areas, caused essentially by an ever greater need for land for cultivation, has led to fears of a significant reduction of wood producing potential that could not be replaced by the products of plantations established in the last few decades. Some have even voiced fears about the rapid disappearance of forest resources, in particular of the closed tropical rain forest. In fact, the global figures conceal wide disparities, not only regionally but locally, and the shrinking of forested areas is not of the same gravity everywhere. Nevertheless it is extremely worrying in some parts of the world.

14. The effects on the ability to satisfy wood needs are also variable. The situation in many countries is already very grave as regards the supply of firewood for poor populations, which is of almost vital necessity for them, and it can only get worse as a result of the growing need and the disappearance of extensive productive areas, even taking into consideration the beginning of production in the plantations that have been established in recent years. On the other hand, in the light of recent studies, and of the prospects for the development of the world economy, it appears that the closed forests of the developing countries will be able to supply the foreseeable demand for industrial wood, whether it be for sawlogs, for roundwood or for pulpwood, and that there will not be a shortage, at least in terms of quantity, of industrial wood, between now and the end of the century.

15. But to achieve this requires better care of forest resources, so as to derive the maximum benefit from them, both directly and indirectly, while ensuring their normal renewal, as well as an intensification of forest management, with all that it implies in terms of increasing knowledge, of intellectual and financial investment and of organization efforts.

1/ Summary of FAO's contribution on Management of Forest Resources in Developing Countries (ID/WG.387/6)

II. PROMOTION OF COMMERCIALLY LESS ACCEPTED SPECIES

16. Tropical forests are currently being logged for only a few selected species. Removals of industrial wood from areas being logged in the tropical forest are usually limited to a selected, and often small portion of growing stock, with many species and grades left unharvested. According to Gammie 2/ "only in forests which contain the highest volumes of commercially acceptable species does the net industrial volume exceed 10 per cent of the gross harvestable growing stock". In West Africa, he reports, where average growing stock ranges from 250 m^3 to 300 m^3 per ha the volume of commercial wood actually removed in 1978 still ranged between 5 m^3 and a maximum of 30 m^3 per ha. About ten species out of several hundreds account for over 70 per cent of total exports. A similar situation is reported for Amazon forests and even in South East Asia, with a much larger proportion of total growing stock in currently desired species, the volume extracted over the decade has averaged only 50 to 60 m^3, i.e. about 20 per cent of the total standing volume.

17. In view of the need to make a more rational use of the forest resource and the fact that many primary species are fast being depleted, there is agreement about the need to promote the use of secondary species. These secondary species are variously described as lesser known species, lesser used species and for the purpose of this meeting as "commercially less accepted species" (CLAS).

18. The fact that only a few species are currently marketed seems to be related to their occurance, the assurance of a continuous supply and the knowledge about their suitability for specific end uses.

19. The occurence of species differs according to the regions. Asia has the most homogeneous forest, followed by Africa and the Amazonian forest is by far the most heterogeneous. Since the continuous supply in adequate quantities is a requisite for the promotion of a specie, low occurence of a large number of species with similar properties suggests the possibility of grouping them for utility and structural purposes. Guidelines for grouping might be a useful way to promote CLAS.

20. A lot of information concerning the technical properties of many hundreds of species is already available, specially for Asia and Africa. There is a need

2/ J.I. Gammie, World Timber to the Year 2000, EIU Special Report No. 98, London, p.83.

to increase the knowledge of the properties of many species in Latin America. But to avoid duplication and research into properties which are not related to the end use, research should be conducted having specially in mind the properties their eventual user is interested in.

21. The reliability of supply is a major consideration for a merchant who wants to introduce a new specie. Long-term supply arrangements might be a means to reward the user and be beneficial to the producer in his efforts to promote CLAS.

22. Given the difficulties of marketing CLAS in importing countries, local markets should be given particular attention. Larger volume uses might be encouraged in the construction industry in developing countries where there exist consumer prejudices against the use of wood in housing. Promotion of this concept as well as changes in codes and standards to promote the use of CLAS are needed.

