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## ABBREVIATIONS

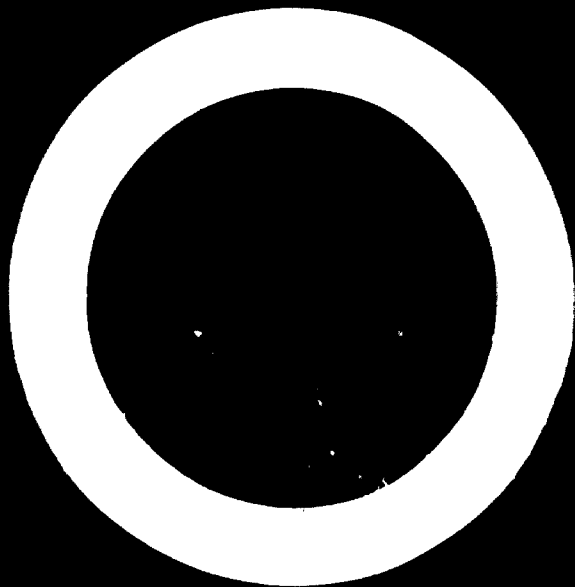
<b>ACABQ</b>	<b>Advisory Committee on Administrative and Budgetary Questions</b>
<b>ACAST</b>	<b>Advisory Committee for the Application of Science and Technology for Development</b>
<b>ACC</b>	<b>Asian Coconut Community</b>
<b>APO</b>	<b>Asian Productivity Organization</b>
<b>ASEAN</b>	<b>Association of South-East Asian Nations</b>
<b>ASMO</b>	<b>Arab Organization for Standardization and Metrology</b>
<b>CARICOM</b>	<b>Caribbean Community</b>
<b>CIOS</b>	<b>International Council for Scientific Management</b>
<b>CMEA</b>	<b>Council for Mutual Economic Assistance</b>
<b>CPCM</b>	<b>Maghreb Permanent Consultative Committee</b>
<b>EAC</b>	<b>East African Community</b>
<b>EC</b>	<b>European Community</b>
<b>ECA</b>	<b>Economic Commission for Africa</b>
<b>ECE</b>	<b>Economic Commission for Europe</b>
<b>ECLA</b>	<b>Economic Commission for Latin America</b>
<b>ECOSOC</b>	<b>Economic and Social Council</b>
<b>ECWA</b>	<b>Economic Commission for Western Asia</b>
<b>ESCAP</b>	<b>Economic and Social Commission for Asia and the Pacific</b>
<b>FAO</b>	<b>Food and Agriculture Organization of the United Nations</b>
<b>FIT</b>	<b>Funds-in-Trust</b>
<b>GATT</b>	<b>General Agreement on Tariffs and Trade</b>
<b>GTF</b>	<b>UNIDO General Trust Fund</b>
<b>IBRD</b>	<b>International Bank for Reconstruction and Development</b>
<b>ICA</b>	<b>International Co-operative Alliance</b>
<b>ICAITI</b>	<b>Central American Institute for Research and Technology</b>
<b>ICC</b>	<b>International Chamber of Commerce</b>
<b>IDCAS</b>	<b>Industrial Development Centre for Arab States</b>
<b>ILO</b>	<b>International Labour Organisation</b>
<b>IPF</b>	<b>Indicative Planning Figure</b>
<b>IRRI</b>	<b>International Rice Research Institute</b>
<b>ISBI</b>	<b>International Savings Bank Institute</b>
<b>ISO</b>	<b>International Organization for Standardization</b>
<b>OAU</b>	<b>Organization of African Unity</b>
<b>OCAM</b>	<b>Common Organization of African and Malagasy States</b>
<b>OECD</b>	<b>Organisation for Economic Co-operation and Development</b>
<b>OIML</b>	<b>International Organization of Legal Metrology</b>
<b>RB</b>	<b>Regular budget</b>
<b>RCD</b>	<b>Regional Co-operation for Development</b>
<b>RP</b>	<b>Regular programme of technical assistance</b>
<b>SIECA</b>	<b>Permanent Secretariat of the General Treaty on Central American Economic Integration</b>
<b>SIS</b>	<b>Special Industrial Services</b>
<b>UDEAC</b>	<b>Central African Economic and Customs Union</b>
<b>UNCTAD</b>	<b>United Nations Conference on Trade and Development</b>
<b>UNDP</b>	<b>United Nations Development Programme</b>
<b>UNEP</b>	<b>United Nations Environment Programme</b>
<b>UNESCO</b>	<b>United Nations Educational, Scientific and Cultural Organization</b>
<b>UNIDO</b>	<b>United Nations Industrial Development Organization</b>
<b>VINITI.</b>	<b>All-Union Institute for Scientific and Technical Information</b>
<b>WAITRO</b>	<b>World Association of Industrial and Technological Research Organizations</b>
<b>WHO</b>	<b>World Health Organization</b>

## *Preface*

*The present Report is to be considered an updating to, and continuation of, the 1973 Report (ID/B/140), a document that extended beyond the bounds of an annual report to include historical background information about UNIDO and its work. In the interest of brevity and non-duplication, cross references have been made to the pertinent sections of the 1973 Report where appropriate.*

*The contents of the 1974 Annual Report have been carefully selected so as to provide the reader with a representative cross-section of the Organization's activities in the year 1974. An attempt has also been made to present a follow-up account of projects and activities described in the preceding Report. Moreover, in keeping with the wish expressed by several delegations at the eighth session of the Industrial Development Board, the description of the work carried out in 1974 under the various programmes and programme components of the Organization follows the pattern of the biennial programme and budget of UNIDO for 1974-1975, which was approved by the Board at its seventh session.*

*As in the 1973 Report, a comprehensive picture of the Organization is to be found in the statistical annex and in the numerous appendices which contain data on income and expenditure for the year under review as well as lists of the Organization's publications, studies, meetings and training courses in 1974.*





## Chapter I

# INTERGOVERNMENTAL POLICY-MAKING ORGANS

1. As a subsidiary body of the General Assembly, UNIDO is subject to the direction and monitoring of the General Assembly as well as of a number of other intergovernmental policy-making bodies and subsidiary or *ad hoc* bodies.<sup>1</sup> The present chapter recounts some of the decisions and recommendations made during the year 1974 by those various organs that had, or are likely to have, a direct bearing on UNIDO and its programme of work.

## THE GENERAL ASSEMBLY

2. In the spring of 1974, the States Members of the United Nations convened a special session of the General Assembly "to study for the first time the problems of raw materials and development, devoted to the consideration of the most important economic problems facing the world community."<sup>2</sup> At this sixth special session, from 9 April to 2 May 1974, the General Assembly adopted two resolutions: the Declaration on the Establishment of a New International Economic Order (3202 (S-VI)); and the Programme of Action on the Establishment of a New International Economic Order (3201 (S-VI)).

3. The Declaration contains an outline of the general principles of a new international economic order that "shall be one of the most important bases of economic relations between all people and all nations".<sup>3</sup> Several of the principles stated in the Declaration have specific relevance to the work of UNIDO, such as:

"(m) Improving the competitiveness of natural materials facing competition from synthetic substitutes;

"(o) Securing favourable conditions for the transfer of financial resources to developing countries;

"(p) Giving to the developing countries access to the achievements of modern science and technology, and promoting the transfer of technology and the creation of indigenous technology for the benefit of the developing countries in forms and in accordance with procedures which are suited to their economies;

<sup>1</sup> The 1973 Annual Report (ID/B/140) contains a brief historic description of these bodies as well as an explanation of their interrelationships.

<sup>2</sup> General Assembly resolution 3201 (S-VI), preamble.

<sup>3</sup> General Assembly resolution 3201 (S-VI), para. 7.

"(q) The need for all States to put an end to the waste of natural resources, including food products;

"(t) Facilitating the role which producers' associations may play within the framework of international co-operation and, in pursuance of their aims, *inter alia* assisting in the promotion of sustained growth of the world economy and accelerating the development of developing countries." (Resolution 3201 (S-VI), para. 4.)

4. The Programme of Action underlines the need for "maximum economic co-operation and understanding among all States, particularly between developed and developing countries, based on the principles of dignity and sovereign equality."<sup>4</sup> The Programme which is designed to rectify the imbalance between developed and developing countries, attaches particular importance to the development of manufacturing industries in the developing countries and identifies the pressing need to take measures to promote the processing of raw materials in the producer developing countries. Measures proposed by the General Assembly in section I, subsection 2 (food), section III (industrialization), section IV (transfer of technology), section V (regulation and control over the activities of transnational corporations), section VII (promotion among developing countries) and section X (Special Programme) of its resolution 3202 (S-VI) will have a direct bearing on the activities of UNIDO.

5. Within the Programme of Action, the General Assembly also adopted a Special Programme that includes "emergency measures to mitigate the difficulties of the developing countries most seriously affected by economic crisis, bearing in mind the particular problem of the least developed and land-locked countries"<sup>5</sup> and established a Special Fund from which emergency relief and development assistance is to be provided.<sup>6</sup>

6. The need for renewed efforts in encouraging industrialization in the developing countries has been underlined in both resolutions and a separate report on the possible role, activities and programmes of UNIDO in fulfilling the objectives in the Declaration and Programme of Action was submitted by the Secretariat of UNIDO to the Permanent Committee of the Industrial Development Board at its fifth session.<sup>7</sup>

7. Since the sixth special session, the *Ad Hoc* Committee on the Special Programme, which was established in pursuance of General Assembly resolution 3202 (S-VI), held two sessions and submitted, through the Economic and Social Council, to the General Assembly at its twenty-ninth session an assessment of the requirements of the most seriously affected countries and a draft resolution on the operation of the Special Fund.

8. The General Assembly at its twenty-ninth session decided in resolution 3356 (XXIX) that the Special Fund should operate as an organ of the General Assembly, commencing by 1 January 1975, and laid down the provisions governing the operations of the Special Fund. In the same resolution the Executive Director of the Special Fund was requested to make effective use of the existing facilities of the United Nations Secretariat, including those of UNIDO.

<sup>4</sup> General Assembly resolution 3202 (S-VI), preambular para. 2.

<sup>5</sup> *Ibid.*, section X, preambular para. 1.

<sup>6</sup> *Ibid.*, section X, para. 5.

<sup>7</sup> ID/B/C.3/28.

9. During its twenty-ninth session, the General Assembly dealt with matters pertaining directly to UNIDO under its agenda item 43. Under this item, the General Assembly considered the confirmation of the appointment of the Executive Director of UNIDO. Section II, paragraph 18, of General Assembly resolution 2152 (XXI) of 18 November 1966 provides that the Executive Director of UNIDO shall be appointed by the Secretary-General and that his appointment shall be confirmed by the General Assembly. It also provides that the Executive Director shall be appointed for four years and shall be eligible for re-appointment. The term of Mr. Ibrahim Helmi Abdel-Rahman expired on 31 December 1974. The Secretary-General thus proposed to the General Assembly the appointment of Dr. Abd-El Rahman Khane as Executive Director of UNIDO for a four-year term ending on 31 December 1978. The General Assembly confirmed the appointment of Dr. Abd-El Rahman Khane at its 2325th plenary meeting, on 18 December 1974.

10. The General Assembly at its twenty-ninth session adopted three resolutions directly related to UNIDO. The first resolution, 3305 (XXIX), dealt with the revision of lists of States eligible for membership in the Industrial Development Board; included for the first time in list A is Guinea-Bissau, and in list C Grenada.

11. In resolution 3306 (XXIX), which concerned the Second General Conference of UNIDO, the General Assembly took note of the report of the Industrial Development Board on the work of its eighth session<sup>8</sup> as well as of the report of the Intergovernmental Preparatory Committee for the Second General Conference on the work of its third and fourth sessions.<sup>9</sup> In the same resolution the General Assembly urged States Members to make maximum efforts to ensure the success of the Conference and to outline specific measures for the implementation of the Programme of Action on the Establishment of a New International Economic Order (General Assembly resolution 3202 (S-VI)) in respect of international co-operation for the industrial development of the developing countries. Three operative paragraphs of that resolution dealt with the international declaration and the plan of action for industrial development to be defined and adopted by the Conference and made specific reference to industrial co-operation between developed and developing countries and between the developing countries themselves, to substantially higher participation of the developing countries in world industrial production and to the appropriate machinery to be established for the implementation of the targets of this goal whereby special attention should be paid to the least developed among the developing countries. The General Assembly agreed that both the declaration and the plan of action should promote and lay down guidelines for:

“renewed and strengthened co-operation for the promotion of the industrial development of the developing countries, while respecting their independence, sovereignty, national objectives and their right to take full advantage of and to use freely their natural resources, and that the process of industrialization shall ensure social justice, through patterns of consumption which satisfy the genuine and fundamental needs of the whole population, making them full participants in the process and benefits of development” (operative para. 3).

<sup>8</sup> A/9616.  
<sup>9</sup> ID/S/145

The General Assembly also considered that the plan of action for industrial development should include:

“concrete measures to assist developing countries in increasing significantly their industrial development, including their installed capacity, as a means of expanding their trade in manufactures and semi-manufactures, processing their basic commodities and raw materials and contributing, *inter alia*, to the development of their agro-industrial capacity, bearing in mind that the industrialization of the developing countries should be based on the most advanced technologies appropriate to their particular conditions and needs in accordance with the most efficient utilization of the natural and human resources available to each country or group of countries, as defined in their own development plans and priorities” (operative para. 5).

The Conference was also urged by the General Assembly to decide, on the basis of the plan of action, on the necessary measures to strengthen UNIDO within the United Nations system:

“to enable it to develop into an effective institutional framework in order to expand its activities in a manner consistent with the requirements of the developing countries and the role of their industrialization within a new international economic order” (operative para. 6).

Finally, the General Assembly requested the Secretary-General, in consultation with the Executive Director, to submit to the Conference a report on the role of the United Nations system in establishing a new international economic order in the field of industrialization.

12. The third resolution 3307 (XXIX), dealt with the establishment of a United Nations industrial development fund. In this resolution, the General Assembly, convinced that additional financial resources were required for achieving an effective international co-operation in the industrial sector, took note of the report of the Secretary-General on the establishment of a United Nations industrial development fund<sup>10</sup> and requested the Second General Conference to consider the establishment of such a fund, to be financed from voluntary contributions, as well as the basic guidelines for the operation of the fund.

13. The General Assembly further decided to postpone to its thirtieth session consideration of the question of the separate preparation and submission of the programme and budget of UNIDO and of administrative autonomy for the Organization; at its thirtieth session the General Assembly would have the views of the Second General Conference on these subjects.

14. A number of other resolutions adopted by the General Assembly at its twenty-ninth session are also of special concern for the activities of UNIDO. One of the resolutions is the Charter of Economic Rights and Duties of States (resolution 3281 (XXIX)). Another resolution, 3241 (XXIX), gave further impetus to the special programme of UNIDO on co-operation among developing countries (see chapter II, section on “Special programmes”); in this resolution, the General Assembly, *inter alia*, urged all specialized agencies and other organizations within the United Nations system to provide continuing support for the promotion of economic co-operation

<sup>10</sup> A/9792.

among developing countries in accordance with paragraph 9 of General Assembly resolution 3177 (XXVIII), and requested the Secretary-General to report to the General Assembly at its thirtieth session on the contribution made by the United Nations system in promoting economic co-operation among developing countries.

15. International co-operation to combat desertification was the subject of another resolution (3337 (XXIX)) adopted by the General Assembly at its twenty-ninth session, in which special emphasis was given to the available knowledge in this area and the experience, *inter alia*, of UNIDO to be utilized in combating desertification. All organizations concerned within the United Nations system were requested to make their contribution to the *ad hoc* interagency task force being set up in preparation for the United Nations Conference on Desertification, to be held in 1975. In another resolution, 3338 (XXIX), the General Assembly recalled its resolution 3202 (S-VI) and the decision 28 (LVII) of the Economic and Social Council on special economic problems and development needs of developing island countries and invited the heads of organizations in the United Nations system to intensify their efforts with regard to developing island countries within their respective fields of competence.

16. In resolution 3343 (XXIX), pertaining to the special session of the General Assembly to be held from 1 to 12 September 1975 and which is to be devoted to development and international economic co-operation, the General Assembly requested the Secretary-General, in collaboration with several executive heads of organizations within the United Nations system, including UNIDO, to submit to the Preparatory Committee of the special session a comprehensive report on the state of international economic activities, with particular emphasis on an integrated approach with regard to commodities, agricultural and industrial development so as to enable the General Assembly at its special session, to contribute further to the appropriate changes in the over-all pattern of international economic relations.

### **Special conferences**

17. During 1974, the General Assembly convened two special conferences of particular interest to UNIDO, the United Nations World Population Conference and the World Food Conference.

#### ***United Nations World Population Conference***

18. The United Nations World Population Conference, which was held from 19 to 30 August 1974 at Bucharest, Romania, focused attention on the population problems of the world and on their far reaching consequences. The Conference formulated a World Population Plan of Action aimed at raising the standards of living and improving the quality of life of the peoples of the world through well-formulated population goals and policies. One of the themes expressed at the Conference was that a decline in the birth-rate and a smaller family size were generally associated with development and modernization. The Conference urged that the Plan of Action be closely co-ordinated with the International Development Strategy for the Second United Nations Development Decade, which is to be reviewed at the Second General Conference of UNIDO.

19. Some of the subjects considered by the World Population Conference touched upon areas falling within the field of competence of UNIDO. By way of example, UNIDO is contributing, in co-operation with the United Nations Fund for Population Activities, to the establishment of production facilities and the utilization of natural resources in the manufacture of chemical contraceptives.

### *United Nations World Food Conference*

20. The United Nations World Food Conference was held at Rome, Italy, from 5 to 16 November 1974 in accordance with the decision taken by the General Assembly in resolution 3180 (XXVIII) of 17 December 1973. UNIDO took an active part in the preparatory arrangements for the Conference.

21. The World Food Conference adopted a Declaration on the Eradication of Hunger and Malnutrition. In addition, it adopted 22 resolutions, a number of which will have a direct bearing on the activities of UNIDO, particularly with reference to the work in the agro-industrial sector.

22. In his address of 8 November 1974 to the Conference, the Executive Director of UNIDO emphasized the interrelationship and close connexions between agriculture and industrialization. He pointed to the fact that the development of agricultural production required in all countries a parallel development of industrialization and stated that the basic problem of the developing countries was poverty which could only be solved by the establishment of a new world economic order as recommended by the General Assembly. He pledged the support of UNIDO to all measures adopted by the Conference.

23. A paper on the decisions and recommendations of the World Food Conference on matters relating to questions of industrialization<sup>11</sup> was submitted by the Secretariat of UNIDO to the Permanent Committee at its fifth session, and a separate document on the implications for the activities of UNIDO of the recommendations of the World Food Conference<sup>12</sup> was prepared by the Secretariat for the consideration of the Second General Conference of UNIDO.

### **THE ECONOMIC AND SOCIAL COUNCIL**

24. At its fifty-seventh session, held in July and August 1974, the Economic and Social Council, under its agenda item 17 entitled "Industrial development co-operation", took up matters relating to UNIDO. The following reports were before the Council: a note<sup>13</sup> by the Secretary-General transmitting the report of the Industrial Development Board on the work of its eighth session;<sup>14</sup> the report and conclusions of the *Ad Hoc* Committee on Long-range Strategy for UNIDO;<sup>15</sup> the

<sup>11</sup> ID/B/C.3/32.

<sup>12</sup> ID/CONF.3/17/Rev.1.

<sup>13</sup> E/5546.

<sup>14</sup> A/9616.

<sup>15</sup> E/5546 (ID/B/142 and Corr.1).

report of the Intergovernmental Preparatory Committee for the Second General Conference of UNIDO;<sup>16</sup> and the report of the Executive Director of UNIDO relating to the Second General Conference.<sup>17</sup> The latter two reports had been prepared in response to operative paragraph 4 of General Assembly resolution 3078B (XXVIII) of 6 December 1973 concerning preparations for the Conference. In addition, the Council had before it the report of the Committee for Development Planning on its tenth session<sup>18</sup> which was devoted to the question of the industrialization of developing countries.

25. The Council welcomed the conclusions and recommendations contained in the report of the *Ad Hoc* Committee. It was noted by the Council that the recommendations and conclusions, along with the Declaration on the Establishment of a New International Economic Order and the Programme of Action, were to be discussed at the Second General Conference of UNIDO as they would undoubtedly form a basis for the long-term strategy for UNIDO.

26. Of special note to UNIDO is ECOSOC resolution 1909 (LVII) in which the Committee recommends that a comprehensive strategy be formulated at the Second General Conference of UNIDO to assist in accelerating the industrialization of developing countries and that co-ordinated steps should be taken to strengthen the efficiency of the UNIDO machinery in the field of industry so that it may contribute more effectively to the industrialization of the developing countries. In the same resolution, the Council recommends that the necessary steps be taken to improve the delivery capacity of UNIDO operational activities, including the question of an increased allocation of the necessary resources to the Organization. The importance of the forthcoming results of the Second General Conference was also stressed in resolution 1911 (LVII) in which the Council considered, *inter alia*, that the outcome of the Conference should contribute to the special session of the General Assembly, to be held in 1975, which is to be devoted to development and international economic co-operation.

27. In ECOSOC resolution 1874 (LVII) on the economic and social situation in the Sudano-Sahelian region, the Secretary-General was requested to hasten the preparatory work on the possible establishment of a research institute for the arid Sahelian zone in close co-operation with, *inter alia*, UNIDO. Also in connexion with arid areas (resolution 1898 (LVII)), the Secretary-General was requested to convene an *ad-hoc* inter-agency task force comprised of persons appointed by the competent organizations of the United Nations system, including UNIDO, with a view to preparing a world programme of development research and application of science and technology to solve the special problems of the arid area.

28. The role of an international technological information system was also the subject of a resolution adopted by ECOSOC at its fifty-seventh session (resolution 1902 (LVII)) in which UNIDO, together with other United Nations organizations, was called upon to co-operate in a feasibility study on the progressive establishment of an international information exchange system for the transfer and assessment of technology. Such a system, in the opinion of the Council, should serve the actual

<sup>16</sup> E/5547 (ID/B/145).

<sup>17</sup> E/5548.

<sup>18</sup> E/5478.

needs of potential users of information and should be compatible with existing and proposed systems within the United Nations, particularly with the Universal System for Information in Science and Technology.

29. The Council also devoted special attention to the improvement and development of building technologies based on locally available materials (resolution 1886 (LVII)) and requested UNIDO, in particular, to intensify the studies requested at the 1972 Symposium on the Development of the Plastic Fabrication Industry in Latin America, held at Bogotá, Colombia, and to devote special resources to the promotion and establishment in developing countries of industries utilizing building materials derived from petroleum, particularly polymers, and other binders and coatings of organic and mineral origin, in response to integrated industrial planning for this international market.

### *Committee for Development Planning*

30. The Committee for Development Planning is a standing committee of the Economic and Social Council. The Committee, which was established in 1966, is composed of 18 experts, representing different planning systems, who are appointed by the Economic and Social Council from nominees of the Secretary-General to serve in their personal capacities for three-year terms. At its annual meetings, the Committee considers the various problems that arise in connexion with the implementation of development plans. By way of example, it drew up recommendations with regard to development planning for the Second United Nations Development Decade (1971-1980). In recent years, it has been assisting in evaluating the progress made towards the implementation of the International Development Strategy.

31. At the invitation of the Executive Director of UNIDO, the Committee for Development Planning held its tenth session in Vienna from 25 March to 3 April 1974. One of the main items on the agenda of its tenth session was "Principal aspects of industrialization in developing countries"; in drawing up its report,<sup>19</sup> the Committee bore in mind that the underlying issues of that subject would be discussed by the Second General Conference of UNIDO. The report of the Committee is to be one of the main papers for the deliberation of the Conference under agenda item 6, "Industrialization of the developing countries".

32. In referring to the contribution of the United Nations to the industrialization of the developing countries, the Committee concluded that:

"There is an urgent need... for reinforcement of appropriate technical assistance activities, including those of UNIDO and the funding therefor. There is need for greatly improved information exchange and referral systems, particularly as to alternative technologies, processes, and industrial products. And there would be great virtue in the progressive establishment of confidence in developing countries, that, as would be buyers of technology, they can turn

<sup>19</sup>E/5478. This report was submitted to ECOSOC at its fifty-seventh session, see para. 24 above.



to expert organizations of the United Nations system for hard-hitting dispassionate evaluations of the comparative costs and benefits of competitive alternatives, stripped of all proprietary advocacy."<sup>20</sup>

The Committee was also of the opinion that industrialization had not received sufficient attention in the aid programmes of the developed countries and of the international organizations and recommended greater and more co-ordinated efforts by the United Nations system to encourage the industrialization process as a major instrument of progress, modernization and social change in developing countries.

### THE INDUSTRIAL DEVELOPMENT BOARD

33. The eighth session of the Industrial Development Board took place in Vienna from 2 to 14 May 1974. At this session, the Board examined the reports of the Permanent Committee on the work of its third and fourth sessions and the report and conclusions of the *Ad Hoc* Committee on Long-range Strategy for UNIDO. Aside from the recommendations on the long-range strategy for UNIDO, major items on the agenda of the eighth session were the implications of the sixth special session of the General Assembly for the work of UNIDO and natural resources of the developing countries and their relationship to problems of industrialization.

34. During its eighth session the Industrial Development Board adopted five resolutions. Resolution 42 (VIII) dealt with the further development of a long-range strategy for UNIDO. In this resolution, the Board endorsed the conclusions and recommendations of the *Ad Hoc* Committee and invited the Executive Director to initiate consultations directed at seeking resources for the implementation of the recommendations of the Group of High-level Experts and to start immediately to implement those recommendations that were not contingent and dependent on extra resources. The Executive Director was also invited to report to the Permanent Committee at its fifth session on measures taken or planned relevant to the conclusions of the *Ad Hoc* Committee.<sup>21</sup> Further, the Industrial Development Board asked the Executive Director to be guided in his preparation of the 1976-1977 biennial programme budget and the 1976-1979 medium-term plan by the report of the *Ad Hoc* Committee.

35. In resolution 40 (VIII), the Board noted with interest the amendment to the Guidelines and Procedures on the SIS programme and asked the Executive Director to report at its ninth session on the working of the new arrangements.<sup>22</sup> In addition, the Executive Director was requested to report also to the Permanent Committee at its fifth session on the working of the new procedures and on the consultation with the UNDP Administrator concerning the establishment of a separate account for SIS.<sup>23</sup>

<sup>20</sup> *Ibid.*, para. 122.

<sup>21</sup> A report (ID/B/C.3/29) on this subject was submitted to the Permanent Committee.

<sup>22</sup> See chapter VII, section on "Special Industrial Services programme".

<sup>23</sup> A report (ID/B/C.3/31) on this subject was submitted to the Permanent Committee.

36. In resolution 41 (VIII) on a programme of action for the benefit of the least developed among the developing countries, the Board requested the Executive Director to draw up a detailed, over-all action-oriented programme for these countries, taking into account, *inter alia*, the recommendations of the sixth special session of the General Assembly, and to appoint, if necessary, consultants and experts for drawing up such a programme that was to be submitted to the Second General Conference of UNIDO.

