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United Nations Industrial Development Organization

REPORT OF THE FIRST CONSULTATION MEETING ON THE VEGETABLE OILS AND FATS INDUSTRY

Madrid, 12-16 December 1977

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PREFACE

The Second General Conference of UNIDO, held at Lima, Peru, in March 1975, declared that in view of the low share of developing countries in total world industrial production, their share should be increased to the maximum extent and as far as possible to at least 25 per cent of total world industrial production by the year 2000 (Lima Declaration and Plan of Action on Industrial Development and Co-operation, ID/Conf.3/31, chapter IV, paragraph 28).

The General Assembly, at its seventh special session in September 1975, in its resolution 3362 (S-VII) (section IV, paragraph 1), endorsed the Lima Declaration and Plan of Action on Industrial Development and Co-operation and requested UNIDO to establish a system of continuing consultations in the field of industry between developed and developing countries. The consultations are intended to explore ways and means of bringing about the above objective and a new distribution of industrial activities in the world that will adjust the present economic imbalance between developing and developed countries and allow a more equitable development in the interest of all countries. Industrial Development Board decided at its tenth session in 1976 that consultations on industrial sectors should be organized by UNIDO among member countries. Participants from each member country may include officials of Governments as well as representatives of industry, labour, consumer groups etc. as deemed appropriate by each Governemnt. The vegetable oils and fats sector was selected as a topic for a consultation meeting since it can serve as the starting point for the establishment of a chain of related industries and has a substantial bearing on food supp... Although developing countries already produce about 50 per cent of world output of orude vegetable oils, oonsiderable further expansion is desirable in the further processing of vegetable oils and fats.

Consultations on the Fertilizer Industry, the Iron and Steel Industry and the Leather and Leather Products Industry were convened by UNIDO in 1977.

The First Consultation Meeting on the Vegetable Oils and Fats Industry was preceded by Regional Preparatory Meetings for Asian countries (Bangkok, 9-13 May 1977), Latin American countries (Santiago, 13-17 June 1977), and African countries (Addis Ababa, 4-7 July 1977). A Technical Panel Meeting was convened in Vienna from 9-11 August 1977 to consider the Draft World-Wide Study on the Vegetable Oils and Fats Industry, 1975-2000, which was one of the background documents for the Consultation Meeting.

I. ORGANIZATION OF THE MEETING

Introduction

1. The First Consultation Meeting on the Vegetable Oils and Fats Industry, which was hosted by the Government of Spain, was held at the Hotel Melia Castilla, Madrid, from 12 to 16 December 1977. The Meeting was attended by over 130 participants representing Government, industry and labour, from 50 countries. Over 20 representatives of international and regional organizations also attended the Meeting.

Opening of the Meeting

- 2. The Executive Director of UNIDO, Dr. A. Khane, delivered the opening address. He stressed that consultation meetings were intended to identify measures for mutually advantageous international co-operation leading to concrete proposals for inclusion in development programmes in the sector.
- 3. Subsequently, H.E.D. Enrique Martinez de Genique, the Spanish Minister for Agriculture, stressed the need for promoting international co-operation through effective agreements to solve the innumerable problems faced by the vegetable oils and fats industry of the developing countries; he pointed out the consequent need for a transfer of technological know-how and financial resources to those countries.

Election of Chairman

4. Mr. Francisco Botella, Deputy Head of the Department of International Agricultural Relations of the Spanish Ministry of Agriculture, was elected Chairman of the Consultation Meeting. On assuming office, he expressed his hope that the Meeting would focus on obtaining positive results in the field of vegetable cils and fats, in a harmonious context of international cooperation.

Election of four Vice-Chairmen

- 5. The following Vice-Chairmen were elected:
 - Mr. César C. Gallegos-Barguin (Mexico)
 - Mr. S. Larbi-Odam (Ghana)
 - Mr. László Nagy (Hungary)
 - Mr. N.S. Rajagopal (India)
- 6. It was agreed that the Chairman and four Vice-Chairmen would constitute the Bureau of the Meeting.