III. DEVELOPMENT OF PRIMARY AND SECONDARY PROCESSING

23. Wood being a bulky commodity with very high transport costs, it is somewhat surprising that processing should still be located mainly in developed countries. The reasons for the present location of processing facilities are of course diverse. Some of them are political and related to the inheritance by independent countries of the traditional colonial pattern or to the political risk involved in the establishment of manufacturing facilities. Others are connected with historical situations which tend to accumulate and take the form of external economies like the existence of a more complete range of supporting services and infrastructure or the availability of skilled manpower.

24. However, two factors seem to affect directly the profitability of wood processing industries in developing vis-à-vis developed countries. One is the existence in industrialized countries of markets for residues from processing industries and the other the fact that effective quantitative and qualitative yields and productivity are higher in developed countries.

25. The opportunities for using residues are greater in the industrialized log-importing countries than in the tropical timber exporting countries, so that processing losses are reduced in the former. Whereas in the developed countries a considerable part of wastes from forest and residues from sawing are used as

a raw material, in developing countries their use is still extremely low. The existing processing technologies and methods are generally adequate but some adaptation and modification is felt to be necessary in order to ensure the widest possible utilization of the available raw material and the integration of different production processes. This will come about by a) the re-utilization of residues of one end product as a raw material for another, b) utilization of semi-finished products out of one production process as base or intermediate product in another process, and c) by recycling wastes and residues to produce energy or other by-products.

26. Among the various possibilities to turn production residues into new products, the production of particle board and fibre-board are the most interesting ones. The possibility of producing them depends however on the market. In developing countries the use of these products in construction, for furniture and for interior decorations is still very low and exports are not competitive due to high production and freight costs. Other possible uses of residues are cement-bonded particle boards and slabs for construction. Here again the development of the products depends on the domestic market and the results of research and development work on the effect of wood extractives on the setting of cement.

27. The conversion of wood residues into marketable products being sometimes difficult in developing countries, the alternative is to use them to provide additional energy. This involves further investment but helps to reduce production costs.

28. The development and integration of production processes using as a base or an intermediate product the product of another line would permit the increase of value-added. Also the establishment of a great diversity of production lines like: parquets, panel and flush doors, windows and window frames, furniture, timber engineered products ensures an integrated use of the raw material, since it admits the use of a greater variety of dimensions and to a lesser extent a greater variety of species. Furthermore, the species-independent approach to the use of grouped timbers in construction has much to commend it for contributing to rational development of the wood-processing industries. However, despite considerable success in determining strength properties, stress grading and strength grouping, real progress is hampered by lack of parallel developments in kiln drying and preservation of mixed or unknown timbers. A comprehensive species-independent approach to complement the species-dependent approach is recommended.

29. Although there is nothing inevitable about it, effective quantitative and qualitative yields in processing units tend to be higher in developed countries

than in similar plants in developing countries. This is due to the type of equipment utilized as well as to the more skilled labour force. To be able to compete internationally or to meet national goals, an improvement in productivity is necessary.

30. Training for technicians and supervisory/management personnel seems to be an inevitable prerequisite for an increase in efficiency. An improvement of the skills to run machinery has to go hand in hand with increased capability of managers to choose adequate equipment and to organize the production process and the availability of designers, timber engineers, quality control inspectors and graders.

31. Much wood processing in developing countries is done in small units which use old, poorly maintained equipment, the result being that production levels and quality are low and wastes unnecessarily high. The provision of adequate improved technology aimed at the reduction of wastes and the improvement of quality seems to be required. In medium or large sized units there seems to be need for an adaptation of the sophisticated methods of processing used in developed countries to local conditions. Productive factor proportions being different in developing countries there is need for more efficient but not necessarily labour saving methods, like Low Cost Automation Systems.

32. The development of industry will also call for increased local production of the necessary equipment and ancillary materials (glues, hardware, etc.).

IV. TRANSPORT PROBLEMS - SHIPPING

33. Transport costs represent a disproportional part of the cost of tropical timber and ocean freight rates account for a high proportion of it. This is due to the fact that timber is a bulky commodity and that it has to cover comparatively long distances from producing to consuming countries. The ratio of the cif to the fob value, which provides a measure of the incidence of international transport and insurance costs, shows that in the case of sawlogs and veneer logs freight rates related to fob prices represented 47 per cent in 1980. The magnitude of transport payments involved is therefore very considerable. According to available statistics more than US$ 2.000 million annually are involved alone in the non-coniferous sawlog trade.