37. One of the main issues at the eighth session of the Board was the implementation of the decisions of the sixth special session of the General Assembly. In its resolution 43 (VIII), stressing the vital role of industrialization in the development of the developing countries, the Board requested the Executive Director to report to the Permanent Committee at its fifth session on the possible role, activities and programmes of UNIDO for fulfilling the objectives set out in General Assembly resolutions 3201 (S-VI) and 3202 (S-VI).<sup>24</sup> The Executive Director was further requested to assist the *Ad Hoc* Committee on the Special Programme in carrying out its functions in regard to matters concerning industrialization and to provide assistance in the emergency operations to be undertaken in accordance with the Special Programme.

38. The Industrial Development Field Advisers were again the subject of a Board resolution (39 (VIII)); the Board considered that the number of Field Advisers would need to be increased in the future and that sources other than UNDP funds should be explored for the financing of these posts.<sup>25</sup>

39. The publications programme of UNIDO was one of the subjects of the deliberations of the Board at its eighth session. The Board requested "the Executive Director to discuss with the Secretary-General action to be taken in relation to the UNIDO publications programme and to report the outcome of those discussions to the Permanent Committee at its sixth session".<sup>26</sup>

40. During its eighth session, the Board also acted in its capacity as an Intergovernmental Preparatory Committee for the Second General Conference of UNIDO in accordance with General Assembly resolution 2952 (XXVII). The eighth session of the Board ran concurrently with the fourth session of the Preparatory Committee. The report of the Industrial Development Board on the work of its eighth session is contained in document A/9616. The report of the Intergovernmental Preparatory Committee on the work of its third and fourth sessions is contained in document ID/B/145.

### **THE PERMANENT COMMITTEE OF THE INDUSTRIAL DEVELOPMENT BOARD**

41. The fourth session of the Permanent Committee was held in Vienna from 17 to 26 April 1974, immediately preceding the eighth session of the Board. It presented its report to the Board in document ID/B/143. During its fourth session, the

<sup>24</sup> A report (ID/B/C.3/28) on this subject was submitted to the Permanent Committee.

<sup>25</sup> See chapter VI, section on "Programme delivery machinery".

<sup>26</sup> A/9616, par. 89.

Permanent Committee also acted in its capacity as Intergovernmental Preparatory Committee for the Second General Conference of UNIDO. The fourth session of the Permanent Committee ran concurrently with the third session of the Preparatory Committee.

42. On the basis of documentation prepared by the UNIDO Secretariat, the Permanent Committee reviewed the 1973 activities of the Organization, in particular its operational activities, as well as the updating of the programme and budget for 1974-1975. It recorded its serious concern over the decline in the rate of technical assistance by UNIDO in 1973, a concern that was shared by the Board.

43. Among the subjects of the deliberations at the fourth session were the special programmes for the least developed countries, for the Sudano-Sahelian zone, and for co-operation among developing countries.

44. With regard to the future programme of UNIDO, the Permanent Committee considered that the reports of the Group of High-level Experts on a Long-Range Strategy for UNIDO and of the *Ad Hoc* Committee could provide guidelines on objectives and priorities needed for the formulation of the 1976-1977 programme budget and the 1976-1979 medium-term plan of UNIDO, a view that was adopted by the Board and incorporated in its resolution 42 (VIII).

45. The fifth session of the Permanent Committee was held in two sittings: the first from 2 to 13 December 1974, and the second from 20 to 27 January 1975. At its fifth session, the Permanent Committee discussed the follow-up of decisions and recommendations (a) of the sixth special session of the General Assembly and (b) of the World Food Conference in matters relating to questions of industrialization. It also dealt with action arising out of resolution 42 (VIII) of the Industrial Development Board and with the question of evaluation.

46. During its fifth session, the Permanent Committee also acted as Intergovernmental Preparatory Committee for the Second General Conference of UNIDO. The fifth session of the Permanent Committee ran concurrently with the fifth session of the Preparatory Committee. The report of the Permanent Committee on the work of its fifth session is contained in document ID/B/147. The report of the Preparatory Committee on the work of its fifth session is contained in document ID/B/151.

## *Chapter II*

# **FIELD ACTIVITIES**

## **GENERAL INTRODUCTION**

1. During 1974, the UNIDO programme of field activities continued to evolve, primarily along the lines laid down in the UNDP country programmes. The industrial sector was attracting increasing attention from the Governments of the developing countries as a means of improving the standard of living of the populations through enhanced economic growth. During the year under review, institution-building for programming and policy-making as well as for promotion and investment constituted an important part of the field activities. Concurrently, attention was devoted by developing countries to technological aspects of industrialization either through institutions concerned with specific sectors of industry or through co-operation in the establishment of pilot plants or assistance at the plant level. The upgrading of skills and the transfer of know-how through specialized training courses, held mainly in the industrialized countries, constituted an important part of the programme of UNIDO in 1974. Corollary activities aimed at bridging industrialization with marketing and trade also continued to receive the attention of the Organization in its efforts to help the developing countries achieve accelerated industrialization.

2. On the whole, the trends in the field activities continued along the same course as that described in the 1973 Annual Report (cf. ID/B/140, paras. 30-35). While the general aims of industrial development remain unchanged, it becomes more and more evident that both efforts and resources, which only a few years ago seemed to be reasonably adequate to resolve the problems of the immediate future, are not keeping pace with the growing needs. In the initial years of the introduction of the country programmes, efforts were made to achieve perfection in the methods and procedures of project formulation as well as in the mechanics of project implementation. The time thus expended will have to be recovered if an effective balance is to be achieved between the developing countries' natural evolution and the contribution by the United Nations system to their development.

3. The portion of UNIDO projects remaining within the UNDP programming cycle 1972-1976 is estimated to be of the order of \$87.6 million, which includes several projects that are still in the process of formulation and approval. The demand for implementation of field projects has continued to evince a constant growth. By and large, the field projects being carried out by UNIDO have sufficient built-in flexibility to adapt to the new economic changes; in this connexion, continuous reviews are being made at the field level, either on individual projects or on country programmes as a whole, in an attempt to keep the activities abreast of current developments.

## Country programmes

4. The first cycle of the country programming exercise, which commenced in mid-1971, is nearly complete. During 1974, 27 country programmes, including second country programmes for Algeria and Indonesia, were approved by the UNDP Governing Council, thus bringing the total number of approved country programmes to 109. In the few remaining cases, the approval of country programmes, insofar as they relate to the period 1972-1976, may not be much more than a formal recording of expenditures incurred and commitments already made.

5. The UNDP Governing Council had earmarked a total indicative planning figure (IPF) of \$1,292.5 million for all country programmes for the period of 1972-1976. Of the estimated share of UNIDO in the implementation of projects totalling \$132.5 million, financial authorization has been received for slightly over 700 projects with a total value of \$87.7 million and some 210 projects of the value of \$44.8 million are in the pipeline (the pipeline is defined as projects included in the country programmes but not yet individually approved and other requests for assistance from Governments, under their IPFs, which are being processed but for which no financial authorization has yet been received). The estimated share of UNIDO in the total amount programmed by UNDP for assistance to the developing countries (country IPF) for 1972-1976 is shown broken down by region in the following table.

<i>Regions</i>	<i>Total country IPF earmarked (in millions of US dollars)</i>	<i>UNIDO share (in millions of US dollars)</i>	<i>%</i>
Africa	380.0	43.5	11.4
The Americas	279.5	26.0	9.3
Asia and the Far East	338.5	43.8	12.9
Europe and the Middle East	294.5	19.2	6.5
All regions	1,292.5	132.5	10.3

6. It may be noted that the UNIDO share of the total country IPF, as expressed in percentages, is calculated on the basis of IPFs earmarked by the UNDP rather than of IPFs actually programmed. A number of country programmes approved by the Governing Council had some unprogrammed reserves in their IPFs; in the last two years, commitments have been made against these reserves, and it has not been possible to determine, at this stage, how much is still available for further programming.

7. During the programming exercise, UNIDO prepared 67 country briefs for the UNDP Resident Representative Offices, but only limited use was made of those briefs in preparing the country background papers. Other agencies had a similar experience, and it is likely that the country briefs in present form will not be required for the preparation of the second programming cycle.

8. The country background papers prepared by the Resident Representatives were often inadequate. They contained mostly information extracted from national development plans and other published reports, but did not provide specific directions for the formulation of project proposals.

9. UNIDO submitted project proposals for 107 country programmes, but requests inviting UNIDO Headquarters to participate in discussions at the country level were received only in a few cases. The Industrial Development Field Advisers, however, participated, to various degrees, in most of those discussions. During 1974, UNIDO programming missions visited 19 developing countries.

10. The process of selecting projects for inclusion in the country programmes left much to be desired. The Governments, on whose behalf the country programmes were being prepared and who would be among the main partners in the implementation of the projects programmed, were rarely in direct contact with the agencies. Consequently, one of the main considerations of the country programming system, namely the integration of UNDP assistance into the total development efforts of the countries concerned, remained at best a rather hazy objective. The country programmes showed very little innovative ideas; they contained an abundance of the traditional kind of projects. Of equal concern, the phasings of activities were unrealistic.

11. For the next cycle of country programming, UNIDO has submitted the following suggestions to UNDP:

- (a) The present practice of undertaking a number of country programming exercises simultaneously at set intervals and within very tight time schedules should be discontinued—the programming exercise could be undertaken throughout the year.
- (b) The programming exercise should be conducted on the basis of a direct exchange of views between the Governments concerned, UNDP and the executing agencies. The starting point would be an evaluation of ongoing activities, followed by a round-table discussion between the three parties concerned. This procedure would not only help to save time and effort by avoiding unproductive pursuits, but would make the programme more realistic, promote intersectoral activities and orient the country programming towards specific national development objectives.
- (c) The format for the country programme should be revised and reformulated in such a way as to present only general guidelines for UNDP assistance, indicating total UNDP inputs and time required, leaving details of project outlines and schedules of implementation to be worked out at a later stage among all concerned. At the same time, the programme should be flexible enough to permit adaptation to the changing needs of recipient countries.
- (d) The roles of all three partners—Government, UNDP and the executing agency—in the implementation of individual projects included in the country programmes should be clearly determined and embodied in the programme documents.

12. The country programmes cover a wide spectrum of activities, as may be expected in view of the different levels of development in the recipient countries. Several general characteristics, however, can be identified in the projects assigned to UNIDO. The distribution of the UNIDO share in country IPF, by programme component, is presented in appendix F, table 1. It will be noted that, by value, the following components account for about 74 per cent of the UNIDO share: small-scale industries, engineering industries, industrial programming, industrial institutions, light industries and metallurgical industries. However, if the number of

requests is taken as an indication of the priorities, the order would be: engineering industries, light industries, industrial programming and small-scale industries, followed by building materials industries and industrial management. This distribution has changed only marginally since the first group of country programmes, approved in 1972, and thus a certain broad direction in the comparative preferences of the recipient countries among the activities of UNIDO may perhaps be discerned. However, the magnitudes involved are small and a few good-sized projects could change the entire picture.

13. There appears to be a concentration of field activities in a relatively small number of countries; 27 countries account for approximately 48 per cent of the total share of UNIDO in the UNDP country IPF.

14. The allocation of resources to various components within the projects of UNIDO seems to be in line with the general pattern of UNDP-financed field operations. The following table reveals what a study of the approved projects now in hand has shown.

*Distribution of resources among various components as percentages of total value of approved UNIDO projects*

<i>Regions</i>	<i>Individual experts</i>	<i>Consultants</i>	<i>Equipment</i>	<i>Training</i>	<i>Others</i>	<i>Total</i>
Africa	62.3	11.6	16.5	6.0	3.6	100.0
The Americas	67.0	9.9	14.7	5.8	2.6	100.0
Asia and the Far East	57.1	3.5	27.0	10.0	2.4	100.0
Europe and the Middle East	47.5	9.8	27.3	13.1	2.3	100.0
All regions	59.1	8.7	21.0	8.3	2.9	100.0
Averages for all agencies in 1973	64.0	13.0	12.0	8.0	3.0	100.0

As can be seen from the above table, the expert component shows a decline in Europe and the Middle East as well as in Asia and the Far East, where equipment and training seem to be attracting greater attention than before. In Africa and the Americas, however, allocations for expert services continue to be high. The average length of service envisaged for expert services is approximately 14 months.

15. The implementation of country projects has lagged well behind the schedules proposed by the developing countries. Whereas the total value of projects to be implemented by UNIDO during the period 1972-1976 is estimated at \$132.5 million, the expenditure up to 31 December 1974 has come to only \$44.9 million (i.e. 33.9 per cent), leaving a balance of about \$87.6 million to be implemented by the end of 1976. The short-fall of UNIDO in the expected implementation of IPF projects can be attributed to several factors, singly or in combination, which are explained in subsequent pages.

### **Intercountry programmes**

16. The regional programmes have continued to suffer from considerable delays in the processing and approval of projects. The level of UNIDO activities in these programmes has tended to remain static, reflecting the level it had attained before the

introduction of the intercountry programming system. Out of an earmarking of \$196.3 million by UNDP for regional programmes for 1972-1976, the projects assigned so far to UNIDO account for only \$4.2 million.

17. In 1974 UNDP approved a total contribution of \$385,000 for 12 interregional projects with a total value of \$2 million; the balance was met by UNIDO from other sources of finance. Of these projects, ten were comprised of in-plant training programmes and the remaining two were concerned with expert group meetings.

18. To date, there has been no global project in industry.

### IMPLEMENTATION IN 1974

19. The estimated value of technical assistance delivery by UNIDO in 1974 was approximately \$23.9 million, an increase of 19.5 per cent over the corresponding figure of \$20 million for 1973.<sup>1</sup> Notwithstanding this achievement, UNIDO failed to meet the 1974 expenditure target of \$28.6 million which it had set for itself in 1973 (cf. ID/B/140, para. 997).

*1974 target figures and implementation expenditures  
in 1973 and 1974, by source of funds  
(In millions of US dollars)*

	<i>IPF</i>	<i>SIS</i>	<i>GTF</i>	<i>RP</i>	<i>FIT</i>
1974 target	21.5	2.4	2.0	1.5	1.2
1974 implementation	17.4	2.6	1.9	1.5	0.5
1973 implementation	13.7	2.7	1.4	1.5	0.7

From the above table, it is immediately evident that the major portion of the short-fall in 1974 occurred, as in 1973, in the UNDP/IPF country and intercountry programmes.

20. In formulating its delivery target for 1974, a target that represented an increase of 43 per cent over the actual delivery in 1973, UNIDO based its projections on two main assumptions:

- (a) Approval by UNDP during 1974 of new IPF projects to a value of \$40 million; and
- (b) Availability of additional resources necessary to support such an increased programme of field activities.

The residual effects of the virtual hiatus in new project approvals in 1972, described in document ID/B/140, paragraphs 61 to 64, and the slow-down in the first half of 1973 continued to make themselves felt in the early part of 1974. In March 1974, UNDP took several corrective measures designed to accelerate project approvals for

<sup>1</sup> Detailed data on expenditures in 1973 and 1974 under all sources of funds are to be found in the statistical annex.



projects to be implemented by UNIDO and by the end of the year new projects at a value of \$35.4 million had been approved for UNIDO under the IPF of UNDP (the comparative figure of UNDP/IPF project approvals in 1973 was \$20.6 million). The total net project approvals during 1974 amounted to \$44.2 million as compared to a figure of \$27.3 million for 1973.

21. Owing to the budgetary constraints under which the entire United Nations system was forced to operate in 1974, the increase in budgetary resources anticipated by UNIDO did not materialize. The reimbursement by UNDP of overhead costs has been chronically inadequate to cover the costs incurred by the executing agencies in supporting their field activities. UNIDO has been particularly affected in this respect, as its programme of field activities, which has grown at a rapid pace in recent years, consists primarily of new projects. A large portion of staff time was devoted to pre-field activities, in designing and developing projects. These activities do not earn any overhead entitlements as, under the existing procedure, the entitlements are based on actual expenditures which, in fact, relate to a smaller programme developed earlier. In order to arrest the resulting deficit in its budget, UNIDO has had to resort to periodic freezes in staff recruitment and travel, and these freezes had a necessarily negative influence on the rate of delivery of technical assistance in 1974.

22. Another factor affecting the technical assistance delivery of UNIDO has been a preponderance of small projects, financed under UNDP and entrusted to UNIDO for execution; 65 per cent of 640 approved and pipeline projects constitute, by value, less than 12 per cent of the total share of UNIDO in the country IPFs. Indeed, 104 projects consist solely of individual fellowships, requiring the placement of 555 candidates. Conversely, a mere 69 projects account for more than 44 per cent of the total share of UNIDO in the country IPFs during the first programme cycle, 1972-1976. Moreover, 83 per cent of all SIS projects (which tend in any case to be small in average value) were costed at \$30,000 or less in the same analysis. UNIDO is at the bottom of the scale among projects (see UNDP/MIS/Series A/No.5). The average size of new projects either approved or presently in the pipeline under IPF, broken down by size and programme component, is shown in appendix F, table 2. The unusually large number of small-scale projects, which require virtually the same degree of Headquarters support as do large-scale projects, has substantially contributed to difficulties encountered in the programme delivery at a time of severe budgetary constraints. It takes as much effort to recruit an expert or place a fellow for a month as it does for a year.

23. In 1974, for example, two large projects (with total earmarkings of about \$5 million) that had been designed and developed by UNIDO over a two-year period and that had been taken into account in the forecast of implementation for 1974, were suddenly taken over by UNDP for direct execution. The expenditures for these two projects, which are now reflected in the UNDP figures for 1974, would have brought the total delivery by UNIDO of technical assistance in 1974 much closer to the original target figure.

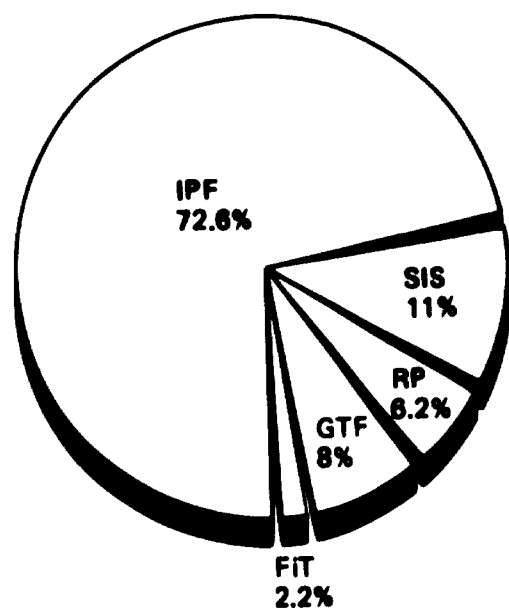
24. The SIS programme has still not regained the momentum it lost during the uncertainties that prevailed during the last two years. Notwithstanding the agreement between UNDP and UNIDO to establish a programming level of two and one half to three times the annual authorized expenditure, the number of requests for assistance and, consequently, the total volume of approved projects in hand are still on the decline.

25. A percentage breakdown of the total UNIDO technical assistance expenditure in 1974 by source of funds is given in figure 1. The greatest part of UNIDO expenditures for technical assistance in 1974 was incurred under the IPF of UNDP, which accounted for 72.6 per cent of the total technical assistance delivery of UNIDO (the corresponding figure for 1973 was 68.5 per cent).

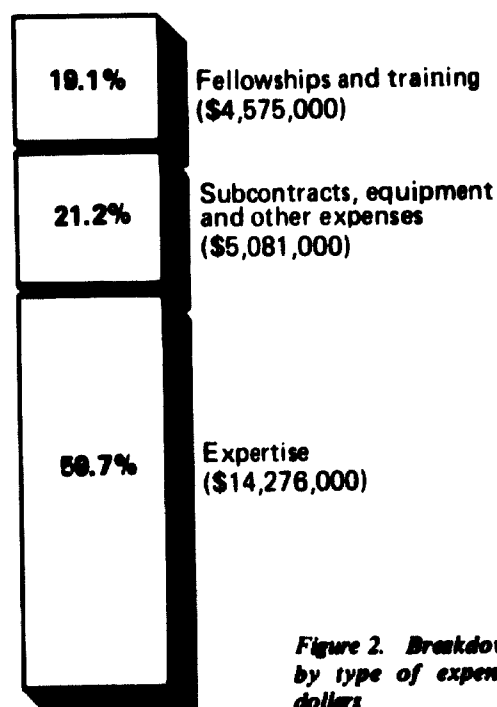
26. Figure 2 provides a rough breakdown of UNIDO technical assistance expenditures in 1974 by type of expenditure. The largest single item in 1974, as in previous years, was for the provision of expertise, followed by subcontracts, equipment and other expenditures and by fellowships and training. The rounded-off totals for 1974 by type of expenditure are: expertise, \$14.3 million, subcontracts, equipment and other expenses, \$5 million, and fellowships and training, \$4.6 million. Caution is to be exercised, however, in the interpretation of this and similar breakdowns of expenditure throughout the report. The statistics for training and fellowships, for example, show only a portion of UNIDO training efforts, namely those pertaining to formal training elements and programmes, but the counterpart training, which is a major task of all UNIDO experts, is not reflected in those statistics. Moreover, subcontracting is usually related to the provision of expertise.

27. Of the three substantive programmes of UNIDO, the industrial technology programme accounted in 1974 for 46.4 per cent (or \$11 million) of the total technical assistance delivered by the Organization. The industrial services and institutions programme was responsible in 1974 for delivering \$7.9 million of technical assistance or 33.1 per cent of the UNIDO total. The programme of industrial policies and programming accounted for 19.2 per cent or \$4.6 million of the Organization's technical assistance in 1974. The detailed accounts of technical assistance expenditures by programme component are to be found in the separate chapters on the three substantive programmes of UNIDO as well as in the statistical annex.

28. The question of improving the rate of delivery of technical assistance is difficult and can be solved only through the co-operative efforts of all the partners involved: Governments, UNDP and UNIDO. UNIDO will continue to take measures



*Figure 1. Breakdown of UNIDO technical assistance expenditures in 1974, by source of funds, in percentage*



*Figure 2. Breakdown of technical assistance in 1974, by type of expenditure, in percentage and in US dollars*

to maximize its productivity, but these efforts can be sustained and developed only with material support. Similarly, any further assistance that host Governments might be able to provide in expediting the process of appraisal of experts and consultants as well as of institutional arrangements required for particular activities would contribute significantly to the progress that can be achieved in the future years.

29. Although UNIDO failed to meet its implementation target for 1974, there was a substantial increase over the previous year in the amount of assistance delivered. UNIDO delivery of assistance under the IPF showed an increase of 27 per cent over the corresponding period of 1973. This figure is the more impressive when viewed in the light of UNDP reports for 1974 which show an over-all decline of 1 per cent in technical assistance delivery for all agencies taken together. UNIDO hopes to maintain this upward trend, provided that the required increase in Headquarters resources are made available. Should these resources be forthcoming, it can be anticipated that programme expansion and implementation will gradually regain the pattern of growth observed within the UNIDO programme of activities prior to 1973.

### **SPECIAL PROGRAMMES**

30. In response to specific needs and in keeping with the directives given it by its intergovernmental legislative bodies, UNIDO has developed special programmes for: promotion of technical co-operation in the field of industry among developing countries (CDC); special measures in favour of the least developed countries (LDC); and assistance to the drought stricken countries of the Sudano-Sahelian zone. These special programmes cut across the lines not only of the various sources of finance

available to the Organization but also of the three substantive programmes of UNIDO (industrial technology, industrial services and institutions, and industrial policies and programming).

31. The following paragraphs contain an account of the efforts UNIDO has made in 1974 to implement the three special programmes.

### **Programme of co-operation among developing countries (CDC)**

32. Further to endorsing the recommendation made by the Permanent Committee at its fourth session that the Executive Director continue to give a high priority to the implementation of the Industrial Development Board resolution 36 (VII) on co-operation among developing countries, the Board at its eighth session examined a report by the UNIDO Secretariat on the application of that resolution (document ID/B/C.3/18) and approved the programme of action proposed by the Executive Director for the promotion of technical co-operation in the industrial field among developing countries.

33. As a first step towards the implementation of a systematic and long-term programme of action, UNIDO initiated, in August 1974, a survey among the Governments of the developing countries to define areas in which they could offer technical assistance or would need and welcome assistance from other developing countries. Governments of the developing and least developed countries were invited to suggest specific areas suited to mutual co-operation in the industrial sector, as well as the methods and types of action that would be most effective. Their views on the best ways and means of delivering such assistance were also sought.

34. On the basis of the information thus gathered, UNIDO will establish a roster of resources of, and needs for, technical co-operation among developing countries. This will enable the Organization to match the available resources and requirements and bring together the countries concerned.

35. In fact, hitherto the UNIDO General Trust Fund has been a major source of finance for activities designed to strengthen co-operation in the field of industrial development among developing countries, though it may well be replaced in the course of time by the United Nations Industrial Development Fund, should the establishment of such a fund be approved by the General Assembly.

36. A number of projects that fall within the category of co-operation among developing countries are described in detail in chapter VII, section on "UNIDO General Trust Fund". Of those not cited elsewhere, mention should be made of the following projects which UNIDO has sponsored within the framework of its CDC programme.

37. The programme of consultations and plant visits organized by the Government of Brazil to familiarize senior officials from developing countries with Brazilian achievements in the food processing sector was held as scheduled early in 1974. Immediately thereafter the Senegalese participants went on to Colombia on a study tour of local fruit processing pilot plants and demonstration units to assess the suitability of such plants and units to their own country.

38. An interregional consultation, which UNIDO organized together with the Mexican Government on the subject of legislation pertaining to licensing and patents, was held at Mexico City from 11 to 15 November 1974. Participants from 16 developing countries exchanged details of their experience with agreements relating to technology transfer as well as to the legislative and institutional systems for foreign technology transfer agreements, and identified the immediate and long-term requirements of the developing countries in this field.

39. Activities in preparation of the ECWA/UNIDO meeting on the development of selected food processing industries in the ECWA region have continued: background papers have been prepared by the participating countries and are currently being analysed with a view to identifying national and regional priorities. At the meeting, to be held in Beirut in early 1975, co-operation programmes will be proposed and a strategy for the regional development of the specific branches of the food processing industry will be formulated; this meeting will be held in the same manner as the UNIDO/ECWA meeting of November 1974 in Beirut on the special problems and requirements of industrial development in selected countries in the Middle East (cf. para. 53 below).

40. Co-operation among developing countries on an interregional scale (as opposed to a purely regional scale) was the key note of a seminar on packaging in developing countries held in Bombay, India in November 1974. Participants from Argentina, Bangladesh, Brazil, Burma, Egypt, Ethiopia, Hong Kong, Indonesia, Iran, Jamaica, Mexico, Philippines, Republic of Korea, Singapore, Sri Lanka and Thailand met not only to discuss the latest developments in this increasingly important field and to acquaint themselves with the considerable experience that had accumulated in the field of packaging and ancillary industries, but also to initiate meaningful co-operation projects.

41. Packaging is also the subject of a co-operation project between Egypt and Morocco, in which an expert from the Egyptian General Organization for Food Industries is scheduled to spend two months in Morocco, studying the feasibility of establishing a pilot plant for packaging dates and elaborating an appropriate production programme.