Adoption of the agenda

- 7. The Meeting adopted the following agenda:
 - 1. Election of officers
 - 2. Adoption of the agenda
 - 3. Consideration of the priority issues:
- (a) The prospects for the growth of the vegetable oils and fats industry up to 2000 throughout the world, and the definition of the elements of a global policy resulting from such prospects;
- (b) Forms of international co-speration needed to establish new production capacity in developing countries for:
 - (i) Expelling or extracting oil from oil-seeds and fruits;
 - (ii) Processing crude vegetable oil into end products;
 - (iii) Manufacturing animal feeds;
- (c) Action required as a follow-up to the First Consultation Meeting on the Vegetable Oils and Fats Industry.
 - 4. Adoption of the report.
- 8. The Meeting decided that three working groups should be established consisting of representatives of each of the five regional groups, to formulate proposals and conclusions relating to agenda item 3 (a), (b) and (c).

II. PROSPECTS FOR THE GROWTH OF THE VEGETABLE OILS AND FATS INDUSTRY UP TO 2000 THROUGHOUT THE WORLD AND THE DEFINITION OF THE ELEMENTS OF A GLOBAL POLICY RESULTING FROM SUCH PROSPECTS

- 9. A representative of the UNIDO secretariat introduced the issues, emphasizing the need to examine each issue with particular attention to long-range prospects for the development of the sector rather than current, short-term problems. He urged participants to concentrate on consideration of the measures proposed in the issue paper ID/WG.260/4.
- 10. There appeared to be broad agreement that a significant growth in the consumption of oils and fats would take place primarily in developing countries and that increases in processing capacity would therefore also be located in those countries. A number of developing and developed countries expressed concern that the major constraint on attaining that objective related to agricultural production.
- 11. It was felt by the Meeting that the UNIDO Draft Study might have covered the aspects of raw material production in greater detail; it would be useful for UNIDO to consult with FAO and other agencies with similar interests and information.
- 12. Participants clearly felt that collaboration between developed and developing countries and between developing countries themselves, particularly with regard to the transfer of technology, training of personnel and other related areas should be further enhanced, and that UNIDO might be well placed to play an important role in the co-ordination of such activities.
- 13. Several participants reported that their countries had succeeded in considerably increasing yields of oil-bearing seeds and fruit and, by properly co-ordinating such increases in agricultural production with industrial processing facilities, had substantially improved their vegetable oils and fats situation. Participants from several countries offered assistance to developing countries in transfering to them their know-how along those lines.
- 14. The point was also made that regional co-operation between developing countries, particularly where there existed countries with deficits and surpluses side by side, would be most useful. It would be desirable for UNIDO to provide statistics that would make it possible to group countries into three categories: countries having deficits; countries having surpluses; and countries near self-sufficiency.

- 15. It was emphasized by some participants that economic considerations would have to continue to be the basis for the sector's further development: several developed countries were in the process of increasing their production of soya beans and rape-seed largely to satisfy their needs for protein meal and partly to take advantage of the fact that the availability of these oils with a low saturated fatty acid content was necessary to them. It would be useful to have better forecasts of the world's protein meal need and protein meal availability by 2000; the forecasts might also cover the storage and processing capacities that would have to exist by that time in developing countries in order to produce a satisfactory situation. All projections should properly take into consideration the anticipated growth in population and per capita income in the developing countries.
- 16. The representative of the Commission of the European Economic Community reaffirmed on behalf of the Commission its concurrence with the spirit of the Lima Declaration. Although he strongly supported the UNIDO system of consultations as a viable instrument of international economic co-operation, he felt that any attempt at establishing a world-wide planning system for industrial development would be unacceptable, since such a system would be incompatible with the principles on which market economies were based.
- 17. Participants from certain countries that were producers of rape-seed stated their intention to become self-sufficient in the production of that oil-seed. Their intention was also to export the rape-seed oil. Those participants expressed the view that their countries production of rape-seed was mainly an input to the animal feed industry but would significantly increase the availability of edible oils. It was proposed by a participant that the estimated 1985 figures on rape-seed oil production in the UNIDO Draft Study should be modified.
- 18. A participant from the country that was the major producer of soya beans stated that the number of oil-seed processing plants had declined in recent years. Soya bean processing capacity, however, continued to expand as larger mills replaced smaller ones taken out of production. It was noted that in his country, palm and coconut oil imports were expected to increase by 1985. As the UNIDO Draft Study did not include projections on protein meal production for 2000, the analysis was incomplete. He noted that there were major constraints on the export of fully refined oils and oil products. The