34. Empirical investigations have shown that liner conference freight rates are administered prices and that the key factor influencing the structure of freight rates is claimed to be "charging what the traffic will bear". In the wood trade this is reflected in two ways. On one side freight rates for similar distances can be completely dissimilar and on the other side rates tend to increase with the degree of fabrication and therefore diminish the benefit derived from exports with a higher degree of processing.

35. Lines outside the conferences cover mainly the Far East trade. Their development has produced a considerable reduction in freight rates, due to competition among them. Freight rates with these companies are negotiable. Chartering on the other side is the cheapest method but it depends on volume availability. In the case of sawn-wood, it has been shown that this might be obtained through grouping exports from different companies.

36. Given the expenditures involved in shipping, one of the key questions is how they can be reduced by improving or rationalizing shipping services. For example in Asia, part of the log trade is already being done with purpose-built bulk carriers at considerable saving. In the case of sawn-wood and other processed wood products the use of containers seems to be the future method of transport. The need of adequate seasoning of timber for this purpose has to be taken into consideration and research on the moisture content will be needed. Bundling rules should be disseminated.

37. There seems to be scope for different actions to improve the present situation, for example by assisting countries in their negotiations of freight rates, or by the development of transport cost saving methods, like changing from the use of liners to chartered shipping. Port infrastructure and efficiency of operation will also have to be developed to handle semi-manufactured and manufactured products.

V. INTERNATIONAL CO-OPERATION, INCLUDING NEW FORMS OF MUTUALLY BENEFICIAL CONTRACTUAL ARRANGEMENTS AND REDEPLOYMENT OF PRODUCTIVE FACILITIES

38. Many wood producing countries in the developing world have formulated and are implementing policies to increase domestic processing and to promote exports with higher value-added. In the case of Asia Indonesia's efforts to increase plywood production and its reduction of log exports will undoubtedly affect the regional scene. On the other hand timber deficit countries are experiencing difficulties

to maintain production levels due to shortages in raw material. This is the case in Japan, Korea and Taiwan Province of China, but also in developing countries like India, Thailand, Algeria, Jordanie and others.

39. This new situation of reduced availability of raw materials and of increased domestic processing in wood countries gives scope to new forms of mutually beneficial contractual arrangements. While satisfying the legitime wish of producing countries for more value-added local production, they could ensure to importing countries the supply of wood in unprocessed and semi-processed form. Importing countries could provide capital, know-how and training and in return ensure the supply of raw material.

40. In Asia restructuring is already under way and should be scrutinized carefully. In "transit" processor countries like the Republic of Korea or Taiwan Province of China will probably have to find ways to cope with the declining availability of raw material and rising energy cost. Their future development will probably be based on a greater reliance on more added value products, capitalizing on the abundant and highly skilled labour force available and specializing in downstream processing.

41. Developing countries with a well established wood industry like India and Thailand might find it useful to enter arrangements with timber producing countries in order to ensure a steady supply of raw material and intermediate products for their industries. Further use could also be made of lignocelulosic agricultural residues and annual plants.

42. A certain division of labour is bound to emerge in which countries will have to decide in what products they are going to specialize. The unimpeded operation of competitive market forces might create a situation of overproduction harmfull to the aims of developing countries. Complementary agreements between producing countries establishing specialization patterns might be a way to cope with such a complex situation.

43. Trade and industry associations for the wood and wood products industry are well established in Asia, like the South-East Asian Lumber Producers Association (SEALPA), the recently organized Asian Plywood and Panels Federation (APPF), the Asean Federation of Furniture Manufacturers Association (AFFMA) and the Asian Federation of Furniture Industries Associations (AFFIA). This is not

the case in Africa and Latin America, where local and regional organizations should be strengthened and where necessary, created. So far the action of these organizations, when existent, has been oriented towards the exchange of information among members, the representation of their sector vis-à-vis their local government, and - indirectly in Asia - in the setting of product price levels. Their function could be usefully expanded in the future in order to undertake co-operative efforts in the training of manpower, technology and research and development.