42. Morocco is also receiving assistance in another important sector of its economy: namely, the sugar processing industry. Within the framework of the CDC programme, technicians from Morocco will receive training in Egypt and Mauritius, two developing countries with well-established sugar industries of their own.

43. The matching of one country's skills with the available resources of another has led to co-operative ventures spanning continents. At the time of writing, moves are being made between Pakistan and the Libyan Arab Republic regarding the possible establishment in the Libyan Arab Republic of an engineering pilot/demonstration plant for the manufacture of agricultural implements, irrigation pumps and small engines.

44. The element of exchange is particularly marked in the CDC projects promoted by the Government of India. Further to the study tours for officials from developing countries which the Government of India arranges within the specific framework of its programme of co-operation in industrial technology with UNIDO (see chapter VIII, section on "Co-operative programmes with contributing countries"),

a study tour on an even grander scale was organized by UNIDO and the Institute of Indian Foundrymen in December 1974. Attended by foundry operators, technologists and designers from selected developing countries in Asia and the Far East region, the participants visited small foundry units in the Calcutta region to examine the technical, economic, managerial and institutional factors of the small foundry industry in India with a view to identifying the technical and economic conditions under which small foundries can be established in other developing countries of the region.

45. Through the exchange of information on supply problems (in respect of both raw materials and know-how), training deficiencies and financial constraints, meetings such as these contribute to the development of specific industrial branches through the initiation of joint ventures between developing countries, the provision of equipment, designs and expertise, and the organization of effective training schemes.

46. The programme of co-operation among developing countries is still comparatively new: however, its significance will increase with the growing realization that collective self-reliance and intensified co-operation among developing countries constitute singularly effective means of strengthening the role of the developing countries in the establishment of a new international economic order. Thus, with the identification of the various countries' resources and requirements by means of the survey (cf. para. 33 above), UNIDO will be able "to promote and establish effective instruments of co-operation in the fields of industry, science and technology".<sup>2</sup> At the same time, UNIDO will increase its endeavours to publicize the importance of the CDC programme along the same lines as will undoubtedly be adopted at the Fifth Regional Seminar on UNIDO Operations, tentatively scheduled for October 1975, which will be primarily oriented towards the least developed countries of Asia and the Far East.

### **Special measures in favour of the least developed countries**

47. The special needs of the least developed among the developing countries continue to call for increased attention and action. In 1974, as in previous years, UNIDO undertook a number of practical measures in favour of these countries.

48. The present financial provisions by UNDP for technical assistance specially earmarked for the least developed countries are as follows:

UNDP Special Measures Fund of \$35 million for the period 1973-1976;

The Capital Development Fund, administered by UNDP (as of June 1974 this fund is reported to have committed all its resources, amounting to about \$11.4 million);

A special earmarking of \$1 million per annum from the Special Industrial Services programme.

49. As a follow-up to the Third Regional Seminar on UNIDO Operations, held in Addis Ababa in co-operation with ECA in February 1973 and oriented particularly to the needs of the least developed countries in Africa (cf. ID/B/140, paras. 72-75),

<sup>2</sup> General Assembly resolution 3202 (S-VI), section VII, para. 1(h), of 1 May 1974.

58 priority projects closely related to the Governments' own national development plans were identified. As of 30 September 1974, 28 of these 58 projects were under implementation by UNIDO. The total value of these UNIDO-assisted projects amounts to \$4,282,000, excluding government contributions. The breakdown of this amount among the various sources of finance is as follows:

<i>Source of funds</i>	<i>US\$</i>	<i>No. of projects</i>
Country programmes (IPF)	3,471,500	12
Special Industrial Services (SIS)	197,500	12
"Special Measures" Fund	613,000	4
<b>TOTAL</b>	<b>4,282,000</b>	<b>28</b>

Additionally, UNIDO is assisting some of the countries concerned in obtaining external financing for four industrial projects.

50. During 1974 UNIDO continued to organize workshops and seminars designed to meet specific needs of the least developed countries in Africa, the Middle East and Asia. A regional workshop on the preparation and evaluation of industrial projects, undertaken jointly with ECA, was held in Addis Ababa, from 29 January to 14 February 1974. The workshop was attended by the representatives of seven English-speaking African countries, five of which were from least developed countries. The purpose of the workshop was to assist national agencies responsible for industrial development in improving skills in the fields of project preparation, financial analysis and economic evaluation.

51. A training workshop on small-scale industry for the least developed countries of Asia, the Far East and the Middle East was held in Kathmandu, Nepal, from 1 to 12 April 1974. The workshop was followed by a study tour in India from 13 to 23 April. The main objective of the workshop and study tour was to help promote the formulation of integrated programmes of small industry development.

52. In co-operation with the Government of India, UNIDO organized a manufacturing development clinic in New Delhi in October 1974, aimed at the transfer of know-how primarily among the developing countries themselves. The clinic was attended by participants from 17 countries, 12 of which are presently classified as least developed.

53. A joint UNIDO/ECWA meeting on special problems and requirements of industrial development in selected countries of the Middle East was held in Beirut from 25 to 29 November 1974. The objectives of the meeting were to bring together government officials responsible for industrial development in their respective countries with prospective investors and aid donors and to discuss specific industrial projects where co-operation could be established.

54. UNIDO will pursue the activities it has developed in the fields described above with particular emphasis on the follow-up of the activities and projects already identified. It will concentrate on the exploration of additional financial resources needed to carry out the projects.

55. The Fifth Regional Seminar on UNIDO Operations, primarily for the least developed countries in the ESCAP region, is tentatively scheduled to take place in New Delhi in October 1975. The main objectives of the seminar will be to identify major problems in the industrial development of the countries involved; to consider measures to be taken to overcome some of these problems; to explore types and forms of multilateral and bilateral assistance required; and to initiate discussions between the participants of the least developed countries and the more advanced countries of the region.

56. The approval in December 1973 by the General Assembly<sup>3</sup> of the recommendation of the Industrial Development Board (decision I(VII)) to increase the level of the UNIDO regular programme of technical assistance from \$1.5 million to \$2 million as of 1975 and to utilize the supplementary resources resulting from this increase for the benefit of the least developed countries will permit the further expansion of UNIDO activities for the least developed countries during 1975.

#### **Assistance to the drought stricken countries of the Sudano-Sahelian zone**

57. In its resolution 3054 (XXVIII) of 17 October 1973, the General Assembly invited all organizations of the United Nations system including UNIDO "to devote as much as possible of their resources, within their respective programmes, to responding to requests for assistance from countries in the Sudano-Sahelian region for reconstructing the economies of these countries".

58. In accordance with the provisions of this resolution, UNIDO established contacts with both the United Nations Special Sahelian Office (UNSSO) and the Permanent Inter-State Committee on Drought Control in the Sahel in order to identify areas in which, within its terms of competence, UNIDO could co-operate. However, in view of priorities indicated by the recipient Governments, which are primarily concerned with immediate rehabilitation measures (meteorological and agricultural research, irrigation, water supply, soil conservation, road construction etc.), it appears that UNIDO is not expected at present to take a very active part in the actions envisaged by UNSSO. The contribution of UNIDO is conceived on a relatively long-term perspective, and to this end consultations are going on with all parties concerned to develop specific projects to alleviate the plight of the stricken countries, with main emphasis on industrial activities related to agriculture.

59. In consultation with UNIDO, the Government of Romania, through the joint UNIDO/Romania Centre, has offered to field a mobile demonstration unit for processing and use of plastics in agriculture in Mali and Upper Volta. This project proposal was presented at the Bamako meeting in March 1974, and a preparatory mission (financed under the SIS programme and the UNIDO regular programme of technical assistance) visited the two countries in September and October 1974 in order to obtain the necessary information to prepare detailed terms of reference. The project is expected to be implemented in 1975 with the financial and material support of UNIDO and the Romanian Government.

60. UNIDO is also providing assistance with the allocation earmarked under the regular programme for new projects and activities to the Centre for Solar Equipment

<sup>3</sup>General Assembly resolution 3086 (XXVIII) of 6 December 1973.



Production in Dakar (Senegal). This assistance involves the evaluation of possibilities for the industrial production of equipment using solar and other non-conventional sources of energy, such as solar pumps and wind driven pumps, that would be of particular benefit to all countries of the Sahelian region affected by the drought.

61. UNIDO is investigating the possibility of promoting other related activities in the countries of the Sudano-Sahelian zone such as production of building materials, fertilizers, agricultural tools and implements, and food storage facilities.

### THE REGIONAL SCENE

62. During the year under review, the value of UNIDO technical assistance delivery to the developing countries was \$23.9 million. Although this represents an increase of almost \$4 million (or 19.7 per cent) over 1973 delivery, the total sum of technical assistance delivered by UNIDO in the field of industry in 1974 to the developing countries was again but a small token in comparison with the growing needs of the developing countries, particularly at a time when soaring prices for industrial inputs, monetary instabilities, food shortages and population growth are putting a crushing burden on the economies of these countries. In a small measure, however, it was possible to increase in 1975, as compared to the previous year, technical assistance in those regions where the demand for industrialization is most marked. The rounded off totals of UNIDO assistance in 1974, by regions, are: Africa—\$6.7 million (1973, \$6.5 million); the Americas—\$4.4 million (1973, \$3.5 million); Asia and the Far East—\$6.2 million (1973, \$4.4 million); Europe and the Middle East—\$4.1 million (1973, \$3.2 million); and Interregional—\$2.5 million (1973, \$2.4 million). The breakdown of these figures is presented graphically in figure 3.<sup>4</sup>

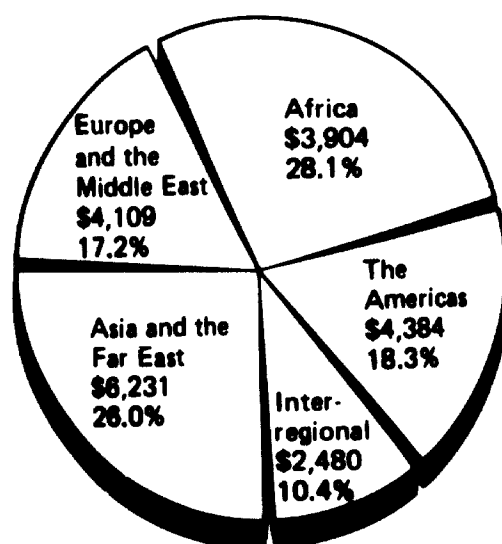
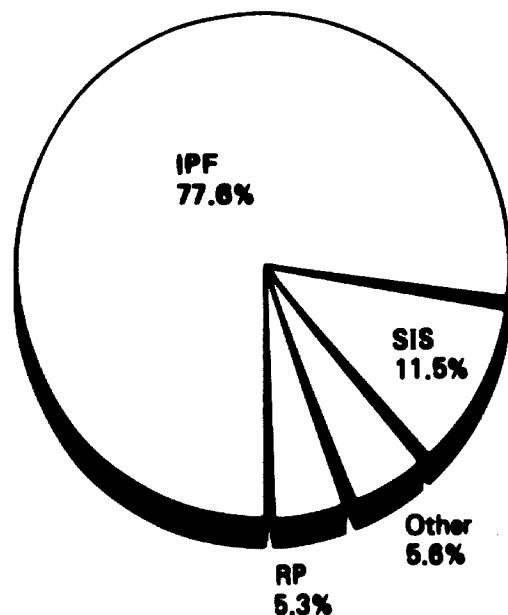


Figure 3. Breakdown of technical assistance in 1974, by region, in percentage and thousands of US dollars

<sup>4</sup> For a complete breakdown of expenditures for technical co-operation activities of UNIDO, by region and source of funds, see table 8 in the statistical annex.

## Africa

63. During 1974, UNIDO was able to increase slightly the volume of its technical co-operation activities in Africa by 3.5 per cent over the corresponding figure for 1973. During the year under review, technical assistance at a value of \$6.7 million was delivered by UNIDO to developing countries in Africa, which was \$0.2 million more than in 1973. For a breakdown of UNIDO technical assistance expenditures in Africa in 1974, by source of funds, see figure 4.



*Figure 4. 1974 technical assistance expenditures in Africa, by source of funds*

64. During 1974, 60 additional projects were approved with a total UNDP contribution of over \$13.5 million (for 1972 and 1973 approvals, see ID/B/140, para. 92). Ten projects in country programmes were deferred to 1975 or later, though some of them were provided with approved preparatory budgets, and the respective project managers were in the field or under active recruitment in 1974. Twenty-four large-scale projects were completed during 1974.

65. The increase of government requests, which was noted in 1973, continued throughout 1974 as the country programming exercise became more fully understood. The growth in the delivery of technical assistance was accelerated by the increased autonomy for decision-making accorded to UNDP Regional and Resident Representatives. As a consequence, approvals and commencement of implementation, at least for the smaller projects, took less time than in earlier years.

66. The main developments with regard to UNIDO activities in Africa during 1974 were: the sharp increase of UNIDO's share in UNDP-financed country programmes; growing assistance to the least developed countries, including efforts leading towards special projects for the Sudano-Sahelian zone; and the specialization of technical assistance required by the more highly developed countries of Africa. In the future, the number of government requests are expected to increase further as problems resulting from the rising prices for oil demand both emergency and long-term solutions such as the utilization of charcoal, natural gas and peat for industrial and household use.

67. Many of the large-scale projects in the African region originated from surveys and missions, reports on SIS projects and suggestions made by government authorities, UNIDO field advisers, experts and staff members. These efforts provided the basis for UNIDO field operations in 1974, which included new and continuing projects such as the establishment of a quality control centre for engineering industries and a textile development centre (Egypt); further assistance to the Ghana Industrial Holding Corporation and to the Industrial Development Centre (Mali); assistance to the Malbaza Cement Plant (Niger); and three projects focusing on training, consultancy and accounting systems development (Uganda).

68. Other IPF projects under implementation during 1974 covered assistance to: the Centre national d'assistance aux petites et moyennes entreprises (CAPME) (United Republic of Cameroon); the Centre d'études et de promotion des entreprises dahoméennes (CEPED) (Dahomey); the food industry development centre (Egypt); the pharmaceutical industry and boatyards (Ghana); industrialization for coal (Madagascar); the production of building materials (Malawi); a pilot plant for industrialization and pyrethrum production (Rwanda); a foundry and mechanical workshop (Somalia); the cement industry (Zaire) and a railway foundry (Zambia). Two projects under implementation cover studies on wool and mohair (Lesotho) and on copper manufacturing (Zambia).

69. The trend in Africa towards increased emphasis on the development of assistance in industrial strategy and long-range planning continued in 1974 as evidenced by the approval of projects for: an industrial development centre (Burundi); the strengthening of the Ministry of Industry (Somalia); and assistance to the Tanzanian Investment Bank (United Republic of Tanzania).

70. It is hoped that, as a result of the agreement reached by the Administrator of UNDP and the Executive Director of UNIDO in May 1974, whereby working arrangements and procedures for the SIS programme were amended and simplified, the implementation rate of SIS projects in Africa, which decreased from \$988,000 in 1973 to \$771,000 in 1974, will show an improvement. Under the agreement, for instance, the UNDP Resident Representatives were delegated the authority to approve SIS projects without preliminary referral to UNDP headquarters in New York. Even though the amendment came into force only in mid-1974, there was a noticeable improvement in the processing of requests from African countries under the SIS programme.

71. Further improvement in the SIS implementation rate is anticipated from the consultations of UNIDO staff with UNDP staff in 1974. The meetings dealt with project problems in 27 countries, including countries from the African region, as well as with regional and interregional project problems. Several approvals were advanced for pending projects, some clarifications of obstacles to approvals were achieved, and co-operation was increased; all these measures should lead to improved implementation of approved projects.

72. In 1974, UNIDO continued its special activities for the least developed countries of Africa. The total value of the UNIDO assisted projects for the least developed countries of Africa amounts to some \$4.3 million (excluding government contributions), financed mainly from IPF funds with smaller proportions being derived from the SIS (Special Measures for LDCs) funds and the SIS Trust Fund (for further details, see section on "Special programmes", paras. 49-50 above).

73. UNIDO also continued its contribution to the co-operative efforts of the international community to meet the needs of the Sudano-Sahelian zone, devastated by drought (cf. ID/B/140, para. 102). In general, the situation of the countries in that zone has been aggravated by increased energy costs which adversely influenced the ability of several countries to budget counterparts or to absorb technical assistance. Projects proposed for early approval and implemented by UNIDO include fabrication of building materials, manufacture of water pumps, pipes and tubes, food processing, assembly of agricultural equipment, fertilizer mixing and processing, international subcontracting and investment promotion.

74. Special measures to meet the needs of the Sudano-Sahelian countries include the sending of mobile maintenance and repair workshops with a view to increasing the efficiency of agricultural and transport equipment, the promotion of manufacturing enterprises, and endeavours to increase production of foodstuffs. The most effective contributions UNIDO can make to the Sudano-Sahelian countries will be on a relatively long-term basis, and to this end consultations are going on with all parties concerned to develop specific projects. Eleven large-scale projects, which have been identified by UNIDO for long-range preventative measures against drought will, however, require financing above current budgetary estimates. (See also section on "Special programmes", paras. 57-61 above.)

75. UNIDO also gave attention to the promotion of co-operation among developed and developing countries through assisting in the formulation of requests for more projects in international subcontracting, establishment of joint ventures and transfers of technical knowledge as for instance in Egypt, Gambia, Ivory Coast, Kenya, Liberia, Mauritius, and United Republic of Tanzania. Similar projects are being developed for other countries as well as on a regional basis.

76. In Botswana, a project on an enterprise development programme (cf. ID/B/140, para. 89) as an experiment in co-operative inputs became operational in 1974. Under this project, land is provided by the Government, financial contributions are arranged by the Swedish International Development Authority and UNIDO provides the expertise. This example in sharing investment burdens may lead to similar projects in Burundi, Chad, Dahomey, Gabon, Ethiopia, Madagascar, Rwanda, Senegal, Somalia, Swaziland, Upper Volta and Zaire. In 1974, a rural industrial estate project for Liberia received approval under a preparatory budget, and the project manager has been designated by the Government; another such project was approved for Togo. All these projects are in accordance with the emphasis given by the UNDP Resident Representatives for Africa at their 1973 regional meeting in Addis Ababa to an integrated approach towards rural development (cf. ID/B/140, para. 99).

77. Specialized technical assistance continued to be requested by the more developed countries of Africa such as Algeria, Egypt, Ghana, Ivory Coast, Mauritius, Nigeria, Senegal, Tunisia and Zambia. The highly technical and sophisticated projects for these countries covered such areas as complex metallurgy, advanced engineering, electronic research, textile development, medicinal formulation, building materials development and quality control of castings used in railway construction. As a result of the high rate of production development in these countries, the demand for UNIDO assistance in standardization of industrial products also increased.

78. During 1974, there was a growing demand in Africa for mobile repair and maintenance workshops capable of serving a large radius in rural areas and servicing agricultural, transport and small industrial machinery. This trend is appreciable, especially in view of the fact that in most developing countries the establishment of such physical facilities lags behind the growth of industrial installations. Four units have already been shipped to Algeria and the Gambia in 1974, and three units are scheduled for delivery to Zambia early in 1975.

79. Although UNIDO projects in Africa cover a wide range of industries, much remains to be done in deepening and accelerating assistance leading to acceptable levels of industrial development throughout the region. Recent economic developments, including rising prices and monetary instability, and the disparity between various economies have tended to compound the problems connected with industrial development and have accentuated the need for the establishment of viable enterprises that are consistent with the diverse requirements of the respective Governments. UNIDO has therefore concentrated its efforts in assisting local industry in Africa in investment promotion for the manufacture of indigenous raw materials such as lime (Burundi), in the production of pyrethrum (Rwanda) (cf. IDB/B/140, paras. 181-186), in international subcontracting (Kenya and Mauritius), in the promotion of copper manufacture (Zambia) and in several operational projects for the production of steel, cement, food, paper, bicycles, pharmaceuticals, leather, plastics and garments. Of special note are the efforts being made to offset costly imports of oil and petroleum products by the rapid establishment of projects for the utilization of indigenous natural resources such as peat, natural gas and charcoal. To further assist African industries in utilizing local raw materials, plans are being developed for the greater substitution of sisal, kenaf, rubber, wood, jute etc. in place of plastics in the manufacture of packaging materials.

80. As regards training, the situation in 1974 remained almost unchanged from that of 1973 (cf. ID/B/140, para. 105). Particular stress was again laid on counterpart training. As in previous years, regular programme funds for fellowships were not fully used and frequent reminders again elicited replies that suitable candidates were rare.

81. During 1974, the joint UNIDO/IBRD Co-operative Programme analysed a number of proposals for investment opportunities in African countries (for further details, see chapter VIII, paras. 27-36).

82. Operational, executive or administrative personnel and advisory assistance continued to be provided through UNIDO to African holding companies and development companies to help them to make market studies, expand production, lower costs, systemize accounting and improve quality.

83. During the year under review, United Nations agencies continued their efforts to assist African countries in greater co-ordination of their development plans (cf. ID/B/140, para. 98). UNIDO has continued its participation in development planning projects for Dahomey, Lesotho, Liberia, Madagascar, Sierra Leone, Togo and Zambia. New project approvals have started or expanded this development programme in the Congo, Egypt, Kenya, Liberia, the Libyan Arab Republic, Sierra Leone, Swaziland, Togo, United Republic of Tanzania and Zambia. These projects have intensified the co-operation of UNIDO with the Food and Agriculture Organization (FAO), the International Labour Organisation (ILO) and the World

Health Organization (WHO). Such projects also synchronize the contributions of other multilateral and bilateral sources in the over-all development plans for the recipient countries.

84. During 1974, UNIDO continued its co-operation with such regional organizations as the Maghreb Permanent Consultative Committee, the Central African Economic and Customs Union (UDEAC), and the newly established Mano River Union. Consultations took place in Vienna in October 1974 on the requirements of the Mano River Union, and regional co-operation projects are being developed.

85. Close co-operation was maintained with ECA. In February 1974, UNIDO and ECA organized in Addis Ababa a regional training workshop on project preparation and evaluation. The newly established UNIDO/ECA industry division has not only facilitated the co-ordination of the work of both organizations but has contributed significantly to the industrialization efforts of African countries.

86. A noteworthy event during 1974 was the first meeting of the Follow-up Committee on Industrialization in Africa, held in Addis Ababa in September 1974. The Follow-up Committee, noting the fact that for the last 15 years the share of the African countries in world industrial production had remained more or less constant at 0.5 per cent, proposed a provisional specific target of 2 per cent by the year 2000 as a desirable share of the African region in world production. Special attention was also drawn to the need for a more even distribution of industrial activities within the region; in 1972, for example, 8<sup>5</sup> out of 41 countries produced almost three quarters of the total manufacturing output of the region.

87. In the industrialization process of the African region the following issues must be taken into account:

- (a) The growing realization that current world-wide economic conditions are conducive to higher prices and scarcity of financing;
- (b) The growth of infrastructure in the developing countries;
- (c) The need for African countries to increase revenues through upgrading resources based on indigenous materials;
- (d) The availability of expertise in Africa resulting from past efforts to improve national and regional industrial development.

These conditions can serve as a basis upon which UNIDO can build its further assistance to the African countries through the provision of expertise, equipment and contacts with interested partners.

88. In stressing the need for action and in facing realistically the possible effects of inaction, it is necessary to recognize that the initial curtailment of oil prices since October 1973 has led to a combination of inflation and slump in Africa. On the one hand, the developed countries are intensifying inflation by increasing the cost of production; on the other hand, they are creating a recession by curtailing output, income and employment and aggravating balance-of-payment deficits. The industrial strife in coal mines, power stations, railways and in other sectors are aggravating this trend. The impact of this situation on the economies of developing countries is dire:

<sup>5</sup> Algeria, Egypt, Morocco, Tunisia, Nigeria, Zaire, Kenya and Zambia. (Source: E/5490, para. 20.)

while the higher oil prices and the higher cost of production in the developed countries are raising their import bills, the recession will reduce the demand for the minerals and agricultural products exported from the developing countries. The consequent aggravation of inflationary pressures and balance-of-payment deficits will reduce both the domestic and foreign exchange resources available to the Governments of the developing countries for their economic development programme.

89. The prospect of recession in Europe, the United States of America and Japan, all major customers of the African economies, may rule out the continuation during 1975 of the buoyant situation that obtained in 1973; also, foreign aid may deteriorate, owing to the balance of payments of the major lending countries.

90. The forces imposed upon the economies of Africa from the outside world include the recurring monetary instability, world-wide inflation coupled with recession, and the jump in world prices for commodities such as cereal grains. Many developing countries have had to resort to the subsidization of some necessary imports, such as rice; in others, there have been attempts to curtail consumption.

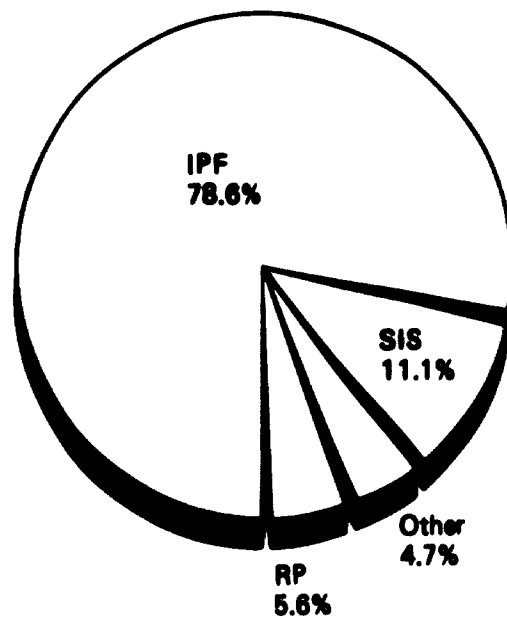
91. UNIDO, in co-operation with ECA, the other United Nations agencies concerned and with all possible bilateral programmes will make every effort to ameliorate the possible results of a recession in Africa. If success is to be achieved, however, currently available funds, both public and private, must be greatly augmented.

### Latin America

92. The value of technical assistance delivered by UNIDO to Latin America amounted to \$4.4 million in 1974, which represents an increase of 26 per cent (or \$0.9 million) over the 1973 delivery. The share of Latin America in the total technical assistance programme of UNIDO for 1974 rose slightly from the 1972 and 1973 figure of 17.3 per cent to 18.3 per cent. The acceleration in the approval of projects, mostly under IPF, and the increase in the rate of project implementation in 1974 give a firm indication that the 1975 level of implementation will increase further, although the number of new project approvals will probably be less in 1975 than in 1974.

93. The delivery by UNIDO of technical assistance to Latin America under IPF in 1974 increased by 27 per cent compared to the 1973 delivery under IPF. During 1974, there was a notable decrease of 21 per cent (or \$100,000) in delivery to Latin America under the SIS programme, owing largely to the fact that many SIS project proposals had been included in the relevant country programmes; on the other hand, there was an increase in the level of implementation of projects financed from the UNIDO General Trust Fund. (For a breakdown of 1974 technical assistance expenditures see figure 5.)