constraints included high transportation costs resulting from special handling costs, and related to the perishability of most finished products. Other participants, in support of his view, suggested that the matter might be a suitable subject for discussion at a future consultation meeting.

had not been included in the Draft Study. He estimated that the annual production of olive oil by 2000 would be 2.7 million tons and requested that olive oil should be included in UNIDO studies. With regard to marketing, he mentioned the difficulties encountered by the developing countries and urged the Meeting to arrive at a conclusion on market opportunities for exports from developing countries. That matter could also be discussed at a subsequent consultation meeting.

Conclusions

- 20. The statistical data and the subsequent discussions indicated that the oils and fats markets in some developed countries were already becoming saturated and further development of the markets for oil products would take place mainly in developing countries as population and incomes in those countries increased and their markets developed. However, there could still be room for increasing the share of tropical oils within the total oils and fats consumed in developed countries, and that could offer opportunities to exporting developing countries to increase their share in the markets of developed countries. The following conclusions were reached:
- (a) Meaningful efforts should be made to secure a substantial increase in the production of oil-bearing materials in the developing countries as a basic requirement for the further development of the vegetable oils and fats industry in those countries;
- (b) New capacities for the processing of all oil-bearing materials in developing countries, such as coconut, palm kernels, palm fruit, ground-nuts etc., would be installed mainly in the developing countries in order to satisfy their growing needs and also for export;
- (c) To facilitate the development of the oil-seed processing industry, industrialists from developed countries could increasingly import processed goods from developing countries to the extent of their needs, with due respect to the rules of international trade policy;
- (d) Developed countries would continue to replace and expand existing equipment as indicated by market factors. 1/ Their requirements for oilcake and meal for expanding the poultry and livestock feed industries must be met. The factors influencing the expansion of oil-seed processing capacity in developed countries might not parallel those in developing countries, since the processing capacities of the developed countries were primarily designed to process temperate zone seeds such as soya beans, rape-seed and sunflower seed;

^{1/} This was not to be interpreted to mean that countries not having an oil-seed processing industry were precluded from installing equipment manufacturing capacities.

- (e) Any increase in processing capacity would have to be based on normal techno-economic viability considerations such as:
 - (i) The adaptation of products to the needs and expectations of those markets;
 - (ii) The availability of adequate and reliable supplies of raw materials for processing and arrangements for co-operation among deficit and surplus developing countries to meet these requirements;
 - (iii) Optimum scales of production;
 - (iv) Access under conditions of fair international competition to national, regional and international markets for the different products considered;
- (f) In order to ensure the success and viability of industrial installations that might be planned by the developing countries, co-operation among developing countries and between developed and developing countries should be promoted for the benefit of all parties. Such co-operation should involve industrialists and other parties.

III. FORMS OF INTERNATIONAL CO-OPERATION NEEDED TO ESTABLISH NEW PRODUCTION CAPACITY IN DEVELOPING COUNTRIES FOR:

- (i) Expelling or extraoting oil from oil-seeds and fruits;
- (ii) Processing orude vegetable oil into end products;
- (iii) Manufacturing animal feeds
- 21. There was broad agreement on the action that could be taken to assist the developing countries in the establishment and expansion of their industrial production capacities in the field of the vegetable oils and fats industry.
- 22. Within the context of the global development of the fats and oils industry, the establishment of new production capacity in the developing countries as well as the development of existing capacity should be worked out on an individual country basis, taking into account the specific needs of and constraints in each country.
- 23. The suggestion in the secretariat document (ID/WG.260/4) that plants with a capacity of 100 tons per day of semi-processed or crude vegetable oil should be established was considered by several participants to be open to question because of the extensive land area required for the cultivation of oil-seeds and the transport problems that would be involved in meeting the raw material needs of such plants. Consequently, capacities smaller than 100 tons per day should also be considered.
- 24. The question of improving oil-seed processing in the rural sector, which was admittedly less efficient, was also examined. In view of the social problems that could arise from disrupting that traditional method of processing, it was felt that it was unlikely to be phased out. The need to make more efficient use of the raw materials in such processes was stressed.
- 25. A participant stated that the decisive factor in the establishment and location of oil-seed processing plants was sound economic feasibility, and that included availability of the necessary raw materials. Solvent extraction was considered to be one of the best and most efficient processes; it was capital-intensive, however, and needed skilled labour for operation and supervision.
- 26. It was noted that, ten years before, the developing countries in total crushed 82 per cent of their seed production (excluding palm-cil). That percentage was the same in 1976 despite the fact that seed production had almost doubled, which seemed to indicate that they would be capable of meeting

the estimated requirements by 2000. There were still many improvements to be made, however, regarding efficiency and quality of processing, and there were substantial differences between countries.

- 27. The integrated agro-industrial approach was suggested as a suitable means of ensuring the efficient production of raw materials and the application of modern industrial technology, the introduction of economies of scale, and as a help in marketing the products in international markets.
- 28. The Asian and Paoific Coconut Community was examining the under-utilization of installed capacity in the copra-crushing industry that was mainly due to the inadequacy of the transportation system and not a lack of raw material.
- 29. The representative of UNCTAD informed the Meeting that a second preparatory meeting on vegetable oils and oil-seeds was to be convened in February 1978 in Geneva within the context of the Integrated Programme for Commodities. He also provided information on maximum storage periods, storage capacities and storage costs for a number of vegetable oil-seeds and oils in selected countries.
- 30. Some participating countries from Africa requested technical assistance in the marketing of their finished and semi-finished products both within their countries and for export.
- 31. It was recognized that the manufacture of compound animal feeds would assist in providing value added and making available the greater volume of animal proteins that was required in the developing countries in view of the protein-calory deficiency. Such development would take place slowly, however, because of demand constraints and the need to improve animal husbandry. It was suggested that new cil-seed processing plants in the developing countries should include feedmills. The capacities suggested in the secretariat paper (ID/WG.260/4) of between 50,000 and 100,000 tons per year of compound animal feeds were thought to be inappropriate to the situation of many developing situations at the present time.
- 32. One participant drew attention to the difficulties experienced in some developing countries due to the non-availability of necessary spare parts for imported equipment. Assistance was required in the manufacture of some of those essential spare parts in the developing countries. Assistance in the development and application of appropriate industrial technology in that field was offered by a participant from a developed country.

- 33. Participants from several developed countries explained the different types of technical assistance programmes of their Governments available to the developing countries. Those programmes included: the carrying out of feasibility studies, processing technology, storage, the setting up of laboratories and quality control, and the provision of training at all levels.
- 34. Attention was drawn to the need of several developing countries for assistance in increasing oil-seed production, such as: the supply of fertilizers, pesticides, and agricultural equipment; the establishment of irrigation schemes; and the introduction of harvesting techniques suitable for a rapid expansion of their oil-seed production. It was suggested that UNIDO should make a study on harvesting techniques, in co-operation with the agencies concerned, and submit a report to the next Consultation Meeting on the Vegetable Oils and Fats Industry.
- 35. The need for technical assistance in the field of oil-seed production, development, research and training was stressed by several participants. One participant stated that the provision of technical assistance from his country involved both private industry and government efforts; it was global in scale and included co-operation with the recipient Governments and research centres. Recipient developing countries were urged to simplify their general administrative procedures in order to ensure prompt and ready response to specific requests.
- 36. The recommendations contained in the reports of the regional preparatory meetings held at ESCAP, ECLA and ECA were referred to by some delegations as useful. They emphasized the need for regional preparatory activities to continue as a means of identifying local and regional problems prior to their consideration at global consultation meetings. Similarly, the recommendations of global consultation meeting should be implemented in the regions in co-operation with the regional economic commissions, where appropriate. The ESCAP representative referred to the intergovernmental meeting on agro- and allied industries scheduled to be held at Bangkok from 24-30 January 1978, which would consider among other items the regional problems of the vegetable oils industry in Asia and the Pacific. In considering that item, the meeting would also take into account the recommendations of the First UNIDO Consultation Meeting on the Vegetable Oils and Fats Industry.