94. Most of the initial difficulties encountered by a number of countries with the new country programming procedures were resolved during 1974. The \$250,000 project for the Colombian iron and steel industry, for example, which had been approved by UNDP in 1972, became fully operational in 1974.



*Figure 5. 1974 technical assistance expenditures in the Americas, by source of funds*

95. Changes in Government often effect changes in the rate of delivery of technical assistance by UNIDO to the country concerned; priorities and plans may be changed which naturally retards implementation at least temporarily. Work proceeded satisfactorily in Argentina and Costa Rica, and in Chile the implementation of technical assistance reached a high level in 1974; a further increase is expected for 1975. In Brazil (for which UNIDO has the largest programme in the Latin American region and the second largest UNIDO programme in the world (cf. ID/B/140, para. 112)), a large number of projects did not materialize in 1974; the great interest shown by the Government in the industrial sector of the country gives rise to the hope that implementation by UNIDO of technical assistance for Brazil will regain momentum in 1975. The designation of a Senior Industrial Development Field Adviser for Brazil is expected to contribute to the successful implementation of the UNIDO programme for this country.

96. Another factor affecting the rate of project implementation by UNIDO in Latin America is natural disasters. The earthquake in Managua, the capital of Nicaragua, at the end of 1972 may be cited as one example. During 1973, UNIDO participated in various missions to Nicaragua to assess the damage done to the industrial sector of the country and to draw up plans for rehabilitation. As a result of these missions, implementation of an IPF project (industrial priorities) and of a project concerned with industrial parks, financed from the Special Rehabilitation Fund, commenced in 1974. Another project, on the rehabilitation of small-scale and handicraft industry (also to be financed by the special Rehabilitation Fund) is in the pipeline.

97. During 1974, three in-plant group training programmes were organized by UNIDO for nationals from the Latin American region, namely, management of maintenance and repair services (Italy), industrial co-operatives (Poland) and upgrading of industrial information personnel (Union of Soviet Socialist Republics). In addition, a training programme in plastics technology for participants from Latin American countries was held in Buenos Aires in September/October 1974. UNIDO also carried out promotional activities on the occasion of the Pacific International Trade Fair in Lima, Peru.



98. Although there were expectations in 1973 that the SIS programme in Latin America would show signs of recovery during 1974 (cf. ID/B/140, para. 117), this hope did not materialize. Latin American countries are concentrating their efforts on the implementation of their respective country programmes and the number of requests for SIS projects in 1974 was consequently lower than had originally been anticipated. However, following the 1974 amendment to the Guidelines and Procedures for the SIS Programme, whereby UNDP Resident Representatives were given the authority to approve SIS projects, there were indications that the situation might improve in 1975.

99. The number of project approvals under the UNIDO General Trust Fund increased considerably during 1974. The countries that benefited from projects financed under this Fund included Bolivia, Brazil, and Trinidad and Tobago. In addition, UNIDO helped to organize intergovernmental consultations in Mexico, from 11 to 15 November 1974, on an exchange of experience among developing countries regarding the formulation and application of the Mexican law on licensing and patents and comparable experience in other developing countries.

100. In 1974, the President of Mexico visited Vienna and UNIDO Headquarters. In an address to the UNIDO staff, he stressed UNIDO assistance to the industrial sector of Mexico and expressed the hope that this assistance would increase in future. During his visit, contacts were established between UNIDO officers and Mexican high officials with the aim of strengthening present project implementation and of developing future projects.

101. As already indicated in the 1974 report (see ID/B/140, para. 118), one of the main difficulties in expert recruitment for the region is the requirement of fluency in Spanish. This problem has been further aggravated by the great number of experts required for the large-scale projects that were approved late in 1973 and during 1974.

102. During 1974, four of the five posts of UNIDO regional advisers in Latin America were filled. The advisers devoted most of their time to the preparation of papers and other background material for the Conference of Ministers, held in Mexico from 18 to 23 November 1974, which served as a preparatory meeting for the Second General Conference of UNIDO. The creation of a joint UNIDO/ECLA industry division was also under consideration during 1974; such a division could contribute to an increase in the delivery by UNIDO of technical assistance to the countries of the region.

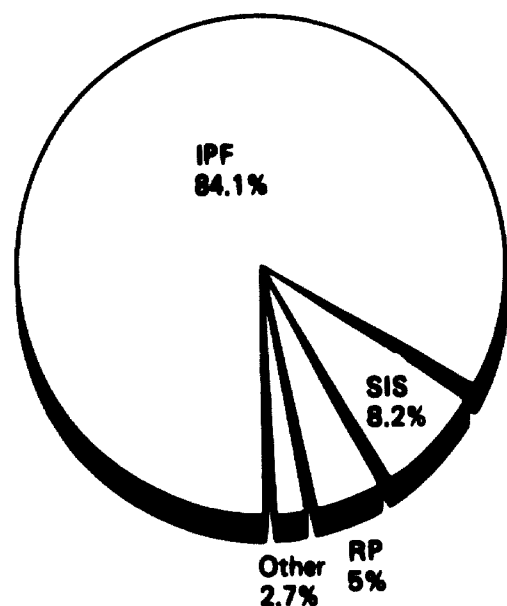
103. Co-operation between UNIDO and the regional groups in Latin America continued during the year under review. Of special note was the assistance rendered by UNIDO to the Andean Group (Andean Development Corporation) and to the Caribbean Community (long-term regional perspective plan for the industrial sector).

### **Asia and the Far East**

104. In 1974, the economic climate of the developing countries in Asia and the Far East reflected certain aspects of an economic and political nature that obtained not only in this region, but also in the majority of the other developing countries throughout the world. Inadequate industrial infrastructure and limited financial resources, lack of skilled manpower and managerial talent, unemployment and latent

underemployment were all conditions which added up to a bleak prospect for industrial development. The situation was further aggravated by devastating floods in Bangladesh, India and the Philippines. More recently, the rising prices, in particular for oil, and financial instability of major currencies shook the economic foundations of the developed and developing countries alike; in some areas, the sequels of war affected the efforts of many countries to reach stability and progressive development.

105. In 1974, 23 countries in Asia and the Far East received technical assistance from UNIDO. The total value of delivery was approximately \$6.2 million, representing 26 per cent of the total technical assistance delivery of UNIDO in 1974. In absolute terms, this shows a substantial increase in technical assistance of \$1.8 million, or 42 per cent, in 1974 over the 1973 figure of \$4.4 million. Thus, the 1974 target of \$6.3 million was nearly met, falling only \$0.1 million or 1.6 per cent short. The increase in the delivery of technical assistance in 1974, as compared with that of 1973, was due to the fact that the implementation of a number of large-scale projects (in Bhutan, India, Iran, Mongolia, the Philippines and Thailand) came into full swing during 1974. The most substantial increase was noted in equipment deliveries, followed by fellowships and training. IPF funds continued to be the major source of financing (approximately 84 per cent) for UNIDO projects in the region, followed by SIS and the RP. The largest share of UNIDO projects under the country programmes is in Asia and the Far East (33.1 per cent). (For a breakdown of 1974 technical assistance expenditures see figure 6.)



*Figure 6. 1974 technical assistance expenditures in Asia and the Far East, by source of funds*

106. As in 1973, UNIDO devoted special attention to the least developed countries of the region. Both Afghanistan and Nepal decided to establish centres of industrial services for planning, project preparation and evaluation, consultancy and training (cf. ID/B/140, para. 129). The Afghanistan project became operational in 1974 while a revised project document for the project in Nepal has been submitted to the Government for consideration and approval. UNIDO continued its assistance to the Nepalese vegetable oil industry; and a follow-up mission to help the Government in

the establishment of a vegetable oil plant has been carried out. An alcohol distillery project in Nepal also received UNIDO assistance during 1974 (cf. ID/B/140, para. 135), and a follow-up mission to the plant is envisaged in the near future. UNIDO provided assistance to Western Samoa in the agro-industrial sector and in the establishment of an industrial free zone. The project in Bhutan on the modernization and expansion of automobile repair workshops proceeded as scheduled in 1974 (cf. ID/B/140, para. 129). Laos continued to receive technical assistance from UNIDO in woodworking, food processing, vegetable oil production, industrial planning, ceramics and in the electroplating industry. In 1974 UNIDO also assisted Papua New Guinea in carrying out a survey on the development of both small industry and co-operatives and on business development. It is envisaged that UNIDO will render further assistance to Papua New Guinea in the areas of wood processing, pyrethrum and agricultural tools.

107. Four UNIDO projects for Bangladesh are in the pipeline to assist its jute and textile industry, small-scale plastics processing, shipbuilding and fish processing industries; technical assistance will also be rendered to the country in the establishment of a national consultancy institute and a standards institute. Moreover, UNIDO will provide assistance to Bangladesh in the management of nationalized industries. During 1974 the country programme of Bangladesh was revised in order to identify new projects in line with a projects increase of IPF funds for this country during the second country programming cycle.

108. In absolute terms, the country receiving the largest amount of technical assistance from UNIDO is India, with a country programme to a value of \$19 million, including operational and pipeline projects. UNIDO assistance to India is directed largely towards product development and advanced technology for optimizing the use for indigenous resources in the fields of metallurgy, engineering, petrochemicals, fertilizers, textile and leather industries, product adaptation and upgrading of quality. In August 1974, UNIDO completed the implementation of a large-scale project (Institute for the Design of Electrical Measuring Instruments) with UNDP inputs amounting to \$1 million; by mid-1975 the implementation of a project on central creep testing facilities at Jamshedpur (UNDP input of \$0.6 million) will also have been completed.

109. While India is a recipient of sophisticated technical assistance, it also serves UNIDO as a source of expertise. During the period 1971-1973, 102 experts from India worked on UNIDO projects in the developing countries.

110. In addition to the projects listed above for single least developed countries, UNIDO organized in April 1974 in Kathmandu, Nepal, a training workshop on small-scale industry for the least developed countries of Asia, the Far East and the Middle East; the main objective of the workshop, which was combined with a study tour in India, was to help promote the formulation of integrated programmes of small-industry development in these countries.

111. During the year under review, almost all countries of the region evinced a desire to improve balance-of-payment positions and to establish or strengthen institutions supporting and sustaining industrial development. Activities under the UNIDO programme of product adaptation and development of export-oriented industries (cf. ID/B/140, para., 130) continued to expand in the region. In addition to India and the Philippines, where projects under this programme were first

introduced, technical assistance in this field was provided to, or scheduled for, Iran, Malaysia, Pakistan, Sri Lanka and Thailand. Activities in supporting areas, such as packaging techniques, continued to grow; a sizable programme to strengthen a design and packaging centre in the Republic of Korea was under implementation during 1974, and a similar project is in the pipeline for India. At the regional level, an in-plant training programme in packaging has been included in the intercountry programme for Asia and the Far East.

112. UNIDO projects related to the expansion and improvement of the institutional base for industrialization continued to be carried out in the region in 1974. Long-term projects on industrial research and industrial standardization were being implemented in Iran, Malaysia, the Republic of Korea, the Republic of Viet-Nam and Thailand. A joint consultancy meeting, organized by UNIDO together with the National Science Development Board of the Philippines on the application of industrial research findings and services was held in Manila, Philippines, from 19 to 27 September 1974; the meeting was attended by government officials, researchers and representatives of the industrial sector. Nationals from the ESCAP region also participated in an in-plant training programme for managers of industry research institutes in developing countries, organized at Delft in the Netherlands. Considerable assistance was also provided in 1974 by UNIDO in quality control, design and development, as well as for planning and financial institutions (Malaysia, Pakistan, Republic of Korea, Singapore).

113. Several countries of the region (Bangladesh, India, Republic of Korea, Sri Lanka) requested, and are receiving, technical assistance from UNIDO in sophisticated fields such as creep testing, precision components manufacture, fine instruments, basic chemicals and plastics. As in previous years, technical assistance was provided by UNIDO to specific branches of industry in the region; the leading branches, in terms of technical assistance delivery, were leather and footwear, textiles, food processing and ceramic industries as well as small-scale industry. During 1974, for example, five large-scale and two small-scale UNIDO projects on leather and leather goods manufacture were under implementation in the ESCAP region (in Fiji, India, Mongolia, Pakistan and Philippines). In Mongolia, work progressed on the experimental and demonstration plant for processing camel and goat hair into cashmere. In addition, a regional seminar on the development of footwear and leather goods manufacturing industries in developing countries was organized by UNIDO in Madras, India, from 4 to 13 February 1974.

114. Environmental problems of the region have also been given attention by UNIDO; an advisor on industrial air pollution control was fielded to Singapore in December 1973 and completed his follow-up mission in 1974.

115. UNIDO continued in 1974 to provide assistance to individual countries in Asia and the Far East through regional and subregional projects. The four regional advisers attached to ESCAP were actively engaged in assisting the countries of the region in their industrialization process.

116. The assistance rendered by UNIDO in 1974 to the Asian Coconut and Pepper Communities was well received. Seminars on licensing know-how (Manila) and quality control (Singapore and Djakarta) were organized by UNIDO in 1974, and a workshop on financial analysis (Bandung) was held in May 1974. In addition, participants from the ESCAP region attended seminars on industrial information

(Singapore and Djakarta) and on promotion and development of machine tool industries (Tbilisi, USSR) which were organized by UNIDO in 1974. Regional projects in the fields of agricultural machinery and subcontracting covering 11 countries in the region were carried out during 1974. Assistance was also provided to the South East Asia Iron and Steel Institute in the standardization of the steel production industry. Further, UNIDO organized in-plant training programmes in packaging, food processing, and mechanical engineering in which nationals from the ESCAP region participated during 1974.

117. The Association of South-East Asian Nations (ASEAN) received assistance from UNIDO in the fields of fertilizers and automotive components. UNIDO also co-operated with the Mekong Committee, carrying out in 1974 studies in iron and steel, ferro-alloys and the phosphoric acid industry. In association with the Asian Productivity Organization (APO), UNIDO provided training facilities in industrial management and foundry technology. UNIDO also continued to assist the Regional Co-operation for Development (RCD) in organizing the publication of an industrial information bulletin on a regional basis. Further information on UNIDO co-operation with regional groups is to be found in chapter VIII, section on "Co-operation with regional groups".

118. In order to reinforce co-operation in providing assistance to the developing countries of the region, an agreement on the establishment of a joint UNIDO/ESCAP industry division at ESCAP headquarters was signed between UNIDO and ESCAP in 1974. It is expected that the new industry division will start its operations by mid-1975.

### Europe and the Middle East

119. In 1974 the total delivery of UNIDO technical co-operation activities to the developing countries of Europe and the Middle East amounted to \$4.1 million as compared to \$3.2 million in 1973, an increase of 28 per cent. (For a breakdown of 1974 technical assistance expenditures see figure 7.)

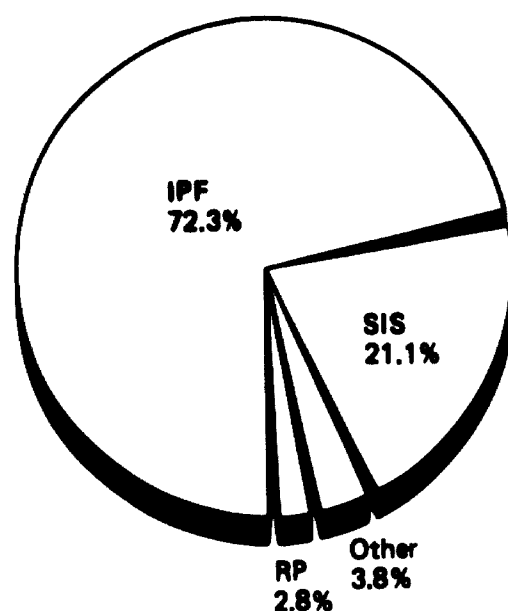


Figure 7. 1974 technical assistance expenditures in Europe and the Middle East, by source of funds

120. As pointed out previously (cf. ID/B/140, para. 139), the industrial requirements in the region vary considerably in line with the broad spectrum of countries and their differing stages of economic development. The wealthy group of countries call for sophisticated industrial techniques and processes which are within their financial capabilities. The more basic needs of other countries have to be met through increased technical assistance in institution building, industrial training and light and small-scale industries.

121. Co-operation between UNIDO and the World Bank resulted in 1974 in two new major projects for the region (Yemen and Yugoslavia), involving some \$19 million in loans.

122. For reasons of convenience, the present review is divided into two sections dealing separately with Europe and the Middle East.

### *Europe*

123. Countries of this area are, generally speaking, economically and industrially relatively well advanced, with a high *per capita* income and a fairly high standard of living. Apart from a few countries, unemployment is not a severe problem. With the expansion of the industrial sector, investments tend to be capital rather than labour intensive. The technical assistance requirements of those European countries where the industrialization process can still be said to be developing are mainly for the transfer of advanced technologies and the adaptation of these technologies to local conditions. Consequently, government requests focus on short-term, high-level expertise and on very specific training programmes, though there are also a number of large-scale and small-scale projects under implementation and in the pipeline for assistance to specific industries. As regards training programmes, UNIDO is facing considerable difficulties in placing fellows as few industrialized countries are ready to provide such training and—where trainees are accepted—often charge high training fees. During 1974, several projects involving fellowships had to be cancelled owing to such reasons.

124. During 1974 UNIDO, for the first time, provided technical assistance to Albania in the form of projects dealing with industrial development and with the ceramics industry. A project for the iron and steel industry of Poland was completed, two large-scale projects for the development of packaging centres in Bulgaria and Poland were nearing completion (cf. ID/B/140, para. 393). Another UNIDO large-scale project in progress during 1974 was assistance to the research institute for instruments design in Sofia, Bulgaria. A UNIDO project for assistance in the establishment of an industrial zone in Salonika, Greece, is still being held in abeyance by UNDP pending further negotiations with the Government.

125. Owing to recent developments in Cyprus, UNIDO activities—particularly assistance to industrial development services—had to be suspended in 1974. At this stage, it is difficult to assess the future needs of the country; however, it is certain that UNIDO will be called upon to render assistance to Cyprus in its industrialization efforts.

126. In 1974, the UNDP Governing Council approved four large-scale industrial projects in the country programme of Turkey; UNIDO involvement in these projects will amount to about \$5 million.

127. Many of the European countries receiving technical assistance from UNIDO also contribute to the activities of UNIDO by organizing, jointly with UNIDO, seminars, symposia and workshops financed from voluntary contributions and by putting at the disposal of UNIDO experts, consulting firms and training facilities.

128. During the year under review a number of activities were carried out by the joint UNIDO/Romania Centre for international co-operation in the field of chemical and petrochemical industries for the developing countries, particularly in the field of training. The joint UNIDO/Hungarian programme for international co-operation in instrument, electronic and telecommunication industries for the benefit of developing countries became operational in 1974, and the same year a joint programme for international co-operation in the development of agro-industries in the developing countries was established between UNIDO and the Yugoslav Government. For further details on the activities under these joint programmes, see chapter VIII.

### *Middle East*

129. In many parts of the Middle East, vigorous industrial development can be expected as a result of increased income from oil revenues. Many Arab countries now have the capacity to supply the financial resources necessary for industrial investment, to provide suitable opportunities for such investment and to develop further co-operation and integration in the economic field. The Third Conference on Industrial Development for Arab States, held in Tripoli from 7 to 14 April 1974, affirmed the view that the time had come to "draw up an Arab development strategy and in particular an industrial development strategy compatible with the new facts in the Arab world."<sup>6</sup> The Conference recommended that priority be given to the development of the iron and steel, petrochemical and fertilizer industries as well as of the manufacturing industries serving agricultural production. Taking into account the number of Arab countries without adequate financial resources, the Conference called upon the Arab countries to consider the creation of a special fund to finance industrial development projects, to consolidate existing financing institutions and to increase their resources in keeping with the requirements of development.

130. The Economic Commission for Western Asia (ECWA) and, within it, the Joint UNIDO/ECWA Industry Division, which started its work in June 1974, have been actively engaged in studying the industrial development needs of the Arab countries of the Middle East and in promoting economic and social co-operation and integration among those countries. These activities as well as UNIDO and ECWA field operations brought about in 1974 an increase of government requests for UNIDO assistance, especially from Kuwait, Qatar, the United Arab Emirates and Oman as well as from Bahrain which had not benefited from UNIDO technical assistance prior to 1974.

131. As in previous years, the programmes of UNIDO in the group of oil-exporting Arab countries are financed mainly on a cost-sharing basis by contributions from the recipient countries themselves. In some cases, whole projects are financed by the recipient countries on Funds-in-Trust arrangement. Such a system gives UNIDO an opening to expand its operational activities in the Middle East.

<sup>6</sup> 3 CIDAS/OR/3, para. 2-1.

132. As confirmed by the Tripoli Conference, the oil-exporting countries of the region are giving increased attention to petrochemicals, fertilizers and other oil-based industrial products (Kuwait, Saudi Arabia, United Arab Emirates), and UNIDO continued in 1974 to render assistance in these branches of industry as it had in previous years (cf. ID/B/140, para. 151). Other oil-exporting countries in the region are concentrating on new industrial techniques and processes; in Iraq, for example, UNIDO provided technical assistance in the development of a semi-integrated steel plant and a sponge iron plant as well as assistance in the design of worsted fine woollen clothes and blankets and in the tanning and leather industry.

133. In countries affected by the recent war in the region, an industrial rehabilitation and reconstruction programme is being launched; in the Syrian Arab Republic, for example, the facilities at the Homs Refinery are being restored and expanded with the co-operation of UNIDO.

134. The least developed country in the subregion (Yemen) put special emphasis on advice in establishing industrial institutions and in training to remedy its lack of trained manpower; in 1974 UNIDO continued to supply assistance to Yemen in industrial programming and planning.

135. One country of the region (Israel) is expected shortly to reach the industrial take-off stage with a subsequent gradual phasing-out of UNIDO assistance by 1976. Short-term trouble shooting assistance may be requested by the Government, however, in the future through Funds-in-Trust arrangement.

136. During 1974, the number of SIS projects in the region decreased further as countries adjusted to the new country programming procedures; UNDP is also attempting to have some SIS requests integrated within the various country programmes. Most of the technical assistance provided by UNIDO to the countries of the Middle East was again devoted to strengthening of industrial and economic centres, industrial advisory units, quality control centres, and other industrial institutions. As in previous years, technical assistance was also used to help to identify, analyse and solve technological problems in existing plants.

137. Throughout the year UNIDO continued its close co-operation with the Industrial Development Centre for Arab Countries (IDCAS). (For further information on the subject, see chapter VIII, section on "Co-operation with regional groups".)



### *Chapter III*

## **INDUSTRIAL TECHNOLOGY PROGRAMME**

**(30.0.00)**

### **INTRODUCTION**

1. In 1974 UNIDO, through its industrial technology programme, continued to provide assistance to the developing countries in solving the various technological and economic problems that occur in the individual branches of the industrial sector during the process of industrialization. Again, emphasis was given to: the development, adaptation and transfer of technological know-how; the improvement of technical skills; the development of agro-industries, including industrial processing and fuller utilization of agricultural resources; the industrial processing and utilization of mineral resources; the building up of industrial capacity in the developing countries; the minimization, through environmental planning, management and control, of environmental damages resulting from industry; the maintenance and repair of equipment; and the technological evaluation of licences.

2. The programme of industrial technology consists of the following eight components: engineering industries; metallurgical industries; building materials industries; chemical, pharmaceutical and pulp and paper industries; fertilizer, pesticides and petrochemical industries; light industries; general industrial techniques; and industrial construction. Up to June 1974, UNIDO had dealt with the construction industry as a specific activity of programme component 30.4.00 then entitled "Construction and building materials industries". In view of the growing importance of the construction industry for the industrialization process, UNIDO created a separate component (30.8.00) for industrial construction in order to step up assistance in this important field.

3. In 1974, the total delivery of UNIDO technical assistance under the industrial technology programme amounted to \$11,112,000 as compared to the 1973 figure of \$8,754,000; an increase of 26.9 per cent. Figure 1 shows the 1974 and 1973 implementation, in terms of total expenditure, under the industrial technology programme, broken down by its eight programme components. The major thrust of the industrial technology programme in 1974 was in the light industries, followed by the engineering industries and the metallurgical industries. Nearly 90 per cent of the technical assistance expenditures incurred under the industrial technology programme in 1974 came from the IPF and SIS programme. The 1974 expenditures under this programme, broken down by source of funds, are shown in figure 2.

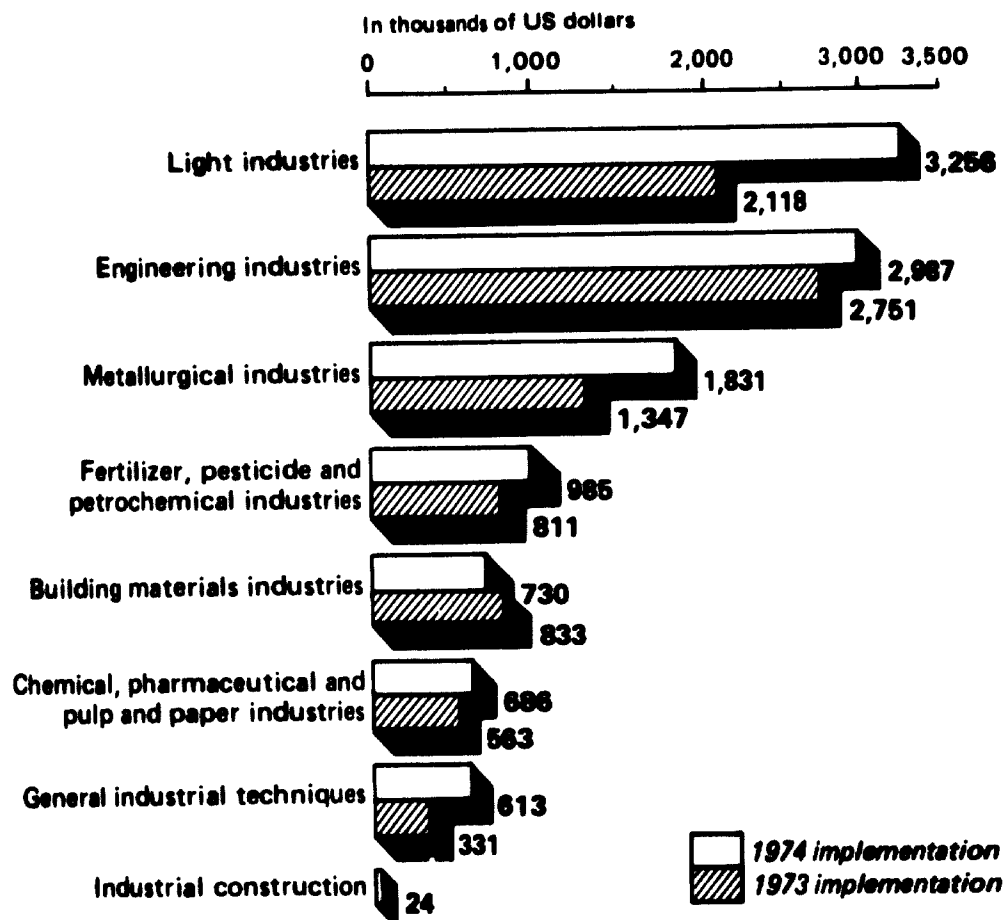


Figure 1. Expenditures in 1974 and 1973 under the industrial technology programme, by programme component

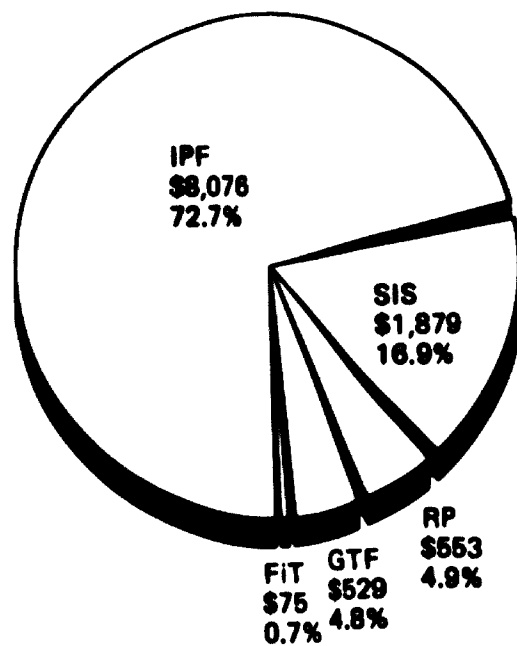


Figure 2. Actual expenditures under the industrial technology programme in 1974, by source of funds (in thousands of US dollars)

4. The cumulative total of projects in industrial technology approved under different sources of finance amounted to \$52.7 million by the end of December 1974. Requests for technical assistance in the areas covered by the industrial technology programme are expected to increase considerably in the immediate future. The estimated delivery of technical assistance under this programme in the years 1975, 1976 and 1977 is \$12.4, \$13.6 and \$15.0 million, respectively, and these estimates are modest compared to the requirements. However, current financial and manpower constraints, owing in part to the vicious circle of overhead costs and reimbursements, do not at present permit a more optimistic perspective of the work performance of UNIDO under its industrial technology programme. The freeze on recruitment in the latter part of 1974 is likely to be reflected in the delivery performance of 1975 and perhaps even in that of 1976.