37. Emphasis was placed on the need to devise mechanisms for regional and interregional co-operation in the industry. The view was expressed that regional forums should be established to discuss the problems of the development of the industry, to exchange experience, and to consider joint ventures and other co-operative measures.

Conclusions

38. The following conclusions were reached:

Co-operation should be established between developed and developing countries in order to permit:

An increase in the production of oil-bearing raw materials in the developing countries;

The preparation of feasibility studies to determine the optimum conditions for the full utilization of existing capacities and the establishment of new capacities for the crushing and processing of crude oils;

An increase in production capacities in developing countries both in primary processing as well as further processing of intermediate raw materials into finished products;

Ensuring a production meeting quality standards, through appropriate assistance;

Assistance in the organization and implementation of an adequate manpower training programme for the proper management of plants to enable quality products to be obtained;

Assistance in the manufacture of essential components, spare parts, machinery, and equipment in the developing countries themselves;

The strengthening of research and development activities not only for the production and utilization of the oils but also for the utilization of the meal as a source of high-protein foods for both human and animal consumption.

- 39. It would be desirable to strengthen international co-operation in its various forms and to provide the developing countries with increasing capital contributions for the carrying out of the above-mentioned operations under conditions that were beneficial to all parties and in the common interest.
- 40. The International Fund for Agricultural Development could be called upon to make a substantial contribution to the operations planned in the field of the development of the production of oil-bearing raw materials, the production of compound animal feeds, and the raising of live-stock.

- 41. In addition to the usual forms of financing, it was desirable that UNIDO study the possibility of increased utilization of the Industrial Development Fund for the promotion of those industries.
- 42. Regional co-operation and co-operation between developing countries should be expanded, with regard to the supply of raw materials for the processing industries, the expansion of the market for processed products and the sharing of experience in regard to training and the selection of technologies.

- IV. ACTION REQUIRED AS A FOLLOW-UP TO THE FIRST CONSULTATION MEETING ON THE VEGETABLE OILS AND FATS INDUSTRY
- 43. The participants noted that when the Industrial Development Board authorized the convening of the Meeting, it had also authorized the carrying out of follow-up action. It was agreed that the following action would be appropriate.

The further development of surveys and studies

- 44. (a) For the short-term programme:
 - Before primary and secondary processing units could be set up, it must be ascertained that adequate sources of supply of raw materials existed. Consequently, a survey should be made of existing and future supplies of oil-bearing raw materials in the developing countries, and of the main commercial, financial and material obstacles and hindrances to development. Efforts should be exerted to produce recommendations to overcome those obstacles;
 - (ii) Detailed identification and evaluation of existing and future infrastructural requirements of the vegetable oils and fats industry. The information in the UNIDO Draft Study should be improved and made more complete to enable a second consultation meeting (which might be authorized by the Industrial Development Board) to examine the infrastructure for the vegetable oils and fats industry in order to provide more specific recommendations;
 - (b) For the long-range programme:
 - (i) The identification of key elements and their effect on the development of the sector.
 - (ii) The improvement and further elaboration of production and demand factors until 2000.
- 45. In carrying out the studies, UNIDO would co-operate with other organizations of the United Nations family concerned and with other competent bodies. UNIDO would seek the co-operation of the countries concerned and possibly assist them in the collection of the information required. The data should be collected on the basis of the priorities of the least developed countries and should be limited to specific requests from Governments.