### **ENGINEERING INDUSTRIES** (30.1.00)

5. The crucial role of engineering industries in the industrialization process is self-evident. The importance attached by the developing countries to this branch of industry is reflected by the fact that the engineering industries component has for years been one of the leading programme components, in terms of its volume of technical assistance delivery, of the industrial technology programme, indeed, of the Organization as a whole. Judging from the approved country programmes, this component will continue for years to come to be one of the more important areas of UNIDO technical assistance.

6. Under its engineering industries programme component, UNIDO delivered in 1974 \$2.98 million of technical assistance as compared to \$2.75 million in 1973, an increase of 8.6 per cent. Delivery under this component accounted for 12.5 per cent of the total technical assistance rendered by UNIDO in 1974. Two factors contributed to the increase in output: a general improvement in working procedures resulting in increased efficiency; and the growing rate of approved projects for which project ideas were formulated two or three years ago. Despite the substantial inflow of new projects, the long delay between the identification of a project opportunity and the final project—a delay due mainly to bureaucratic procedures—mocks the urgency of programmes such as that for the Sudano-Sahelian Zone. The delays between project identification and approval are even longer than those relating to the fielding of experts, a problem to which so much attention has been given.

7. The difficulties, recounted in the last Annual Report (ID/B/140, para. 200), confronting the developing countries in their efforts to develop engineering industries have not been mitigated in 1974; on the contrary, the increasing rate of inflation, the continuing monetary instability and the rising costs of energy have aggravated the difficulties. The question arises as to what UNIDO can or should do through its engineering industries component to assist the developing countries in the establishment and strengthening of their engineering industries. In this connexion, it is interesting to note that several of the activities that have been and are continuing to be carried out under the engineering industries component relate directly to some of the measures called for in the Programme of Action for the Establishment of a New Economic Order adopted by the General Assembly at its sixth special session.

By way of example, the Programme of Action states that "all efforts should be made . . . to ensure that concrete measures to increase food production and storage facilities in developing countries are introduced";<sup>1</sup> UNIDO, through its engineering industries component, is assisting the developing countries in the manufacture of cheap and modern grain storage bins, water pumps and storage tanks, and of small, low-cost tractors and simple agricultural implements. UNIDO is also contributing to the setting up of new industrial capacities by assisting in the establishment of workshops, foundries, metal industries development centres and tooling centres.

8. On the basis of past trends and projects in the pipeline, the future prospect for still further expansion of UNIDO activities in the engineering industries appear bright; the target figure for technical assistance delivery in 1975 under this component is \$3.1 million.

9. The work undertaken by UNIDO in the engineering industries can be divided into five specific activities: metal products industries; machinery industries including agricultural machinery and implements; electrical machinery and apparatus industries including measuring and control equipment; transport equipment industries; and maintenance and repair.

#### **Metal products industries (30.1.01)**

10. Metal products are used universally, and every country seeking to develop its industrial sector must develop this branch of industry. It has been the experience of UNIDO that the most efficient and effective way of promoting metal products industries is through the establishment of pilot demonstration plants, mechanical workshops, forge shops, and tooling and metal industry development centres. Another advantage of such projects is that they readily lend themselves to schemes of co-operation among developing countries. In this connexion, mention may be made of the mechanical workshop and foundry in the Sudan, a project that was described in detail in the last Annual Report (ID/B/140, paras. 187-194). The workshop and foundry are now not only fully operational but, what is more important, they are entirely self-supporting. Moreover, they are being used to provide training for Somali personnel associated with a similar UNIDO project in Somalia. The UNIDO project manager for the foundry and mechanical workshop to be set up in Somalia is a Sudanese national who served as the local project director of the pilot project in the Sudan.

11. Owing to the widespread interest generated by the pilot project in the Sudan, UNIDO has scheduled an information workshop, to be held in the Sudan early in 1975, at which representatives of selected African countries will be able to see and evaluate first hand the workshop and foundry. It is hoped that through these visits and discussions on the history of this project and on the details of its implementation, similar projects will be forthcoming in the respective countries of the information workshop participants.

12. The Metal Industries Research and Development Centre (MIRDC) in the Philippines (see ID/B/140, paras. 205-209) has proved its worth, and the services of

<sup>1</sup> General Assembly resolution 3202 (S-VI), section I, subsection 2.

the Centre are to be expanded; special efforts will be made to extend the services also to rural areas of the country. The envisaged new services of the Centre will cover the rehabilitation of industrial machinery, general maintenance and repair, and metrology. Supplementary assistance is to be provided in the form of two fellowships and a mobile test unit to serve small- and medium-scale metal workshops with a view to upgrading skills and product quality in rural areas.

13. In response to a request from the Government of Indonesia, a UNIDO consultant has prepared and submitted a project document for a large-scale technical assistance project designed to strengthen the Metal Industries Development Centre that has been established in Indonesia with Belgian bilateral assistance. Should this project be approved, UNIDO will co-operate closely in its implementation with the MIRDC in the Philippines.

14. As countries pass in their industrialization process from artisanal workshops to industrial scale production, the need arises for better tooling to meet the demands of larger production quantities, stricter tolerances and higher quality of products. Since few, if any, of the smaller enterprises in developing countries can afford the necessary equipment or obtain the special know-how to manufacture all their own tools, dies and fixtures, the best remedy for this problem would seem to be special tool centres. With the assistance of UNIDO, a number of tool centres have already been established (cf. ID/B/140, paras. 208-210) and are working to capacity. UNIDO plans to continue its assistance in the establishment and strengthening of such centres. By way of example, UNIDO is participating in the implementation of a large-scale project in Trinidad and Tobago for the development of tool and die production that is greatly needed by both the metalworking and plastic manufacturing industries of the country.

15. The sound base that has been built up around the various workshops, development centres and tool centres, established in various developing countries with the assistance of UNIDO, is most encouraging. Such projects not only meet the direct and pressing needs of local industry for such services but also lead to the training of skilled craftsmen. UNIDO intends to continue building on the solid base it has helped to create.

#### **Machinery industries including agricultural machinery and implements (30.1.02)**

16. The principal responsibilities of UNIDO with regard to the machinery industries were explained in the 1973 Annual Report (ID/B/140, para. 211). One of the instruments that UNIDO uses to meet its responsibilities in this field is a series of regional seminars on machine tools for participants from developing countries. In 1974, UNIDO sponsored the third such seminar which was held at Tbilisi, Union of Soviet Socialist Republics, for the ESCAP region. At the seminar, the participants from the developing countries of Asia and the Far East that were contemplating the establishment or that had already established machine tool industries had the opportunity of discussing possible joint activities such as technical assistance, partnerships, pairing of institutes and training, with interested parties from developed countries. In addition to various technical aspects related to machine tools industries, other related factors such as investment, source of financing and credit arrangements were subjects of discussion.

17. During 1974, developing countries evinced a mounting interest in what was previously a controversial application, namely, that of numerical control for machine tools. Apparently there is a growing appreciation of the fact that the poor quality of engineering products is one of the main factors inhibiting many of the developing countries from expanding their industrial production, whether for import substitution or for export. In an effort to improve production quality, eliminate costly and complex jigs and fixtures, achieve greater accuracy, increase the utilization of machine tools and to be able to repeat the production of certain products with a minimum loss of time and money, developing countries are turning increasingly to the use of numerically controlled (NC) machine tools. In order to demonstrate the practical advantages of NC machine tools, UNIDO is assisting in the establishment of an NC machine tool training and demonstration centre in Bulgaria and of an NC centre for the metalworking industry in India.

18. Not all the problems related to machinery industries involve capital investments in equipment. In Sri Lanka, for example, UNIDO provided technical assistance in the production, testing, and installation of pedestal grinders and in the proper utilization of machine tools. A UNIDO expert, attached to the Ceylon Steel Corporation, assisted the local authorities in the establishment of a machine tool division; this division is the only unit that produces machine tools locally, under licence from Hindustan Machine Tools, India.

19. It has been said that the number of machine tools in a given country is an indication of the level of industrial production. In order to manufacture any equipment, however, certain types of machine tools are needed to begin the basic manufacturing process. Unfortunately, a number of developing countries have only limited information about the types and quantities of machine tools in use in their own countries. In order to assist the developing countries in this field, UNIDO began in 1974 a series of preliminary surveys on the current state of and demand for machine tool production; during the year, four of the surveys were completed (in Argentina, Brazil, Mexico and Turkey).

20. The world-wide shortage of food and the desperate straits of a number of developing countries have given greater urgency to the work of UNIDO in the field of agricultural machinery and implements. Agricultural machinery is one of the important inputs for successful and high-yield agriculture. Most of the developing countries have attached priority to the mechanization of their agricultural sector and to the local manufacture or assembly of selected agricultural machinery and implements. UNIDO is having continuous discussions with FAO on this important subject with a view to evolving co-operative activities. During 1974, the work of UNIDO in this field focused on three particular groups of products.

21. The first group of products singled out by UNIDO for specific attention was simple agricultural machinery. In order to promote the manufacture of low-cost and simple appropriate agricultural machinery, UNIDO, in co-operation with the Government of India, organized a joint manufacturing promotion clinic on simple agricultural implements, hand-operated machines and animal-drawn equipment for the least developed countries. A number of participants from the least developed countries attended the clinic, held at New Delhi in October 1974, during which they had the opportunity of examining a variety of products and evaluating their performance as well as of studying manufacturing technology; several manufacturing programmes for simple agricultural machinery were formulated at the clinic and

discussions were held about possible programmes of co-operation in this field among developing countries. In addition, it may be of interest to note that, on the basis of technical discussions held during the manufacturing development clinic, UNIDO has initiated preliminary activities on the promotion of bio-gas plants utilizing cattle manure, with a view to utilizing effectively existing resources in the production of methane gas and non-toxic plant nutrients.

22. Work on the second group of products, namely low-cost grain storage bins (see ID/B/140, paras. 219-221) continued throughout 1974. In this respect, UNIDO seems to have anticipated General Assembly resolution 3202 (S-VI), section I, subsection 2 (g), which states that all efforts should be made "to ensure that concrete measures to increase . . . storage facilities in developing countries are introduced".

23. The third group of products was low cost agricultural power machinery. Given the fact that 0.5 hp per hectare is considered the minimum power requirement to achieve optimum agricultural yield in the developing countries, a total of 16.3 million tractors and 2.2 million power tillers would be needed by those countries to meet this minimum power requirement. UNIDO has been attentive to this problem for some time. Following its 1972-1973 activities related to the development and manufacture of small, low-cost tractors and power tillers, suited to the particular needs of developing countries (cf. ID/B/140, paras. 214-217), UNIDO held in September 1974 technical consultations with agricultural engineers on the occasion of the VIIIth International Congress of Agricultural Engineers, which met in the Netherlands. During 1974, UNIDO also formulated a number of co-operative manufacturing promotion activities related to agricultural machinery and implements for selected developing countries and subregions.

#### **Electrical machinery and apparatus including measuring and control equipment (30.1.03)**

24. Owing to its high rate of innovation, and with no obvious limit to its application, the electrical machinery and apparatus industry is one of the most dynamic and pervasive branches of industry. It is not surprising, therefore, that nearly all developing countries are becoming increasingly interested in this particular branch. With regard to consumer products, a change of interest has been witnessed from radio receivers, which are now assembled in almost every developing country, to the manufacture of colour television receivers. Despite inflation and monetary instability, sales for all types of television receivers increased substantially in the industrialized countries, during 1974, an opportunity that the Republic of Korea, among others, has been quick to appreciate for it has sought the assistance of UNIDO in design work related to television receivers.

25. A new field is opening up in the electrical machinery and apparatus industry, namely that of micro-processors which form the basis of so-called "smart" instruments that can evaluate data and react accordingly. The value of micro-processors in industry controls for piece part manufacturing and processing industries has been recognized by the Government of Bulgaria which has requested the assistance of UNIDO in this field. The joint UNIDO/Hungarian programme for international co-operation in the instrument, electronic and telecommunication

industries for the benefit of developing countries (cf. ID/B/140, paras. 911-913), has proved a most useful vehicle for meeting the growing demand from developing countries for assistance in the manufacture, assembly and maintenance of biomedical electronic equipment. A survey of this branch of industry in the Andean Group of countries has already been completed. UNIDO, in co-operation with the Government of Hungary, is making final preparations for an in-plant group training programme in maintenance and repair of biomedical electronic equipment to be held in Budapest early in 1975.

26. Instrumentation continued to play an important role in the industrialization process. In the Republic of Korea, a proposal is under consideration for UNIDO assistance in the measurement of combustion efficiency of fuel-burning plants. It is anticipated that, through this project, a significant reduction in fuel consumption can be achieved by improving the efficiency of fuel burning and by reducing heat losses. The work of UNIDO in this field is in line with General Assembly resolution 3202 (S-VI), section IV (e) according to which every effort should be made to conserve all sources of energy. The project in the Republic of Korea is no doubt a forerunner and will be followed, it is to be hoped, by other projects of this kind in other developing countries.

27. The electronics industry is essentially an assembly industry. Once a certain stage of development has been reached in this industry, it is natural that interest is aroused in component manufacture. Such a stage has been reached in Egypt where the Government has requested assistance from UNIDO in the development of electronics instruments and, in longer term planning, in the production and application of hybrid integrated circuits. Broader sectoral planning and promotion projects for the electronics industry are of particular interest to countries involved in regional industrialization co-operation schemes such as the Andean Group of countries, and even to countries which anticipate joining, or becoming associated with, the European Economic Community. In view of the wide ramifications of the electronics industry, UNIDO is promoting the idea of an "invisible institution" under which a support group will be set up to promote co-ordination of the work, as regards the electronics industry, of existing commercial, industrial research and investment institutions.

#### **Transport equipment industries (30.1.04)**

28. The activities of UNIDO related to transport equipment continue to be concentrated on two specific subsectors, namely, the automotive industry and shipbuilding and repair. Automotive industries are of particular importance to developing countries owing to the fact that they are labour intensive and can be economically developed by the progressive expansion of ancillary industries. A large number of developing countries have an automotive industry, usually in the form of assembly operations. By and large, the assembly operations have been created to conform to national legislation limiting the import of component vehicles; unfortunately, such operations do not progress automatically to the next stage of increasing the local content of the finished product. It is not surprising therefore that interest in this field has been directed primarily towards assistance in promoting the manufacture of components. As manufacturing operations of this kind are normally associated with high levels of production, UNIDO has given special attention to



schemes relating to the interchangeability of components, subregional co-operation and international subcontracting. A good example of the work of UNIDO along these lines is a project in Peru where assistance is being provided in the manufacture of parts for small automobiles including forged parts, castings, engines and transmissions. In the implementation of this project, special account has been taken of the position of Peru within the Andean Group and the possibility of interchanging various components in countries outside the immediate subregions.

29. The rising price of fuel has accentuated the need in developing countries for inexpensive and basic vehicles such as mopeds, motor cycles, tri-wheelers and simple transport vehicles. Requests to UNIDO for assistance in the manufacture of such vehicles have increased considerably and in this connexion UNIDO assisted in the identification of a project (and subsequently drew up a project document) for assistance to Peru in the manufacture of parts for bicycles and motor cycles. The proposed investment, the equivalent of \$700,000, is to be financed locally and the envisaged plant is to have a manufacturing capacity of 200,000 kits of parts per shift.

30. The project described in the 1973 Annual Report (ID/B/140, paras. 233-235) to assist Bhutan in modernizing and expanding its automobile repair workshops was in full operation in 1974. The project manager will soon receive the assistance of an additional expert, and five Bhutanese nationals are being placed for training in this field under the fellowship programme. Part of the equipment component of this project has been supplied and additional equipment is being procured by UNIDO.

31. The work of UNIDO in this area is likely to continue to increase.

32. The mounting interest in shipbuilding and repair, as reported in 1973 (cf. ID/B/140, para. 238), continued throughout 1974 as Governments of developing countries became more conscious of the considerable importance of establishing and expanding their capacities in this particular branch. Notable progress has already been achieved in Greece, India, Peru and the Republic of Korea among others. During 1974 UNIDO provided technical assistance in the area of shipbuilding and repair to governmental organizations and individual enterprises in Fiji, Iran, Malaysia, Mexico and Peru. In these countries, UNIDO experts advised on the elaboration of shipbuilding industry programmes and on the establishment of new facilities. Assistance was also given in the reorganization and modernization of existing shipyards and marine engineering units.

33. Of particular importance in 1974 was the assistance of UNIDO in the implementation of a regional project, which commenced in 1973, in the Andean Group of countries. Under this project, UNIDO conducted a study with a view to integrating the shipbuilding and repair industries in the member countries of the Andean Group. The aim of the study was to provide the planning body of the Cartagena Agreement with the information necessary to programme the development of these industries and to allocate the related special industry activities among the member countries within the framework of the Andean Group's economic integration.

34. A third study on the series on the utilization of shipbuilding and repair facilities was completed by UNIDO in 1974. A new comprehensive study is being prepared in which the recent experience and prospects for the development of shipbuilding and repair in developing countries will be analysed.

## **Maintenance and repair (30.1.05)**

35. It is most unfortunate that the situation with regard to maintenance and repair, as described last year (cf. ID/B/140, para. 241), has shown no improvement in 1974. It is depressing to see the amount of machinery that is inoperative in too many developing countries owing to the lack of some small part; it is equally depressing that Governments have not yet appreciated that such inoperative machinery constitutes wasted assets. Very few Governments of developing countries have introduced an aggressive maintenance and repair policy. Many developing countries still prefer the inclusion of institutional-type projects in their country programmes, thus relegating maintenance and repair projects to secondary importance and thereby losing the required benefits such projects could bring. Proper maintenance of equipment not only greatly reduces the direct investments by prolonging the life of equipment but also increases final returns through higher productivity.

36. UNIDO believes that more concentrated efforts should be made in the developing countries to demonstrate the direct and indirect benefits of maintenance and repair. In this connexion, the organization of national maintenance weeks, a series of maintenance and repair training programmes and a number of promotional activities organized in the past by UNIDO should now be supplemented by the creation, on a broader scale, of physical facilities for maintenance and repair at the national level. The establishment of such facilities lags far behind the growth of industrial installations. The time has come to find funds, not presently available in the country programmes, to finance maintenance and repair workshops, particularly in the economically weaker developing countries. A central maintenance and repair workshop in the industrial centre of a country, together with a number of interrelated satellite workshops spread through the country, could meet to a great extent the maintenance and repair needs of many of the smaller developing countries. In addition to the day-to-day maintenance and repair services, such a system of workshops could provide consulting and training services in maintenance and repair; the workshops could also serve as central points for the manufacturing and storage of spare parts.

37. With regard to UNIDO technical assistance in the field of maintenance and repair, the trend towards smaller and shorter projects of a trouble-shooting nature has continued through 1974. Relatively few developing countries have diverted their requests for assistance in maintenance to large-scale projects. UNIDO is assisting the Government of Colombia to introduce comprehensive maintenance and repair schemes for road-making and earth-moving equipment. In Egypt, UNIDO is assisting in equipping and setting up a series of workshops which is intended to service one of the largest local transport companies. Mongolia has started its maintenance programme, with the assistance of UNIDO, by introducing a comprehensive maintenance scheme under the auspices of the Ministry of Light Industries. The Republic of Guinea has allocated \$1.4 million to initiate a maintenance and spare part programme, including workshops, for the five largest enterprises in the capital. Mali is benefiting from a contribution from China, to introduce, through UNIDO, maintenance services on a regional basis. It is to be hoped that such projects will serve as an example for other developing countries to instigate large-scale maintenance and repair programmes.

## **METALLURGICAL INDUSTRIES**

**(30.2 00)**

38. The activities of UNIDO under this programme component are aimed at assisting the developing countries in the development of their metallurgical industries. In trying to meet this objective, special attention is given to the establishment and operation of: iron and steel industries; aluminium, copper, lead, zinc, nickel, tin and other non-ferrous metals industries; ilmenite smelting; foundries; industries for metal transformation through rolling, forging, wire-drawing, extrusion etc; installations for metal treating, coating and finishing; and centres for metallurgical technology and know-how.

39. The various field and headquarters activities of UNIDO under this component are concerned with: pre-feasibility and feasibility studies on the establishment of new plants and metallurgical units; expertise for the operation of plants, equipment and processes; laboratory and pilot-scale investigations to ascertain the possibilities for processing indigenous raw materials and the application of specific metallurgical processes and products; specialized training for operation of metallurgical plants and laboratories; national planning of the metallurgical industry branch; exchange of information and know-how; and co-operation among developing and developed countries for decision-making and investment in metallurgical industries.

40. In 1974, the delivery by UNIDO of technical assistance related to the development of the metallurgical industries was \$1.83 million, as compared to a figure of \$1.35 million for 1973—an increase of 35.9 per cent. The 1974 implementation figure under this component represents nearly 7.7 per cent of the total technical assistance delivery of UNIDO during the year.

41. The number of approved projects as well as of projects in the pipeline indicate clearly that the activities of UNIDO under this component will continue to expand.

42. Metal is the primary and essential material for the construction of industrial equipment, public services and hard consumers' goods. This fact is not lost to the developing countries and they are placing increasing emphasis on: the planning and industrialization of their promising ores and metallurgical raw materials; the establishment of steel and non-ferrous metals production, both for their own markets and for export; the development of their metal transforming industries; and the establishment of centres for metallurgical technology to provide a ready and independent source of metallurgical expertise that will expedite the creation, transfer and application of the metallurgical know-how suited to local conditions and resources. An increasing effort is being made by developing countries to secure know-how, equipment, raw materials, capital and markets for their metallurgical industries through joint ventures with developed countries and through programmes of co-operation with other developing countries. Accordingly, UNIDO is developing its promotional activities to encourage an exchange of information related to the metallurgical industries and to bring together potential partners who might undertake joint industrial ventures on the basis of their respective needs and capabilities.

43. Recent trends and conditions related to international exchanges of capital, raw materials and know-how point to the necessity of working towards a new international economic order, as declared by the General Assembly in its resolutions

3201 (S-VI) and 3202 (S-VI) of 1 May 1974. The establishment of such a new international economic order will have direct implications for the metallurgical industries in view of the specific characteristics of this branch of industry: it is capital intensive, it uses large volumes of raw materials and fuels, it is dependent on special site facilities and, finally, it has a considerable impact on ecology. UNIDO is therefore devoting special attention to the planning of future promotional activities in the steel, aluminium and copper industries. Relevant background and position papers were prepared in 1974 by UNIDO staff, in some cases with the help of consultants, and contacts were maintained with intergovernmental organizations and non-governmental organizations with a view to increasing international co-operation for developing the steel, aluminium and copper industries to the maximum benefit for both developing and developed countries. The studies carried out in 1974 indicate that there is scope and need for increased promotional action by UNIDO in this field and that such action will require new mechanisms and approaches.

44. In 1974, UNIDO provided technical assistance in the field of metallurgy to a number of the least developed among the developing countries. The assistance included: follow-up for the development of iron and steel and of bauxite processing industries in Mali; establishment and operation of foundry shops in Haiti, Laos, Mali, Senegal, Somalia and the Sudan; and development of iron ore resources in countries south of Sahara.

45. The five specific activities under the metallurgical industries component are: light non-ferrous metals; heavy non-ferrous metals; iron and steel; foundries; and creation and transfer of metallurgical know-how.

#### **Light non-ferrous metals (30.2.01)**

46. A number of developing countries that are endowed with large deposits of bauxite and ilmenite and with energy generation potential (hydro- or thermo-electric) have especially favourable conditions for the establishment of production facilities for alumina, aluminium and titanium oxide based materials. During 1974, UNIDO had 2 large- and 14 small-scale technical assistance projects under implementation; of the 14 small-scale projects, 10 concerned the aluminium industry and the remaining 4 related to ilmenite smelting.

47. The UNIDO project on the establishment of a prototype pilot and demonstration plant for the smelting of ilmenite concentrates at Chavara (Kerala, India) (cf. ID/B/140, paras. 174-180) has been approved and the necessary funds have been secured. The pilot plant, to be erected with bilateral assistance, will be operated by the Indian Rare Earths Ltd. and will use the electro-smelting technology developed in the Union of Soviet Socialist Republics for the production of a  $TiO_2$ -rich slag and pig iron.

48. As a follow-up to the agreement between the Governments of Iceland and the Gambia for co-operation in the metallurgical processing of ilmenite concentrates (cf. ID/B/140, para. 250), UNIDO helped to secure the services of a consulting firm to assist in the project. A team of experts representing both Governments and the contractor, as well as a British consultant, began field work in the Gambia in October 1974.

49. On the basis of recommendations contained in a feasibility study previously carried out with the assistance of UNIDO in Sri Lanka, UNIDO is providing follow-up assistance, through subcontracting, for industrial scale testing of 1,200 tons of ilmenite concentrates and 300 tons of charcoal from Sri Lanka for the production of pig iron and  $TiO_2$ -rich slag. In this connexion, a UNIDO expert was sent to Sri Lanka to advise on the possibilities of developing the production of charcoal for use in the project. UNIDO also secured the services of a consulting firm to undertake a feasibility study on the industrialization of ilmenitic sand deposits in Senegal.