Setting up of regional co-ordination committees

46. To facilitate greater co-operation between the developing countries in each region and to provide a forum for discussions for follow-up action on decisions taken concerning co-operation between these countries, regional

co-ordinating committees should be established within appropriate regional arrangements. The objectives and the functions of the regional co-ordinating committees could best be determined by intergovernmental meetings that would also be convened through the appropriate regional arrangements. The committees should be designed:

- (a) To provide timely and accurate information to member countries on such matters as:
 - (i) International agencies, organizations or companies with facilities readily available to provide technical assistance, market information and capital availabilities;
 - (ii) The development of the vegetable oil industry, as may be required to meet the continuing needs of future consultation meetings;
- (b) To organize local meetings between two or more countries (with related services agencies) when it seemed likely that such meetings could bring about co-operation between those countries for joint action. Such action would be indicated where the individual countries concerned lacked adequate raw material, finance, market, management, or other resources.

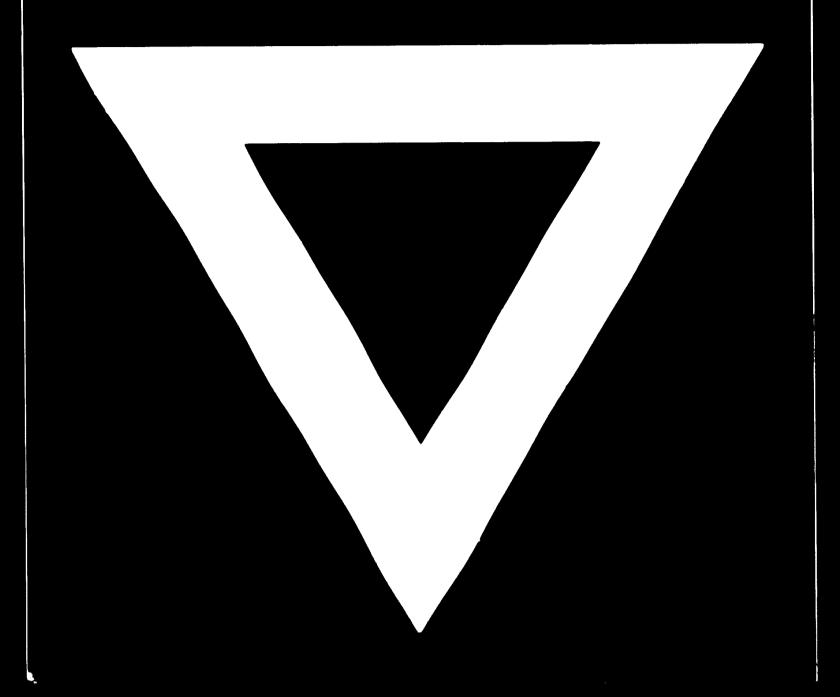
Increased technical co-operation between the developed and the developing countries and among the developing countries themselves by improving feasibility studies and project development activities for the sake of viable and economical enterprises

- 47. Such co-operation might cover the following:
- (a) The establishment of suitable production systems and the selection of appropriate varieties in order to promote the development and production of oil-bearing materials;
- (b) The establishment of local processing capacities by the development of existing capacities; and the establishment of new facilities when necessary;
 - (c) The expansion of capacities for seed storage.
- 48. Those measures could be effective only if they were accompanied by assistance in project development, implementation and operation, and man-power training. Such assistance should cover the following:
- (a) Assistance in the establishment of animal-feed plants for the processing of oil-seed cake;
- (b) A study of the possibility of assistance to solve problems of transport and storage;
- (c) Study of equitable means of oo-operation and assistance in product and process development for local markets and in product definition for export;
- (d) Co-operation between developed and developing countries with a view to the establishment of plants for the manufacture of necessary equipment and machinery for the processing of oil-seeds, the refining of oils, and for the subsequent processing of those oils into finished products.

Adoption of the report

- 49. The Consultation Meeting recommended that its report should be submitted for the information of, and consideration by, all interested parties, including the Industrial Development Board and the countries participating in the activities of UNIDO.
- 50. The report was unanimously adopted at the meeting on 16 December 1977.

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