50. With regard to the aluminium industry, UNIDO provided assistance to Madagascar in the preparation of a pre-feasibility study for the processing of local bauxite. The report of the first phase of the project has been submitted to the Government; the second phase of the project began in 1974 and will include laboratory testing of bauxite samples abroad. As a follow-up to previous assistance, UNIDO provided an expert to advise the Government of Mali on further action to be taken in the development of the country's bauxite resources; a plan of action has been prepared and submitted to the Government.

51. UNIDO assisted the Government of Iraq in the review of, and provision of supplementary information for, a pre-feasibility study on a proposed aluminium plant prepared by the State Organization of Industrial Design and Construction. The UNIDO report, submitted to the Government in September 1974, concluded that the establishment of an aluminium smelter in Iraq was technically and economically feasible, particularly in view of the marked energy generation potential of the country.

52. Other UNIDO projects related to the aluminium industry included assistance in the diagnosis of the aluminium industry in Brazil, assistance to the aluminium industry in Costa Rica, the provision of an industrial economist to the aluminium industry in Egypt and expert advice in the production of alumina in Iceland.

### **Heavy non-ferrous metals (30.2.02)**

53. Several developing countries have abundant ore deposits of copper, lead, zinc, tin, nickel, etc. In view of the rise in world prices for metal, these deposits are of special importance not only for the industrialization of the countries concerned but also for the world economy.

54. The activities of UNIDO in 1974 related to heavy non-ferrous metals included the completion of a pre-feasibility study on the manufacturing of semi-finished and finished copper products in Zambia. The comprehensive report, prepared by a contractor, was transmitted together with the comments and suggestions of UNIDO to the Government; the report contains a plan of action for the development of the Zambian copper industry. Follow-up assistance is now being planned.

55. A large-scale UNIDO technical assistance project has been approved for Yugoslavia; this project will cover the processing of complex non-ferrous ores, which contain nickel, antimony and other heavy non-ferrous metals. During 1974, UNIDO received requests for technical assistance in the field of heavy non-ferrous metals from the Governments of Argentina, Brazil, Nigeria and Peru.

56. UNIDO implemented a number of small-scale projects in 1974: an expert in non-ferrous metals was secured for Burma; an expert on tin smelting was sent to Rwanda; and an adviser on copper production completed his assignment on India. UNIDO provided expert assistance to Turkey to advise the ETIBANK Group on its non-ferrous metals operation, which includes the production of lead, copper, ferro-chromium and mercury.

### **Iron and steel (30.2.03)**

57. The priority attached by Governments of developing countries to the production of iron and steel is reflected in the number of requests received by UNIDO for assistance in the development of this industrial branch. During 1974, 3 large- and 22 small-scale technical assistance projects were under implementation by UNIDO; the projects covered the planning, establishment and operation of iron and steel installations.

58. It is gratifying to note that in 1974 the establishment of two new iron and steel plants was decided upon by Governments that had previously received technical assistance from UNIDO in this field. The Government of Iraq decided to establish a semi-integrated iron and steel plant, based on the direct reduction of iron ore pellets, using available gaseous reductants for the production of sponge iron. A UNIDO expert is continuing to advise the Government in this project. Likewise, a sponge iron industry, with an annual capacity of 2.5 million tons of sponge iron, is now being established in Iran; the project has benefited from previous comprehensive laboratory and pilot-scale tests on iron ores and pellets, sponsored by UNIDO under the SIS programme.

59. A comprehensive study and plan for the expansion of the iron and steel industry of Colombia was the object of UNIDO assistance in 1974, through the services of a contractor. This project should lead to an action plan, of national scope, which is to be submitted to the Government towards the end of 1975.

60. Technical assistance is being provided by UNIDO to INDUPERU in the establishment of the Nazca steel plant in Peru: a general adviser and an economic and financial adviser, both provided by UNIDO, took up their duties in the field in late 1974. In addition, assistance was also provided to the Chimbote steel plant, also in Peru, for improving its quality control practices; other experts are presently under recruitment for this project, and the services of a consulting firm will be provided to up-date and evaluate studies and reports and to assist in the selection of equipment and in the revision of the lay-out and of the transport facilities.

61. Preparatory technical assistance, in the form of a joint UNIDO/IBRD mission, is being provided in the expansion of the iron and steel industry of Thailand. Pilot plant scale investigations and tests on the Valentine iron ore deposits of Uruguay were the object of another request, prepared in 1974 with the assistance of UNIDO staff; the request has been officially submitted by the Government.

62. Among the other technical assistance projects which were under implementation or initiated by UNIDO in 1974 were: assistance in the pelletization and direct reduction tests on Rif iron ores of Morocco; expert assistance in steel melting and

rolling in the Syrian Arab Republic; advice in ferro-alloys production in Turkey and India; provision of a steel standardization expert for the South East Asia Iron and Steel Institute; expert advice on the production of steel rolls in Egypt; assistance in the planning of a steel industry in Burma; and advice on the pelletization of iron ores of Argentina.

63. The maintenance of large iron and steel plants requires special attention and UNIDO is providing assistance, through one large-scale and one SIS project, to the Helwan iron and steel plant in Egypt and to the Danube iron and steel plant in Hungary; both projects are being implemented through contractors. Detailed reports and recommendations, which should become available in 1975, should assist in the introduction of modern, computerized maintenance systems for the two plants.

64. A large-scale technical assistance project leading to the establishment of a demonstration plant for the production of sponge iron (capacity 100 tons per day) in Andhra Pradesh, India, was at an initial stage of implementation in 1974; the demonstration plant will provide an opportunity to evaluate a non-conventional reduction process based on local raw materials.

65. Two special reports were prepared by UNIDO in 1974 on ecological problems created by iron and steel industries and a study was started with a view to identifying new possibilities and modalities of co-operation among developing countries in the iron and steel industry branch. In addition, the Secretariat prepared a background paper on the role of UNIDO in the development of the iron and steel industry of developing countries.

66. It should be noted that a number of preparatory assistance missions, involving considerable work, were carried out by UNIDO staff in 1974 to assist Governments in the elaboration of technical assistance projects.

67. The number, scope and complexity of requests being received for assistance to the iron and steel sector indicate a growing concern on the part of developing countries with this basic industry, and a marked increase in UNIDO technical assistance, supporting and promotional activities in this branch of industry is to be expected. The increase in such activities is not only in line with the conclusions and recommendations of the Third Interregional Symposium on Iron and Steel Industry, organized by UNIDO in 1973, but, more significantly, ties in with the Programme of Action for the establishment of a new international economic order (General Assembly resolution 3202 (S-VI)).

### **Foundries (30.2.04)**

68. As the development of the foundry industry is the basic first step towards industrial production of capital goods, hardware and maintenance components, this industry is of general concern to the developing countries. During 1974, five large- and seven small-scale technical assistance projects related to the development of the foundry industry were under implementation by UNIDO.

69. Assistance was provided to the Government of Senegal in the establishment of a foundry development centre; equipment was ordered for delivery in late 1974 and

early 1975. Several Senegalese technicians underwent training in Europe for this project which should become operational in 1975.

70. During 1974, all the major equipment for the combined Foundry and Mechanical Workshop in the Sudan (cf. ID/B/140, paras. 187-194), including the cupola furnace, was installed and put into operation. Further expertise and training are being provided by UNIDO.

71. Equipment has been ordered for the pilot foundry to be established, in connexion with a mechanical workshop, in Somalia. The equipment component is being financed from the voluntary contributions of Yugoslavia to UNIDO. A training programme was organized at the Foundry and Mechanical Workshop in the Sudan for a number of fellows from Somalia so that they could familiarize themselves with the operation of the installations being provided.

72. In 1974, UNIDO started preparatory work towards the implementation of a project on a metal industries development centre for Malaysia. Activities for the preparation of the technical project report were initiated towards the end of 1974; the report, which should be available in 1975, is to indicate the structure, equipment and action required for establishment of the centre. This project is being backstopped jointly with the engineering industries programme component.

73. UNIDO aided the Railways' Foundry at Kabwe, Zambia, to improve operations, particularly with regard to the quality of the castings it produces. A quality control and testing laboratory is to be provided for the foundry and to this end UNIDO ordered the necessary equipment in 1974. UNIDO expertise for foundry operations was also provided to small aluminium foundries in Haiti and Mali and for planning the expansion of the Mexican foundry industry in medium and large tonnage castings.

74. In December 1974, UNIDO organized a workshop on the exchange of experience in the foundry industry among selected developing countries in Asia and the Far East. The workshop was held in Calcutta, Jamshedpur and Ranchi, India, with the participation of 25 specialists from nine Asian countries. The workshop, which was practically oriented, offered the participants an opportunity to air their mutual problems and to discuss possible schemes for co-operation and for a continuous exchange of know-how.

### **Creation and transfer of metallurgical know-how (30.2.05)**

75. The year under review witnessed a notable increase in the number of projects relating to assistance in the establishment of metallurgical technology centres and in the development of indigenous metallurgical know-how. This trend reflects the great interest of the developing countries in securing their own sources of expertise for the development of the basic industrial branch, the metallurgical industries. Seven large- and six small-scale projects were under implementation in 1974, most of which were new projects; several projects represented the second phase of previous technical assistance projects.



76. The large-scale projects in 1974 covered assistance to the following centres:  
Metallurgical Research Institute, Zenica, Yugoslavia (Phase II)  
Central Metallurgical Research and Development Institute, Cairo, Egypt (Phase II)  
Mineral and Metallurgical Research Centre, Chile (Phase II)  
Central Creep Testing Facilities for the National Metallurgical Laboratory,  
Jamshedpur, India  
Marmara Industrial and Technological Research Centre, Gebze, Turkey  
Iron and Steel Research Centre, Mexico.

77. The above projects involved a total input from the United Nations of about \$4.2 million. Other large-scale projects related to the establishment and strengthening of centres are under study or at the preparatory stage. It should be pointed out that considerable time and effort are required of both UNIDO staff and special consultants for the preparation of technical assistance projects related to the establishment and strengthening of such centres. In 1974, UNIDO provided preparatory assistance in India and to Iran relating to a welding research centre and to a centre for metallurgical technology.

78. As an example of the activities carried out by such centres, mention may be made of the work of the experts, attached to the Central Metallurgical Research and Development Institute in Egypt, who have helped to improve and accelerate steel refining of high sulphur open hearth charges through the application of the lime powder injection technique, the formulation of mineral beneficiation flow-sheets, the sintering of high chloride bearing iron ores and the rolling of steel wire for welding electrodes, to mention only a few areas. Likewise, experts at the Mineral and Metallurgical Research Centre in Chile have successfully tested and applied useful solvent extraction methods, technology for dump leaching of oxide copper ores and processes for recovery of precious metals.

79. In carrying out the specific activity of promoting the creation and transfer of metallurgical know-how, Headquarters activities are of particular usefulness. Over 100 companies and institutions in 16 developed countries are co-operating with UNIDO in the preparation and dissemination of information on know-how and technologies which they are willing to provide through direct contacts with interested parties in developing countries. The transfer of the technologies listed on techno-economic sheets (cf. ID/B/140, para. 286) may be carried out through joint ventures, licensing or other appropriate arrangements. The know-how listed in the portfolio covers processes and products in the metal transformation industry (casting, forging, rolling, extruding, welding, coating, heat treatment, etc.). As a result of the promotion and dissemination by UNIDO of the information contained in the portfolio (cf. ID/B/140, para. 284), some 300 companies in Latin America have been contacted or have received a copy of the portfolio. A large number of these firms has already made contact with the firms offering know-how. A number of *ad hoc* consultants in the Latin American countries are co-operating with UNIDO in this effort.

80. The portfolio project is envisaged as an on-going exercise. The portfolio is continuously being updated and additional firms will be encouraged to co-operate with UNIDO and increase the range and variety of know-how available. In 1975, the emphasis will be on dissemination of the portfolio in the ESCAP region and to this end, preparatory work has been initiated in 1974.

## **BUILDING MATERIALS INDUSTRIES**

### **(30.3.00)**

81. The main activities carried out by UNIDO under the programme component of the building materials industries have to do with cement and concrete products, heavy clay, ceramics, glass and allied products and the processing of wood and manufacture of wood products, especially furniture and joinery. The basic objectives of UNIDO in this field are to assist the developing countries in: the establishment and improvement of manufacturing plants; the development, adaptation and transfer of technology; the improvement of product quality and operational efficiency; and upgrading technological skills through training of nationals in formal courses or as counterparts.

82. In 1974, the UNIDO delivery of technical assistance under its building materials programme component reached \$730,000. This decrease of 14.1 per cent from the 1973 implementation figure of \$833,000 is due to the fact that during 1974, specific activity 30.3.03, industrial construction, previously carried out under this component, was constituted into a new programme component. Expenditures under the new programme component are thus shown under a different heading. If all the activities of the two components were calculated together, as they were in the 1973 Annual Report, UNIDO could show an increase of 8 per cent in the rate of implementation in 1974 as compared to that of 1973. The average size of projects, in financial terms, has increased, as foreshadowed in the 1973 report (cf. ID/B/140, para. 289), from \$19,000 to \$47,000. At the end of 1974, the reservoir of approved projects on hand was over \$1.8 million, or double the 1973 figure. The rate of approval for projects under IPF and SIS related to the building materials industries improved considerably throughout 1974, and the reservoir of forward work is now satisfactory, when viewed in the light of the professional staff resources UNIDO has in this programme component.

83. The work undertaken by UNIDO in the building materials industries is divided into three specific activities: cement and concrete products industry; heavy clay, ceramics, glass and allied products industry; and wood processing and wood products industry.

### **Cement and concrete products industry**

#### **(30.3.01)**

84. The highlight of UNIDO activities in this field in 1974 was the initiation of operations in September 1974 of a 300,000 tons-per-annum cement plant in Zaire. UNIDO had been providing advisory assistance on this project to the Government of Zaire since 1971. It is likely that further assistance will be sought by the Zaire Government, especially in the training of technical and management staff.

85. Requests from developing countries for UNIDO assistance to the cement industry in 1974 were focused on assistance in the establishment of new industries and rescue operations for some factories that had come upon hard times. The possibility of establishing new factories was examined by UNIDO experts in Bangladesh, Dahomey, Ecuador and Paraguay, and assistance was provided to existing factories in the Libyan Arab Republic, Niger, Turkey and Uganda.

86. The problem of establishing in the least developed countries small viable cement plants using the shaft kiln technique is still under examination and a techno-economic evaluation of the prospects is to be made in early 1975, when the Cement Research Institute of India starts its first modern shaft kiln operation, together with an Indian cement producer. Another shaft kiln about to start operation is situated in Nepal and UNIDO is anticipating that that enterprise will be able to provide information for evaluation at approximately the same time. In co-operation with the regional economic commissions, UNIDO has started to analyse the future development of cement consumption, at both country level and regional level, so that shortages and over-production of cement can be foreseen in time and counteracted. The statistical information for this analysis should be ready during 1975.

### **Heavy clay, ceramics, glass and allied products industry (30.3.02)**

87. A rapidly growing demand for improved and diversified building materials combined with an increasing awareness of the important potential in the abundant world-wide non-metallic raw material reserves, has had a marked influence on the activities of UNIDO in this field. The broad variety of products is well illustrated by some 30 projects carried out by UNIDO during 1974 ranging from clay bricks, sandlime bricks, ceramic tiles and insulating building materials to sheet glass, bottle glass and dinnerware and lime, gypsum, asbestos and asbestos cement pipes, as well as such specialized products as electrical insulators and ferrites for computer applications.

88. Work on the UNIDO project in Somalia (cf. ID/B/140, para. 293) continued in 1974. The expert, who had already been in the field in 1973, completed his assignment with two feasibility studies, one for an asbestos-cement roofing sheet plant and the other for a concrete block plant. He further recommended the establishment of a national building materials laboratory. A large-scale UNIDO project for the establishment of the laboratory is now being initiated, and the next step in the development of the country's natural resources will be the launching of a project designed to develop an industry based on the huge local reserves of high-quality gypsum.

89. Another UNIDO expert completed his assignment in Lesotho in 1974 where he had given assistance to the local brick industry. During his term of duty at a mechanized brick plant in Maseru, daily production rose from 7,000 to about 45,000 bricks. The expert found that the demand for quality bricks in Lesotho warranted the establishment of one or more additional brick plants, and he prepared detailed alternative proposals for such brick making facilities. He recommended, however, that a proper survey of the brick clay resources in Lesotho be conducted before the location of the plants was decided upon. Such a survey will be carried out with the assistance of UNIDO in 1975 after the completion of a testing laboratory for the evaluation of the clays.

90. Bricks are also in great demand in Burundi where UNIDO completed work in 1974 on the establishment of a demonstration centre that is presently training, with UNIDO assistance, local artisanal brickmakers in improved manufacturing techniques. One of the purposes of this centre is to demonstrate how well-fired bricks can be produced utilizing the country's extensive reserves of peat as fuel.

91. As a follow-up to earlier UNIDO assistance, a UNIDO expert was sent to Iceland in March 1974 to assist the Volcanic Materials Committee, established under the Ministry of Industry, in setting up a pilot plant for the manufacture of expanded perlite. During the expert's discussions with the Government, it became apparent that there was scope for a much more diversified programme for the development of the volcanic raw material resources; when he left, one month later, a complete two-year programme for the development of an integrated perlite industry had been prepared, envisaging the manufacture of a broad variety of products. A project, including the provision of seven UNIDO experts in various specialized fields, was quickly approved and in October 1974 the expert returned to Iceland to act as team leader of this project. Ultimately, the project is intended to lead to the establishment of a complex of industries with a product range that will include: expanded perlite, perlite gypsum boards, perlite concrete boards, perlite pipe insulation shells, filter perlite, thermoperl, sintered basalt rock tiles, basalt wool, basalt based cement, basalt glass beads and light weight aggregates based on tuffs, scoria pumice etc.

92. In regard to the work related to heavy clay, ceramics, glass and allied products, there is a trend towards combining a number of different product groups under one technical assistance project. This way, a higher degree of continuity in, and integration among, the manufactures can be achieved. In Indonesia, for example, a UNIDO expert, after having surveyed the over-all need for building materials, planned together with the Government a large-scale project amounting to about \$1.5 million; the project was designed to strengthen and accelerate the development of the building materials industry and construction industry in the country. It is expected that this project will not only contribute to a reduction in construction costs but also assist Indonesia in achieving self-sufficiency in the building materials and construction industries.

93. In Peru, a UNIDO expert completed in 1974 a study of the investment possibilities in industrial minerals. His proposal to concentrate efforts on kaolin, bentonite and diatomite was backed up by profiles on each of these minerals together with detailed recommendations concerning the work to be carried out by subsequent specialized consultants.

94. In June 1974, UNIDO held in Czechoslovakia an in-plant training workshop on the production of refractories, financed by voluntary contributions from the Czechoslovakian Government. The primary purpose of this workshop, which was the first of its kind, was to focus the attention of the developing countries on the extremely important role refractories play in the construction and maintenance of a wide range of industrial plants, notably in the iron and steel industry and the cement industry, and the consequent fact that the local manufacture of refractories may therefore have a leverage effect on the development of the over-all industrial capacity of a country.

95. The 15 participants in the workshop followed a balanced programme of lectures during which the actual problems and trends in the refractory industry were discussed. Detailed information was provided on all important aspects of the production processes and the required raw materials and equipment. Subsequent plant visits and in-plant training constituted a practical supplement to the theoretical part of the programme; emphasis was placed on exploring the numerous possibilities for exploiting the abundance of locally available raw materials in the manufacture of refractories and for making the countries self-sufficient in this field.

96. Staff and participants alike thought the workshop was a success and that it ought to be repeated regularly. It is the hope of UNIDO that the interest created in the refractories manufactured by the workshop will lead to an increasing number of requests for technical assistance in this field.

### **Wood processing and wood products industry (30.3.04)**

97. The technical assistance provided by UNIDO under this heading in 1974 was typically varied. A major IPF project in Yugoslavia, Centre for the Development of the Furniture and Joinery Industry, became operational during the year and work continued on a project in Laos designed to upgrade the wood-processing industry in that country. Towards the end of the year, approval was given for UNIDO to undertake a major feasibility study in the Sudan to investigate the technical and economic problems to be overcome in the setting up of a plywood industry in southern Sudan. The study is the first part of a major investment programme of the Sudanese Government; UNIDO will be co-operating in this programme, together with Czechoslovakia, in the provision of consulting services. The study is being financed principally by the voluntary contributions of the Government of Czechoslovakia.

98. A technical meeting on the selection of woodworking processes (as a follow-up meeting to the one held in November 1973 on the selection of woodworking machinery (cf. ID/B/140, paras. 298-299)) was scheduled to take place in Vienna in 1974, but for lack of funds had to be postponed to 1975. The meeting is to provide information on the latest techniques and changes in processing methods in the industry producing panel products, such as plywood and chipboard, as well as general wood products, furniture and joinery.

99. In 1974 UNIDO held in Lahti, Finland, the fourth in a series of seminars on the furniture industries (cf. ID/B/140, para. 300). It is now planned to hold the fifth seminar of this series in 1975.

### **CHEMICAL, PHARMACEUTICAL AND PULP AND PAPER INDUSTRIES (30.4.00)**

100. The work being carried out by UNIDO under this component concerns, as in the past, basic organic and inorganic chemicals; pharmaceutical products; cosmetics and essential oils; and pulp, papers of various qualities, paperboard and paper products.

101. In 1974 the total delivery of technical assistance projects under this heading is expected to amount to \$686,000, as compared with the 1973 figure of \$563,000, an increase of 21.8 per cent. There has been a general increase in project approvals with the result that, at year end in 1974, projects on hand amounted to \$1.4 million. Thus, the position of UNIDO with regard to its work in this field was generally more satisfactory than in 1973, with both deliveries and work in hand increasing. In 1975, UNIDO is aiming at a target of \$700,000 of technical assistance deliveries under this programme component.

102. The operations of UNIDO under this component are divided into three specific activities: basic chemical industry; pharmaceuticals, cosmetics and essential oils industry; and pulp and paper industry.

#### **Basic chemical industry (30.4.01)**

103. Chemical industries are one of the more important areas of industrial development in developing countries. Top priority has been given by most countries to the development of the chemical branch with a view to utilizing indigenous resources, supplying the local needs for domestic and industrial uses, and exploiting export markets. The chemical industries are characterized by their interrelationships not only among themselves but also with other industries, and a proper co-ordination and thorough planning of chemical industries are therefore essential to their development, especially in those countries that have reached the stage at which large-scale and technical sophisticated chemical industries are to be developed. During recent years, a number of projects has been carried out by UNIDO to assist the developing countries in the general development of their chemical industries, notably in Indonesia, Jamaica, Morocco, Senegal, Sri Lanka, Thailand and Turkey.

104. It is interesting to note that earlier processes, which were displaced in the industrialized countries by other technologies based on petroleum, are now being reviewed in the light of recent increases in oil prices. By way of example, charcoal is re-emerging as a source of fuel that, under certain circumstances, can be most useful for metal smelting; at the same time, it provides a valuable by-product source of chemicals. Charcoal has been used for years for iron smelting in Brazil on a large scale and in India on a small scale. A large-scale UNIDO project in Ghana is expected to combine the clearance of mixed tropical hardwood scrub, using the waste for one or more relatively large industrial plants for charcoal and its by-products; the charcoal, in turn, is to be used as a source of fuel for cement and calcium carbide manufacture, and for iron smelting as well as for domestic fuel. The chemical by-products (such as creosote for wood preservation, phenol acetic acid for the rubber industry, and methanol) have a secured local demand and export potential.

#### **Pharmaceutical, cosmetics and essential oils industry (30.4.02)**

105. The programme of UNIDO in pharmaceuticals is designed to assist the developing countries in the establishment of production units from imported bulk materials and in the production of drugs and extracts from local raw materials. Assistance of this kind was provided by UNIDO to Ecuador, Ghana, Iraq, Rwanda and Zambia.

106. The need for training in pharmaceutical manufacturing techniques and high quality control standards led UNIDO, with the generous assistance of the Belgian Government through its voluntary contributions to UNIDO, and the University of Ghent to hold a four-week residential course in August/September 1974 in Ghent. The response was enthusiastic, over 50 nominations being received in eight weeks. More than 30 participants from 22 countries attended the course, and the Belgian authorities have indicated their willingness to host a similar training course for participants from French-speaking developing countries in 1975.

### **Pulp and paper industry (30.4.03)**

107. For some time there has been a world shortage in the supply of pulp and paper. In developed countries this has led, *inter alia*, to newspapers being printed in smaller copies, while in developing countries there has often been no deliveries of paper at all. This world-wide shortage is likely to continue for some time, mainly for two reasons: at least two to three years are needed to build a new pulp or paper mill (in a developing country, a more realistic figure would be four to five years); and very careful consideration is being given by potential investors to new mills in developed countries, which, in the light of past experience, do not appear financially so attractive. None the less, the present situation would seem to provide a good opportunity for developing countries to build up their own pulp and paper industries.

108. The shortage in pulp and paper supply is reflected in the prices, which have been steadily increasing. The cost of pulp needed for paper production, as well as for rayon manufacture and other cellulose-based artificial fibres, has risen during the last year by 75 per cent. Paper and fibre prices have increased correspondingly. Many developing countries have been the special victims of enormously high prices caused by the fact that they have often not been covered by long-term delivery contracts and have been forced to buy spot lots available on the world market when needed.

109. The shortage of pulp and paper and the high prices have intensified the interest of the developing countries in the establishment of their own industries for the production of pulp and paper. This increasing interest is reflected in the growing number of requests received by UNIDO for technical assistance in the field of pulp and paper production.

110. Many of the fibre raw materials available in the developing countries for the production of pulp and paper differ from those used in developed countries, for which the existing technologies and equipment have been developed. As a result, new processes and equipment have to be developed or existing ones have to be adapted to the fibres available in developing countries. For this reason, developing countries are expressing interest in the creation of pulp and paper research institutes. The interest of research and development is particularly concentrated on the use of mixed tropical hardwoods and bagasse for pulp and paper. One example is the \$15 million pilot plant project in Cuba for the development of technologies for the production of newsprint and viscose pulp from sugar cane bagasse (cf. ID/B/140, paras. 159-163). The project is well under way, though suffering to some extent from higher prices and longer delivery periods for equipment than originally anticipated, owing to the boom in the world's pulp and paper industry, including the supply of related equipment.

111. UNIDO has shown interest in the development of new technologies for mixed tropical hardwoods by sponsoring an international symposium in 1974 and by presenting a paper on the subject. Discussions are taking place with a view to providing technical assistance in the development of a process for the production of pulp, fertilizer and essential oils in one sequence. In this project, as in many others, UNIDO is experiencing difficulties in raising the necessary funds.

112. The interest of the developing countries in the erection of new pulp and paper enterprises has heretofore been limited to efforts to meet their own needs of pulp

and paper. In the face of the world shortage of these products, more and more projects now are aimed at deliveries to the world market, primarily of pulp. UNIDO is active in giving assistance in the implementation of such projects. However, large amounts of money are needed for such enterprises (in the range of \$100 million and more) and UNIDO is therefore advocating the creation of a development board for the pulp and paper industry in each developing country, with representatives from the Government, the industry and research institutes to co-ordinate administration, purchasing, marketing, research and development. UNIDO is prepared to contribute with technical expertise and advice to the development boards and in the training of local experts.

### **FERTILIZER, PESTICIDE AND PETROCHEMICAL INDUSTRIES (30.5.00)**

113. The world shortage of food and the ensuing famine that has stricken a number of developing countries are stark reminders of the urgent need for the development of the fertilizer, pesticide and petrochemical industries which constitute the backbone of industrial input into the agricultural sector. During 1974, the world demand for nitrogen and phosphate fertilizers greatly exceeded the supply. The inadequate supply of fertilizers on the world market, together with the fast-rising prices of fertilizer owing to the recent increases in the cost of petroleum and petroleum-based products, has already brought to a standstill the progress that had been achieved by several developing countries during the course of the Green Revolution. If the situation is not alleviated, the results of this bottle-neck in the supply of fertilizers can be catastrophic for large sectors of the world population, a fact that was emphasized time and again at the World Food Conference held in Rome from 5 to 16 November 1974.

114. The World Food Conference adopted a special eight-point resolution on fertilizers in which it requested international organizations and bilateral aid agencies to intensify their efforts towards meeting the needs of the developing countries and to support, materially and financially, the recently established international fertilizer supply scheme. The Conference recommended that FAO, UNIDO and the World Bank organize jointly a programme through which they could assist the developing countries to improve the efficiency of their fertilizer plant operations. In another resolution, the Conference requested FAO to take urgent steps, through its Commission on Fertilizers, to follow up on the Conference resolution on fertilizers and to take appropriate initiative with respect to fertilizers, pesticides, fungicides and herbicides, working in close co-operation with UNIDO, the World Bank and other agencies. These resolutions will help to shape the future work of UNIDO in the critical field of the fertilizer, pesticide and petrochemical industries.

115. During 1974, total UNIDO technical assistance delivered under this programme amounted to \$985,000 as compared to the 1973 figure of \$812,000.

116. The work of UNIDO under this programme component is divided into three specific activities: fertilizer industry; pesticides; and petrochemicals.



### Fertilizer industry (30.5.01)

117. The approach of UNIDO towards technical assistance aimed at alleviating the world shortage in fertilizer supply, particularly in the developing countries, consists of a short-term, medium-term and long-term approach.

118. The immediate or short-term approach is designed to help developing countries to increase the utilization of their present fertilizer production capacities. During 1974, UNIDO undertook two missions of this nature, one to Turkey and the other to Algeria, to identify the problems on an *ad hoc* basis and to advise the Governments on how they could increase their fertilizer production with minimum investment costs. The mission to Algeria was carried out by the UNIDO/IBRD Co-operative Programme which has made plans to continue this type of mission in other developing countries with export-oriented fertilizer production facilities. UNIDO is also providing assistance to India in improving the maintenance services in fertilizer plants, and this will undoubtedly result in a better over-all utilization of the present capacity.

119. The medium-term approach is designed to alleviate the present world deficiency in nitrogen (estimated in 1974 at 2.5 million tons of nitrogen, or nearly 5 million tons of urea per year) by utilizing flared natural gas. In a joint UNIDO/FAO statement, which was presented to, and endorsed by, the Third Conference on Industrial Development for Arab States, held in Tripoli in April 1974, it was pointed out that the benefits to be gained from the currently wasted resource of flared gas were enormous; one ton of fertilizer nutrient produced from natural gas would be sufficient to produce five to ten tons of food grains. During 1974, UNIDO, under its technical assistance activities, prepared a study for Qatar along these lines. This scheme could also be extended to cover phosphates in countries with indigenous deposits of rock phosphate.

120. The long-term approach aims at the construction of fertilizer plants, based on a variety of indigenous feedstocks (gaseous, liquid or solid), with a view to meeting the growing demand for fertilizers. During 1974, UNIDO provided assistance to Yugoslavia by establishing the feasibility of using surplus coke oven gas for the production of nitrogenous fertilizers. Similar studies are currently being undertaken by UNIDO in Bolivia with a view to using indigenous natural gas as feedstock. UNIDO is also conducting a survey in the Syrian Arab Republic for the exploitation of indigenous phosphate deposits.

121. The training and upgrading of skills of nationals from developing countries continued during 1974 with the third in-plant group training programme for engineers in the fertilizer industry, held by UNIDO in collaboration with the Government of the Union of Soviet Socialist Republics. Twelve engineers from eight developing countries attended the course. Plans to provide additional courses and expand this vital activity to serve the needs of developing countries are being incorporated in UNIDO's biennial programme for 1976-1977.

122. With the support of the Government of Finland, UNIDO organized an expert group meeting in Helsinki from 26 to 31 August 1974 on the subject of minimizing pollution from fertilizer plants. Of the 50 participants, 10 came from developing countries. The meeting provided an excellent forum for the transfer of technology,

highlighting the environmental considerations connected with the planning of new fertilizer and captive acid plants as well as methods to reduce the pollution from existing plants. Participants from the developing countries requested UNIDO to continue its efforts in this direction by recommending internationally acceptable guidelines for threshold limits for pollutants from fertilizer plants. The preparation of internationally acceptable codes for the identification of pollutants and their control is also to be included in the programme of UNIDO. A programme to train both fertilizer plant managers as well as engineers and chemists in pollution control measures and monitoring is being planned for 1976.

123. Model projects are being drawn up for nitrogen fertilizer production facilities utilizing different feedstocks such as natural gas, naphtha, fuel oil, coal (lignite) and electric power for the generation of hydrogen that is needed for ammonia synthesis. The objective of UNIDO in these projects is to provide developing countries that possess one or the other feedstock with comparative costs for the investment and local production of fertilizers.

124. In an effort to co-ordinate the development of fertilizer industries as well as related policies on a national and regional basis, UNIDO is promoting the establishment of fertilizer development centres. Such centres would serve as the national or regional authority on the planning of existing production, planning for future production, imports, exports, fertilizer promotion and use, market development, credit policies, fertilizer legislation, design and maintenance of plants, training and documentation. An inter-country programme of this kind is being proposed for the establishment of a regional fertilizer development centre in Arab countries. This programme will be supported by the joint UNIDO/ECWA Industry Division and will play a leading role in the development of an export-oriented nitrogen industry in the Arab countries, utilizing indigenous natural resources.

125. During the past year, UNIDO co-operated with FAO in the preparatory work for setting up the Commission on Fertilizers. On 19 July 1974 the Council of FAO passed resolution 1/63, setting up an International Fertilizer Supply Scheme in response to ECOSOC resolution 1836 (LVI) of 14 May 1974, and UNIDO contributed to the working out of an effective *modus operandi* for this Scheme (see also chapter VIII, section on "Inter-agency co-operation and co-ordination").

126. UNIDO assistance is being extended to developing countries to expedite their plans for setting up fertilizer production facilities under bilateral agreements. An electric furnace phosphoric acid study was carried out by a consulting firm for the Mekong region where excess electrical power is expected to become available.

127. In 1974, UNIDO, in co-operation with the joint UNIDO/Romania Centre, undertook work on the elaboration of a tentative reference manual on the manufacturers of catalysts for the fertilizer and petrochemical industries. More than 300 companies producing catalysts were approached, and the information received was systematized according to the chemical processes for which the respective catalysts were manufactured. The manual is intended to provide users of catalysts in developing countries with a description of the properties and usages of the various catalysts as well as with a summary list of the major catalyst manufacturers in the world.

**Pesticides**  
**(30.5.02)**

128. One of the major thrusts of UNIDO in its work relating to pesticides has been towards the development of local pyrethrum industries, especially in view of the underproduction of pyrethrum flowers in the world. The establishment of a pilot plant in Rwanda for the extraction of pyrethrum was described in detail in the 1973 Annual Report (cf. ID/B/140, paras. 181-186, 327). The increased production of high quality pyrethrum flowers in Rwanda has enabled the pilot extraction plant, during the first phase of the project, to operate on a commercially viable basis with sales of extract earning approximately \$2 million in hard currency; half this amount is paid directly to the farmers who cultivate the flowers. Continued plant optimization and a reduction in operating costs have been achieved by UNIDO experts whose presence at the pilot plant is still necessary. As the overwhelming portion of the pyrethrum extract is used in a refined form and as refined pyrethrum extracts sell at a higher price and provide higher returns, UNIDO undertook in 1974 marketing and technical pre-investment studies on setting up a pilot extract refinery as an annex to the Rwanda plant. The conclusions of these studies were affirmative and it is thus to be hoped that the execution of the project will start soon with a large UNDP input.

129. Several other countries, including Bolivia and Nepal, have requested the assistance of UNIDO in establishing their own pyrethrum industry. Since there is a shortage in pyrethrum extracts, UNIDO has dealt with these requests on a priority basis and has helped requesting countries to formulate development plans by fielding short preparatory missions.

130. Since the success of the Rwanda pyrethrum projects has stimulated a widespread interest in other developing countries that have the potential for successful pyrethrum cultivation and for a pyrethrum based industry, UNIDO is planning to organize a workshop on the development of local pyrethrum industries in 1975 if funds are available. Interested participants will have an opportunity of learning about the basic requirements of setting up their own flower production and extraction industries as well as about the commercial aspects of the industry.

131. Another major field of UNIDO activity in the realm of pesticide industries is the establishment of pesticide formulation plants in developing countries. More and more developing countries are beginning to realize the economic advantages offered by this approach; besides the substantial savings in foreign currency, such plants provide an outlet for utilizing local raw materials, generate associated industries and reduce transport costs. During 1974, UNIDO carried out feasibility and pre-investment studies in six developing countries on setting up local demonstration or commercial pesticide formulation plants; eventually UNIDO will be giving assistance in the realization of such units. There are instances, in Upper Volta for example, in which the construction of a plant may be funded by bilateral aid, based on the recommendations of preparatory work carried out by UNIDO.

132. An increasing number of developing countries is reaching the stage in their industrial development where serious consideration can be given to the establishment of production plants for technical pesticides. In two developing countries UNIDO has been providing technical assistance in this area, and there are good indications of the need for such assistance in several other developing countries. The relatively limited

size of local markets is normally one of the important constraints to the establishment of such plants. In order to ease the restriction imposed by market size, UNIDO, in collaboration with the joint UNIDO/Romania Centre, undertook the development of multi-purpose production units suitable for the production of a number of pesticides of the same generic group. A study on a multi-purpose organophosphorus insecticide production plant was carried out in 1974, and further similar studies are planned on other groups of pesticides once the interest of developing countries in such schemes has been ascertained.

133. In 1974, UNIDO published the second volume of *Industrial Production and Formulation of Pesticides in Developing Countries*. The first volume, which was published in 1972, dealt with the general principles and formulation of pesticides; the main topics of the second volume relate to the chemistry and production of technical materials. These publications not only serve as a source of information but are useful as manuals in the training courses held periodically by UNIDO in this field.

### Petrochemicals (30.5.03)

134. As one of its major activities in the petrochemical field, UNIDO continued to provide assistance in the establishment and strengthening of plastics technology centres (cf. ID/B/140, para. 340). In 1974, the implementation of two such projects was begun (Bangladesh and Burma) and Pakistan was added to the list of countries in which such centres are being planned by UNIDO.

135. The preparatory work started by UNIDO in 1973 to assist the drought-stricken countries of the Sudano-Sahelian region (cf. ID/B/140, para. 319) led to the fielding of a mission, consisting of three experts from the joint UNIDO/Romania Centre and a UNIDO consultant, which visited Mali and Upper Volta and paved the way for a mobile demonstration unit for the production and use of plastics in agriculture. This assistance programme, which was received favourably at the Bamako Meeting of the Permanent Inter-States Committee on Drought Control in the Sahel, held in March 1974, is to be extended to all countries affected by the drought in the region.

136. Another area of UNIDO activities in the petrochemical field is the testing and quality control of petroleum products. In 1974, UNIDO provided assistance to the Homs Refinery in the Syrian Arab Republic in the establishment of a testing and quality control laboratory. Assistance is also being provided by UNIDO to a refinery in Burma, in the expansion of its research and quality control laboratory.

137. In-plant group training programmes continue to be a feature of the UNIDO work programme in the petrochemical field (cf. ID/B/140, paras. 331-332). The in-plant group training programme in plastics technology, financed from Austrian voluntary contributions, was repeated in 1974 for the fifth time. Nineteen nationals from developing countries attended the programme, which included visits to plants and research institutes in Austria, the Federal Republic of Germany, the Netherlands and Romania.

138. Encouraged by the success of the in-plant group training programme in plastics technology, the Government of Austria made available to UNIDO an additional sum of \$20,000 to start a training programme in synthetic fibre technology (cf.

ID/B/140, para. 922). The programme, which took place in Vienna from 7 to 30 October 1974, was attended by 12 participants from developing countries. Although the programme was confined to Austria in 1974, it is hoped that in future years it can be extended to include plant visits in other European countries.

139. Twelve engineers and technologists from Latin America took part in a concentrated course in plastics technology, organized by UNIDO in Buenos Aires, Argentina, from 21 September to 15 November 1974. The course, which was held in co-operation with the Government of Argentina, the Chamber of the Argentine Plastics Industry, the Argentine Technical Institute for the Plastics Industry (INSTIPLAST), and the Latin American Plastics Institute (ILAP), was similar to the in-plant group training programme held in Vienna, Austria.

140. The Latin American course included lectures and discussions as well as practical training at INSTIPLAST. Emphasis was placed on the technology of plastics fabrication, including the use and selection of modern processing machinery, quality control and testing, and the various applications of plastics. Visits were arranged to plants in Argentina to give the participants an opportunity of observing the latest developments in materials, processes and applications, of exchanging technical information with experts, and of studying the possibility of obtaining licences and know-how on process and equipment.

141. The production, processing and use of plastics (particularly in agriculture) in Latin America was the central theme of discussions when some 500 experts, consultants and observers met in Buenos Aires, Argentina, from 8 to 15 September 1974, at a symposium organized by UNIDO in conjunction with the Sixth International Colloquium on Plastics in Agriculture and the Argentina Plastics Exhibition (Argenplas '74). The symposium was held in co-operation with the Government of Argentina, the International Committee on Plastics in Agriculture, the Chamber of the Argentine Plastics Industry and ILAP.

142. Designed to further the efficient and rapid growth of the Latin American plastics industry, the symposium featured lectures, demonstrations and discussions among plastics specialists and industrialists from both Latin America and outside the region. The production and use of plastics for water conservation and distribution purposes were discussed, with special emphasis on the drought-stricken Sudano-Sahelian countries.

143. Among the highlights of the symposium were:

The identification of a number of UNIDO technical assistance projects, especially those involving co-operation among Latin American countries;

An offer by the Argentine Government of co-operation with other countries of the region in the production and use of plastics in agriculture;

An offer of assistance by the experts and the International Committee on Plastics in Agriculture, through UNIDO, to the Sudano-Sahelian countries for production and use of films and pipes for water conservation, storage and distribution.

144. A special session of the symposium was devoted to an examination of the requirements of plastics manufacturers and to an exchange of information on such problems as education and training, the need for technical know-how, and the relationship of plastics to national and economic environments. Possible UNIDO

assistance in setting up an experimental station on plastics in agriculture, for the benefit of Argentina and other Latin American countries, was also examined.

145. The United Nations Environment Conference, in recommendation 64, urged that steps be taken to ensure that the United Nations agencies concerned "undertake studies on the relative costs and benefits of synthetic versus natural products serving identical uses". UNIDO, in co-operation with the United Nations Environment Programme (UNEP), has therefore initiated the necessary action to implement this recommendation and has chosen the rubber industry as a pilot project. The study on the rubber industry will be concerned with the technical and industrial aspects of an ecological-economic evaluation of synthetic *versus* natural rubber; it will include an examination of the relationship between synthetic and natural rubber with a view to reviewing the environmental implications of the products themselves during their respective life cycles.

146. In April 1974, a small preparatory group met in Vienna to recommend a basic outline for the study of the rubber industry and to identify the sources for various inputs and data needed for the study as well as the contributions that other agencies and international organizations could provide for the elaboration of the study. Accordingly, consultants were requested to make detailed studies on specific aspects of the subject and these studies were examined by the expert group meeting on natural *versus* synthetic products, held in Vienna from 16 to 20 September 1974. The expert group made a number of recommendations that are to serve as a basis for action with regard to the rubber industry by Governments as well as by the international organizations concerned.

147. In 1974, a team of UNIDO experts assisted the Gambian Government in the review of a feasibility study prepared by a European company for the construction of a crude oil refinery with a throughput of 1 million tons per annum. It is hoped that as a result of this mission the Government of Gambia will be in a position not only to evaluate the type of crude oil to be imported but also to make a realistic estimate of the investment cost and the economic efficiency of the future refinery.

148. During the year under review, UNIDO also rendered technical assistance through a large-scale project to Rwanda, one of the least developed countries in the African region. The deposit of natural gas at Lake Kivu is a valuable source of methane and carbon dioxide that could be used for the development of industry in the countries bordering the lake. According to recent investigation, the estimated reserves of gas in the deep layers of the lake are equivalent to several thousand million cubic metres. In order to test the stability of the gas reserves, the purification process and the type of equipment needed for a production unit, a pilot plant was put into operation at Cap Rubone in Rwanda in 1963. During the operation of the pilot plant, which represented practically the only source of fuel for the whole country, purified gas was supplied to a nearby brewery. In the last few years, owing to corrosion and deterioration of the equipment and poor maintenance, the operation of the pilot plant was stopped; subsequently, the Rwandese Government requested UNIDO to provide assistance in the supply of equipment and expert services for the reconditioning of the plant. In 1974, two UNIDO consultants carried out preparatory work that should enable UNIDO to conclude a contract with a specialized company; the pilot plant is expected to operate under full capacity by 1975.

149. UNIDO continued in 1974 its operational and supporting activities in the field of single cell protein (SCP) manufactured from hydrocarbons (cf. ID/B/140, para. 339). In November 1973 UNIDO participated in, and contributed to, the International Symposium on Single Cell Protein held in Rome. In 1974, UNIDO published the report of the 1973 expert group meeting on the manufacture of proteins from hydrocarbons. Following the recommendations of this expert group, the Protein Advisory Group of the United Nations System (PAG) prepared guidelines on nutritional and safety aspects of novel protein sources for animal feeding.

150. UNIDO also continued to provide assistance to the Libyan Arab Republic in studying the possibilities for local SCP manufacture and use. In late 1973 and early 1974, a team of UNIDO experts visited the Libyan Arab Republic and prepared a study on the local utilization of SCP through integrated agro-industrial complexes. In August and September 1974, an expert contracted by UNIDO from the Institut français du pétrole prepared a feasibility study on the manufacture and use of SCP in the country. This study, which completed the first stage of UNIDO assistance in the project, will be used by the Libyan Government when it takes a decision on the inclusion of the SCP project in its development programme.

151. During 1974, UNIDO carried on to supply information and answer specific inquiries from developing countries with regard to the manufacture and use of SCP. Owing to the increases in the price of petroleum and petrochemical products, uncertainties began to arise in 1974 as to the competitiveness of SCP with the traditional sources of protein. Many companies have been working on the improvement of SCP production processes and experimenting with the use of new raw materials such as methanol and ethanol. In 1975, when the first large-scale SCP plant is scheduled to go into operation (in Italy), it is expected that some developing countries will take concrete steps towards setting up their own development programmes in this field.

152. In 1974, UNIDO continued its assistance to the Indian Petrochemical Corporation Ltd. (IPCL) (cf. ID/B/140, paras. 342-345). The UNIDO training expert completed his two-year assignment, but at the request of the Government, his mission was extended for another year. Another UNIDO expert arrived in the field in September 1974 to assist the management of IPCL in inspection and maintenance of the aromatics complex. In 1974, UNDP approved a follow-up project, which includes provisions for international experts and fellowships for the IPCL staff. This follow-up project, which is to become operational in late 1975, is aimed at providing assistance to the IPCL in connexion with the start-up and operation of a large olefins complex.

153. UNIDO also undertook preparatory work for another large-scale project in India, technical training for the Indian Oil Corporation (IOC). The project has been approved by UNDP, and operations are to commence in 1975. The aim of the project is to strengthen the public sector of the petroleum refining industry through provision of modern expertise and technical training of the IOC staff.

154. Under this programme component, UNIDO backstopped the technological part of the investment promotion meeting and technological consultations on chemical industries in developing countries, held in Bucharest from 2 to 6 December 1974 (cf. chapter V, section on "Industrial financing and investment promotion"). An issue paper was prepared for the meeting, and projects in the fertilizers, pesticides and petrochemical industries branches, which were discussed during the meeting, were evaluated.

155. Under this programme component assistance was also extended to the in-plant group training programme in petrochemicals held by the joint UNIDO/Romania Centre in 1974 (cf. chapter VIII, section on "Co-operative programmes with contributing countries"). It is hoped that the findings and experience gained during the 1974 programme will help to further improve future in-plant group training programmes in this particular branch of industry.

## **LIGHT INDUSTRIES** **(30.6.00)**

156. The UNIDO programme of activities related to the light industries, as described in paragraph 348 of the 1973 Annual Report (ID/B/140), has undergone little change, as far as the substance of the programme is concerned. The major difference relates to the quantity of technical assistance delivery. In 1974, UNIDO, under the programme component of light industries, delivered \$3.25 million of technical assistance, a figure that represents 13.5 per cent of the total technical assistance delivery of the Organization during that year. In 1973 UNIDO technical assistance delivery under this programme component broke, for the first time, the \$2 million mark (\$2,118,000). The 1974 delivery figure represents an increase of 53.7 per cent over 1973. All indications would seem to point to a continuing rapid increase of technical assistance delivery to the light industries of the developing countries.

157. The work undertaken by UNIDO in the light industries is divided into four specific activities: textile industry; food industry; leather and leather products industry; and printing and graphics industry.

### **Textile industry** **(30.6.01)**

158. On value basis, 80 per cent of all technical assistance projects in the textile industry branch are large-scale projects, with an average UNDP input of \$700,000 and with a duration of three to four years. Consequently, the character of UNIDO's activities in this branch of industry and the type of technical assistance projects change only relatively slowly. The volume of technical assistance is, however, rapidly increasing, reflecting the importance of this branch of industry to the developing countries. The number of approved large-scale projects has increased from five in 1973 to nine in 1974 (Egypt (2), India, Indonesia, Mongolia, Pakistan, Syrian Arab Republic, Thailand and Turkey); these nine projects represent about \$6 million of investments. Another five projects, worth \$3.5 million, are included in the country programmes and the project documents are at an advanced stage of preparation.

159. While each of these large-scale projects is, naturally, tailor-made to meet the particular requirements of the country concerned, they have common features that have been dictated by the needs of the textile industry: they all, with one exception, include elements of technical services to the industry, quality control, testing, dissemination of information in the form of seminars and training courses, and applied research designed to adapt existing products and processes to local conditions. The emphasis varies depending on the industry's needs and priorities.



Thus, for example, the large-scale project in Indonesia is primarily concerned with technical services to the industry with a view to increasing productivity, correcting imbalances of production, advising on long-term planning, etc. Another project in India is almost exclusively concerned with applied cotton research of a very advanced nature. The projects in Thailand and Turkey, where emphasis is laid on quality control and training, are examples of projects between the above extremes.

160. An exception to the rule is the cashmere and camel hair project in Mongolia, where an experimental plant is being built for the processing of a rare and expensive fibre raw material, thus increasing the value of an important export commodity of the country. All of the projects include an element of training in the form of counterpart training, seminars and training courses organized by experts in the field, through fellowship programmes and special training courses held jointly with research institutes and dyestuff producers.

161. The projects are frequently reviewed and appraised to ensure optimum utilization of UNDP funds and to draw lessons for new projects. For the same reasons, and to avoid duplication of effort, UNIDO continues to maintain close liaison with other international organizations, notably the International Institute for Cotton (IIC) and the International Wool Secretariat (IWS). Co-operation with these two organizations is particularly important as they are both active in developing countries. The IIC, being the only international organization sponsoring cotton research, is consulted whenever relevant projects are being developed or implemented. It is hoped that the series of cotton research projects now either being formulated or implemented (Brazil, Egypt, India, Mexico, Pakistan and the Syrian Arab Republic) will eventually develop, in co-operation with the IIC, into a global programme along the lines originally envisaged. Among the four case studies on environment questions which form part of integrated programme of joint UNIDO/UNEP environmental studies, one was concerned with the textile industry. A team of three specialists, in co-operation with local counterparts, examined environmental problems in the textile industry in Thailand.

162. Among the means employed by UNIDO to keep abreast of the latest developments in the textile industry and to assess the applicability of these developments to the developing countries are small expert group meetings, each focusing on a specific topic. In 1975, one such meeting will be organized by UNIDO, in co-operation with the IIC, on recent developments in the wet processing of textiles including, naturally, easy-care finishes on cotton. Participants from both industrialized and developing countries will attend.

163. An examination of textile industry statistics for global trends in this branch of industry bears out the relevance of UNIDO's textile programme to the actual situation and requirements of the industry. Recent trade statistics<sup>2</sup> show that, contrary to the general belief, the developing countries are, in fact, on value basis, net importers of textiles; if the imports of textile machinery, dyes and chemicals and synthetic fibres from industrialized countries to developing countries are taken into account, this negative trade balance becomes even greater. Since the share of the industrialized countries of installed processing capacity is, at the same time, sharply decreasing in favour of the developing countries, one may conclude that among the reasons for this negative trade balance are low productivity of equipment and labour

<sup>2</sup>UNCTAD document TD/B/C.2/136.

and unsatisfactory quality of the products. Additional factors contributing to the negative trade balance in the textile industry are that a major portion of textile exports from developing to industrialized countries consist of bulk goods, such as yarn and grey cloth with a relatively low unit value, and that the export of garments from developing countries have a high import content in the form of imported synthetic fibre raw materials and chemicals which reduce the net gain in foreign exchange. The most profitable end of the trade—finishing, production of exclusive fabrics, fashion goods, etc.—is thus largely outside the capabilities of developing countries.

164. Against this background, it becomes clear why UNIDO's textile projects focus on productivity, quality control and product development and adaptation. While it is recognized that the UNIDO textile programme, large as it may be in comparison with other UNIDO programmes, is only a fraction of what is needed and of what is being provided by bilateral and other sources, we are confident that it is, at least, highly relevant to the needs of the textile industry in developing countries.

### **Food industry (30.6.02)**

165. For years, UNIDO has been promoting the concept of an integrated approach towards the food processing industry, an approach that comprises the whole process—from the production of agricultural raw materials to the distribution of final products. It is the opinion of UNIDO that, from the very beginning, agro-industry should be planned in an integrated form, by combining various disciplines including agriculture, marketing and processing, and also by taking into account the socio-economic conditions prevailing in the country where the establishment of the agro-industrial complex is planned.

166. The UNIDO concept appears to be gaining ground. Following international consultations on agro-industrial development, held in Belgrade in May 1974, and attended by numerous high-level representatives of developing countries, the Yugoslav authorities and UNIDO signed an agreement on a joint programme for international co-operation in the development of agro-industries in developing countries. The objective of this agreement is to provide training and other types of technical assistance to the developing countries in the field of agro-industry. Similarly, as a follow-up on AFRIFOOD 74, the first African exhibition of food processing equipment, and the regional consultation on promotional and technical aspects of processing and packaging foods for export, held in Morocco in June 1974, the Government of Morocco is examining the possibility of establishing an institution to assist African countries in their agro-industrial development (see also chapter VII, section on "UNIDO General Trust Fund"). Various countries, such as the Dominican Republic and Guatemala, have requested UNIDO to prepare and hold meetings at the country level to discuss with local authorities the ways and means of promoting integrated agro-industrial development. At the same time, UNIDO has assisted in the elaboration of master plans for agro-industry complexes in a number of countries such as Dahomey, El Salvador, Laos and the Republic of Viet-Nam.

167. Another characteristic of the integrated approach towards agro-industrial development is that of co-operation among developing countries. This characteristic was present not only in the aforementioned projects, but was also the main

characteristic in a new line of projects that commenced with a UNIDO-organized meeting on co-operation among developing countries in the field of food processing industry, held in Brazil in March 1974. Some 20 representatives of developing countries attended the meeting where they visited local industries and institutions and formulated plans for further bilateral co-operation. Along the same lines, UNIDO is finishing its preparations for consultations to be held in March 1975 on the subject of development of selected branches of the food processing industry in selected countries of the Middle East. It is hoped that the consultations will result in the creation of an institutional basis for a co-operative programme for the development of agro-industries in this sub-region. As presently envisaged, the immediate objective of such programmes will be the creation of chains of national food consultancy services to assist the respective countries with an integrated multi-disciplinary approach to the development of agro-industries. The national services will also encourage co-operation at the regional and international levels, utilizing to the maximum possible local and regional expertise, supplemented by international experts to be supplied by UNIDO.

168. UNIDO enjoyed the co-operation of FAO in the projects implemented in Morocco and Yugoslavia (see para. 164 above), and participated in a joint UNDP/UNIDO/FAO/ILO mission to study UNDP assistance aimed at developing the public sector industries in the Sudan. UNIDO also participated in a World Bank mission for assistance in the development of agro-industry in Turkey. UNIDO and FAO also co-operated in the organization of a meeting to promote investment and industrial co-operation in selected food processing industries, held in Amsterdam in October 1974 (see chapter VIII, section on "Inter-agency co-operation and co-ordination" and chapter VII, section on "UNIDO General Trust Fund").

169. Continuing its activities on pioneer projects with the aim of promoting the development of new foods, UNIDO assisted the Libyan Government in the elaboration of a document calling for the establishment in the Libyan Arab Republic of an industrial complex to produce petro-protein. Further, UNIDO provided assistance to the Mexican Government in the industrialization and use of protein from spirulina and to the Governments of Romania and Yugoslavia in new uses of soya protein.

170. In cognizance of the problems caused by ill-suited food processing systems and equipment purchased by, and installed in developing countries, UNIDO convened in Vienna in November 1974 an expert group meeting on the selection of equipment for the sugar industry. The expert group formulated guidelines to help industrialists in developing countries to select suitable systems. This meeting was the first of a series that is to include expert groups on the vegetable oil and meat processing industries.

### **Leather and leather products industry (30.6.03)**

171. In many developing countries leather and leather products are high on the export-oriented trade list; in some countries they are even the second or third largest export revenue earner. The wish of developing countries to increase further these export earnings, as well as the growing demand for various leather products on domestic markets, is leading to an expansion of the leather and leather products manufacturing industries in many developing countries.

172. The work of UNIDO in the leather branch in developing countries has been focused on efforts to maximize the proper utilization of their valuable raw materials—hides and skins—by processing them into semi-processed and finished leathers and, where feasible, into finished leather products for domestic consumption and export.

173. The trend in the development of the leather branch in the least developed of the developing countries, as reflected in the projects to be included in the second country programming cycle, is towards integrated development projects, mainly large-scale, while in the more developed of the developing countries the trend is towards short-term missions requiring highly specialized and qualified expertise, for instance in leather finishing techniques, in shoe designing and in pattern cutting.

174. In 1974, six large-scale projects were under implementation by UNIDO in the leather branch—in India, Mongolia (two), Pakistan, Democratic Yemen, and Uruguay. The Applied Research and Experimental Centre for the Leather and Leather Products Industry in Mongolia (cf. ID/B/140, para. 368) is proceeding well and on schedule, assisted by seven UNIDO experts attached to this important project. Most of the equipment for the Centre has been supplied, and several national counterparts have received valuable training abroad. Activities on the scrap leather project in Mongolia were started with one specialized consultant and with the assistance of consulting firms. After some initial difficulties the Quality Control Laboratory in Uruguay has now come into full operation, assisted by two UNIDO experts. The shoe manufacturing centre in Democratic Yemen had begun training, through a limited production programme which is being helped by a project manager and one additional expert. The Leather Goods Development Centre in Madras, India, was officially opened in September 1974 and training activities have started at the Centre.

175. Previous UNIDO assistance under the SIS programme to the leather branch and the consultations held in 1973 on the development of the footwear manufacturing industry in Pakistan (as explained in ID/B/140, para. 371) prepared the grounds for the initiation of a large-scale project on leather industry development in Pakistan in 1974, involving three UNIDO experts and one FAO expert.

176. In addition to these large-scale projects, 27 small-scale projects of a duration from one to twelve months were completed by UNIDO during 1974, including sectoral and feasibility studies, and direct technical assistance to the leather, footwear and leather goods manufacturing industries in 20 developing countries.

177. The regional seminar for Asia and the Far East on the development of the footwear manufacturing and the leather goods manufacturing industries (cf. ID/B/140, para. 371) was held in Madras, India, in February 1974. The success of this seminar is evidenced, *inter alia*, by the interest generated in the Philippines to strengthen the export potential of its shoe industry through further UNIDO assistance, and in Fiji by the reactivation of the dormant large-scale project on leather industry development.

178. UNIDO continued in 1974 to participate in the UNDP/FAO project of assistance to the Central Research and Training Institute for Hides, Skins and Leather in Turkey. Co-operation with FAO is also taking place in the UNDP/UNIDO project on leather industry development in Pakistan (see para. 174 above) and in assistance to the leather branch in Upper Volta.

179. An example of constructive and useful field co-operation between ILO and UNIDO experts can be cited from Ethiopia, where the practical training of 14 Ethiopians from the UNIDO-assisted Ethiopian Tannery Share Company is carried out at the leather workshop, which forms part of the UNDP/ILO project related to the Centre for Entrepreneurship and Management. The trainees are to take over supervisory positions in this large industrial tannery when actual production starts in early 1975. Close co-operation is being maintained between UNIDO and ILO experts in the selection and practical implementation of the training programme. This will, no doubt, prove valuable to the successful operation of the new tannery.

180. As stated in ID/B/140, paragraph 391, among the six joint UNIDO/UNEP projects on environmental problems is one project dealing with environmental considerations in the leather producing industry. In August 1974, a preparatory study group meeting of specialists from developed as well as developing countries was held in Vienna to determine the methods of approach to be adopted for this study and to plan the work programme. In continuance of this meeting, specialized consultants carried out five substudies concerning technical and economic aspects of the main study, as well as three area studies in Argentina, Ethiopia, and India. The draft integrated study is expected to be finalized by April 1975.

181. As stated in ID/B/140, paragraph 931, an agreement was drawn up in 1973 between UNIDO and the Government of the Federal Republic of Germany to utilize part of its contribution under the Funds-in-Trust to supply an experimental and demonstration unit for leather finishing to Uruguay. The implementation of this project has been delayed considerably owing to differences of opinion as to which institution in Uruguay should be responsible for setting up and operating this unit. The project was therefore not implemented in 1974, as had originally been envisaged.

#### **Printing and graphics industry (30.6.04)**

182. With the improvement of educational facilities and the growth of communications in the developing countries, there is a concomitant demand for more efficient printing industries. The developing countries, although not yet making full use of the potential of UNIDO to assist them in this fundamental field, are starting to request UNIDO assistance. By way of example, mention can be made of a UNIDO expert who assisted in diversifying production of printing paper in the Ivory Coast, or a pre-feasibility study, prepared by UNIDO, on the establishment of a commercial printing plant in Lesotho. In Afghanistan, a UNIDO assessment mission surveyed and evaluated the situation in the printing industry and made recommendations concerning its expansion and the improvement of its productivity and product quality, as well as for the eventual reorganization of the entire printing branch in the country. In Democratic Yemen, a UNIDO expert undertook a study of conditions in the local printing industry and of the projected requirements in the next few years for expanded and modern printing operations; he also formulated recommendations for the development of the printing industry to meet these requirements.

183. The shortage of skilled labour in the developing countries, especially with regard to the printing industry, acts as a constraint on the production of quality goods in the proper quantities. In an attempt to ameliorate this situation, UNIDO is

assisting the developing countries in the training of personnel. Two UNIDO experts, working in the Republic of Viet-Nam, assisted the local printing industry to upgrade the quality of their products through the training of workers, technicians and engineers.

184. In order to familiarize the developing countries with the latest developments in printing methods, UNIDO, together with the Government of the German Democratic Republic, is organizing a consultation on the printing industry in developing countries, which will be devoted to the diffusion of information on technically more advanced and simplified printing systems. The consultation, which is to be held in Leipzig in March 1976, will be attended by representatives from approximately 20 developing countries.

185. As mentioned in previous annual reports, printing is an important branch of industry, and many developing countries need assistance in this field. Printing, however, will remain in the background until it is realized that this, too, is one of the industrial services offered by UNIDO.

### **GENERAL INDUSTRIAL TECHNIQUES (30.7.00)**

186. The reorientation of the activities of UNIDO under this programme component towards more substantive fields, which was noted in ID/B/140, paragraph 379, continued during 1974.

187. The amount of technical assistance, both requested and implemented, has increased at an even higher rate than was expected from indications at the end of 1973, particularly with regard to activities related to environment and packaging. The levels of activities related to the transfer of technology and industrial design have been maintained as has that of other miscellaneous across-the-board projects.

188. Despite serious delays in staff recruitment, the estimated delivery of technical assistance is expected to increase from \$331,000 in 1973 to \$613,000 in 1974, an increase of 85 per cent. This increase reflects the response of UNIDO to a demand which, as reported previously, was \$479,000 in December 1972 and \$953,000 in December 1973; it is envisaged that by December 1974, the figure will have risen to \$1,200,000.

189. A firm working base for all activities under this programme component was established in 1973 and, with the immediate staff problems alleviated, it should be possible to maintain the increased rate of implementation; given the present staffing level, however, it is unlikely that the rate of implementation can keep abreast of the incoming requests. Estimates of projects approved and likely to be approved in general industrial techniques, according to indications from country and regional programmes, point to a demand for \$4.7 million of technical assistance by the end of 1977.

190. The work undertaken by UNIDO in general industrial techniques is divided into three specific activities: environment; packaging; and industrial design.

## **Environment** **(30.7.01)**

191. During 1974, there was evidence of a growing concern on the part of the developing countries about environmental problems, particularly in those countries where industrial development has been rapidly gaining momentum. In 1973, UNIDO expressed concern (cf. ID/B/140, paras. 386-387) about the general reluctance of developing countries to consider seriously environmental problems of industrial origin. This general lack of enthusiasm is understandable if one takes into account the grave problems facing many developing countries and the limited resources available under IPF for solving those problems. Many developing countries, now realizing that prevention is better than cure, have made provision for monitoring and protecting the environment through the setting up of environmental agencies to co-ordinate efforts in this field. This rise in environmental concern has been demonstrated by a notable increase in the number of requests for technical assistance to help solve the specific pollution problems of industry. Frequently, these requests for technical assistance are aimed at solving the pollution problems of existing plants, but it is significant that an increasing number of requests seeks to identify environmental problems before the construction of a plant. It is therefore most encouraging to witness a perceptible move towards incorporating environmental considerations into the planning stage of industrial development.

192. The series of transfer of technology seminars, requested by the Government of Turkey (cf. ID/B/140, para. 383), is a good example of the growing awareness of environmental considerations. In 1974, a seminar in this series was devoted to environmental considerations in industrial development. A UNIDO staff member as well as two UNIDO consultants presented papers particularly relevant to specific branches of industry. The seminar was attended by government officials at all levels. From the experience gained in this type of seminar, consideration is being given by UNIDO to further activities of the same type, at both the national and regional level. Several projects related to specific pollution problems were either completed or under active implementation by UNIDO in 1974; the value of these projects was \$25,000.

193. A great deal remains to be done to focus the attention of developing countries on environmental problems. A considerable step towards this goal was the conclusion of an agreement between UNIDO and UNEP to formulate a joint, integrated programme for tackling the problems of industrial pollution. This programme, which is essentially long-term in nature, reflects the desire of UNIDO and UNEP to preserve and enhance the environment without halting or reducing the rate of industrial development. The programme has two main themes:

- (a) The development of training programmes aimed at heightening environmental awareness in developing countries and informing people, at all levels of Government and industry, of the factors involved in protecting the environment from damage by industrial pollution;
- (b) The development of methodologies for minimizing industrial pollution in the most economic manner through studies of certain industrial branches and their effects on the environment.

194. In keeping with the first of these themes, environmental elements were incorporated into five UNIDO in-plant group training programmes in 1974 (iron and

steel, textile industry, pulp and paper industry, petrochemicals industry, and maintenance and repair). Concern for the environment cannot be confined to any one particular level in the society of a country, but must be engendered in everyone from the highest level to the technician on the factory shopfloor. Consequently, several training programmes are planned, to begin in 1975, each designed with a particular audience in mind, with emphasis placed in each curriculum on the role which the prospective audience can play in safeguarding the environment. UNIDO and UNEP also recognize that many environmental problems are regional in character and are therefore planning to hold regional training courses in co-operation with the regional economic commissions.

195. For many years it has been common practice in both developed and developing countries to speak of environmental preservation and protection as achievable only at the expense of economic growth. Such statements are founded on a popular fallacy that environmental damage can be avoided only at high cost to the nation. This fallacy ignores the very real possibilities of protecting the environment at very little or zero cost to the polluter and with a net gain in the wealth of the nation as a whole. UNIDO, in keeping with the second theme of the UNIDO/UNEP programme, is currently exploring and developing certain of these possibilities; in 1974, for example, UNIDO conducted four case studies of major industrial branches (iron and steel, cement, basic chemicals and textiles). It is apparent from these studies that there is an extreme paucity of data, particularly in respect of the ecological and social impact of industrialization and the associated external costs and benefits. Much more research is necessary in these areas to fill the gaps in information. However, there is ample technological data available with regard to industrial pollution and the technology for its control in most branches of industry, and UNIDO is planning to use this data, together with the results of its case and sectoral studies, as a basis for developing further the concept of an integrated industrial complex with minimal pollution. The studies take into consideration the kind of key industries that would be fundamental to a fully integrated industrial complex, such as leather, chemicals, cement, iron and steel, and natural and synthetic rubber. One of the studies was devoted to examining the structure and problems of three industrial complexes in Manila, Rotterdam and Teheran.

196. The concept of an integrated industrial complex with minimal pollution is founded on the theory that industrial wastes are resources in the wrong place. Such a complex should ideally: link manufacturing plants so that waste products can be used as inputs for further industrial processing; allow for the mixing of certain effluents in such a way that they are neutralized (e.g. an acid waste plus an alkali waste); and reduce substantially the level of intermediate transportation (transport being a main source of pollution). More investigation is necessary, and UNIDO is planning to co-operate with the International Institute for Applied Systems Analysis (IIASA) in collecting and processing the relevant data with a view to providing a framework for decision making with regard to the design of such an integrated complex.

197. The first six projects, which formed part of the integrated programme of environmental studies and surveys formulated jointly by UNIDO and UNEP, were completed during 1974, and a further programme of 10 projects, some of which are developments from the present programme, are under discussion with UNEP. The value of projects completed in 1974 with combined UNEP/UNIDO funding amounted to \$226,000, of which UNIDO contributed \$60,000. The size of future



programmes that can be carried out in this field is limited to a large extent by the funds which UNIDO will be able to make available from its own sources.

198. The integrated UNIDO/UNEP programme has come a long way from its embryonic stage of just over a year ago, but there is still a long way to go before current efforts bear fruit. The next few years will be challenging as the UNIDO/UNEP programme expands and progress is made in the search for ways of preventing damage to the environment by industry.

### **Packaging (30.7.02)**

199. During 1974, the packaging programme has been consolidated upon the basis established during 1973 (cf. ID/B/140, paras. 393-405). The important role of packaging in the protection and preservation of goods and as a marketing tool is reflected by the increased number of both approved projects and projects in the pipeline of country and regional programmes. Two large-scale projects for establishing packaging centres were virtually completed in Bulgaria and Poland, to a value of \$650,000 in technical assistance. Preparatory assistance was provided by UNIDO to India, Israel, Mexico, Morocco, and the Republic of Korea; upon completion of the preparatory work, these projects should represent a value of \$2 million of technical assistance. In addition, 10 technical assistance projects, to a value of \$376,224, were either completed or were under implementation by UNIDO in 1974. The projects ranged throughout all regions and the subject of assistance varied from simple packaging, e.g. wooden crate manufacture in Uruguay, to sophisticated packaging, such as plastics in Romania and laminated aluminium foil packages in Iceland and Poland. Concurrently, small-scale technical assistance projects in specific branches of the packaging industry were carried out to a total value of \$25,150 in countries as far apart as Brazil and Iceland and Israel.

200. In addition, Burma and Indonesia are proposing the inclusion of packaging centre projects, to a value of \$1.4 million, in their IPF during the review of their country programmes, and a sum of \$1.5 million has tentatively been allocated for a strategic regional programme in the IDCAS region.

201. The year 1974 was marked by a new approach to the implementation of large-scale institutional projects in packaging and by the evolution of a strategy to ensure that the level of the packaging industry is commensurate with the level of industrialization of a given country.

202. Implementation now proceeds in three distinct phases. First, a survey of the packaging needs is carried out by a UNIDO expert. A report is drafted in the field and, if required, proposals for further action are prepared; the formulation of such proposals is facilitated by model project documents. The report and project proposals are utilized by Governments to prepare requests to UNDP. Then follows the second (preparatory) phase, in which assistance is given in establishing a development programme and priorities for equipment and expertise, and in drafting the final project document. The third and final phase is that of the project implementation.

203. The strategy for the development of a packaging industry is based upon the theory that:

Packaging is an essential discipline at all levels of industrialization of a country;

The degree of sophistication of the packaging industry must be compatible with the level of industrialization of the country;

It is desirable to have a centre of technological and economic know-how in packaging within each country.

204. Good packaging is essential at all levels of industrialization as it performs the dual function of preserving and protecting produced goods in transport and storage as well as of providing a major sales aid in both home and export markets.

205. It is estimated that 15 per cent of the food produced in the world is lost through spoilage due to inadequate packaging and storage. Improvements in techniques to redress this situation can thus make a substantial contribution towards alleviating the current food crisis without recourse to increased cultivation, use of fertilizers and pesticides. Similarly, losses due to the deterioration of manufactured products can have a serious effect on the economy of any country, particularly if the products are inadequately packed for transport to export markets.

206. These considerations led UNIDO to evolve a guideline document from which the expertise, equipment and training requirements for the establishment of a centre of packaging know-how can be chosen in relation to the industrial level of the country. As the level of industrialization increases, the centre can be developed in planned stages to a fully sophisticated establishment. This strategic planning can be applied on a regional basis, with a centre in one of the countries being designated for further extension to enable it to carry out fundamental research in materials and methodology for the whole region. This procedure is being followed in a development plan for the IDCAS region.

207. UNIDO has been receiving requests (Burma, Poland, Republic of Korea) for assistance in the establishment of pilot plants, as an adjunct to these centres, to bridge the gap between these centres and industry, particularly with regard to training in production methods.

208. The UNIDO programme of assistance in packaging is now shaped towards an integrated development rather than towards *ad hoc* projects, although these occasionally arise for specific branches of industry.

209. As a necessary adjunct to the programme of direct technical assistance, UNIDO organized several meetings related to packaging during 1974. In May 1974, UNIDO held a consultation meeting in Vienna on problems arising in packaging research studies; the meeting was attended by directors of packaging institutes and by participants who are likely to become directors of packaging institutes in countries that have included the plans for such centres in their country programmes. Among the subjects discussed during the consultations were the proper organization of a packaging institute, United Nations procedures for implementation of technical assistance, experience gained in the implementation of current projects and, in pursuance of resolution 30 (VII) of the Industrial Development Board, methods by which co-operation among developing countries could be effectively achieved in this particular field. In every instance, the participants at the consultation offered, in the

name of their respective countries, to hold a training course or seminar related to the packaging industry; a minimum of at least one course or seminar per year is envisaged. The first of these, an interregional seminar on packaging, was held in Bombay in November 1974. The seminar, which was attended by representatives from 16 developing countries, was financed by the Indian Government, an indication of the importance attached to this branch of industry by India and a fine example of co-operation among developing countries. The seminar provided the participants with the opportunity to exchange information and discuss mutual problems they were encountering in the establishment of a packaging industry.

210. In November 1974, UNIDO organized in Vienna a small meeting of packaging experts to assist and advise the Secretariat in the preparatory arrangements for a large packaging seminar planned for 1975. The draft manuscript of the guidelines for the establishment of a centre of packaging know-how, described in paragraph 205 above, was reviewed by the experts and amended accordingly. It will provide a framework for decision makers in developing countries should they be interested in the establishment of a centre of packaging know-how.

211. Co-operation with other agencies and non-governmental organizations has been fostered during 1974. A UNIDO staff member presented a paper at the first European Seminar on Quality Control in Packaging Industries, which was also attended by participants from developing countries. An audio-visual course in packaging for export has been planned in conjunction with UNCTAD with financial backing from the Finnish Government. At the invitation of the European Packaging Federation, a UNIDO staff member attended their Board Meeting and as a result of the ensuing discussion, a mechanism for co-operation was evolved. This mechanism will be used as a model for co-operation with other bodies such as the World Packaging Organization, the Asian Packaging Federation, the European Packaging Federation and other regional bodies. Through action of this type, the involvement of industry in the working of UNIDO is being increased.

### **Industrial design (30.7.03)**

212. Multidisciplinary projects in industrial design continued steadily throughout 1974, but there was less emphasis on industrial design than had been expected from previous indications. Activities in other fields, such as of non-destructive testing and specialist assistance to research and development centres, continued to increase steadily.

213. During 1974, UNIDO completed the study of industrial design requirements in Hong Kong (the project was described at length in ID/B/140, para. 406). The study showed that there was a well defined need for further training in both design and promotional methods, and steps are being taken to meet this need by UNIDO and the Hong Kong authorities.

214. UNIDO continued its co-operation with the International Council of Societies of Industrial Design (ICSID) and work has commenced on the compilation of a world directory of schools of industrial design. It is obvious that further promotional work is necessary to increase the awareness of the developing countries of the important role which industrial design plays in industrial development.

215. Typical of the industrial design activities commenced by UNIDO in 1974 was the development of the non-destructive testing centre in Argentina and the provision of specialists in a variety of disciplines to the National Institute of Industrial Technology (INTI). Work on the non-destructive testing centre is being carried out in conjunction with IAEA, which is responsible for radioactive methods; UNIDO is responsible for the remainder areas such as ultrasonics, eddy current and magnetic methods. This project will continue for a further two years, with the expertise programmed according to the delivery of equipment and the immediate requirements of industry in the country.

216. The aid to INTI is typical of the assistance given to such institutions in building up their capabilities in various sectors of research. UNIDO will be providing experts in no less than nine types of industrial research, including iron and steel, textiles and industrial design.

### **INDUSTRIAL CONSTRUCTION (30.8.00)**

217. This programme component was established on 1 July 1974 in order to provide developing countries with assistance in industrial construction in a well-structured and organized way, as industrial construction represents a major component of the process of industrial development, serving all branches of industry and using many of their end products. A fast and systematic development of industrial construction is a prerequisite for accelerated development not only of the industrial sector but also of the economy as a whole. Industrial construction has thus become an increasingly important element in the development of the public and private sectors.

218. The objectives of UNIDO under this new programme component are directed towards assisting developing countries through operational projects, studies and research in: development of the industrial construction sector and industrialization of construction processes; construction design and technology, including the establishment of adequate quality standards and quality control procedures; and implementation and construction of industrial projects, including the transfer of construction technology, upgrading of local industrial construction firms and contractors and the use of computers in these fields.

219. Although this programme component is new, several related activities had been carried out by UNIDO previously. Despite the fact that the new programme component was established only in mid-1974, the value of its projects at the end of 1974 was over \$600,000. During 1974, UNIDO delivered approximately \$240,000 of technical assistance under this new programme component. Several large-scale projects have been initiated and are now in the pipeline; they will undoubtedly increase the demand figure appreciably in 1975.

### **Development of the industrial construction sector and industrialization of construction processes (30.8.01)**

220. Under this specific activity UNIDO intends to provide assistance to developing countries in identifying the problems impeding the development of their industrial

construction sector and in devising measures to alleviate such problems. UNIDO will assist in framing strategies, formulating policies and preparing programmes for the industrial construction sector. While assistance will be provided in improving traditional construction processes it will also be provided, as necessary, to industrialize construction processes in order to achieve higher rates of output, greater efficiency and better quality in the construction processes. Such assistance includes help in selecting appropriate construction methods that range from very simple ones to factory prefabrication of components and structures for the construction of factories, non-residential buildings and housing projects. Assistance in factory prefabrication includes, for example, the preparation of feasibility studies and the establishment of prefabrication factories. Furthermore, such assistance deals with the use and assembly of prefabricated components and structures in the construction of industrial buildings. In this respect, UNIDO is placing emphasis on low-cost prefabrication methods that, while utilizing local building materials, do not impair the quality of the end product.

221. In 1974, UNIDO participated in an inter-agency mission to India to study the feasibility of establishing a prefabrication pilot plant that may eventually be assigned to the Hindustan Housing Company. The project document has already been submitted to UNDP for approval. This project will set the scene for UNIDO technical assistance in this area.

222. An expert group meeting on the development of industrial construction in developing countries was held in Vienna in November 1974. At the meeting, the experts elaborated the needs of developing countries in this area and the ways through which such needs could be satisfied. The report of the meeting was disseminated to developing countries for orientation and for direct application in technical assistance.

223. In 1974, UNIDO also undertook preparatory work for a joint consultation on the development of industrial construction in developing countries, which is scheduled to be held in Poland in September 1975.

### **Construction design and technology (30.8.02)**

224. The activities of UNIDO under this heading are focused on the provision of assistance to the developing countries in the selection of the most appropriate construction designs for industrial buildings in terms of the types and requirements of projects at hand, the local environment and the available resources, including local building materials. In view of economy and the high quality benefits, standardization of construction design is being sought. UNIDO is also attempting to provide assistance in selecting the most suitable construction technology, one that is fully adapted to limitations of a specific country. This involves the improvement of existing construction techniques and, upon occasion, the application of more effective ones. Particular attention is devoted to the development of indigenous construction techniques, improvement and maintenance of construction equipment, establishment of construction quality standards and quality control procedures and the development of construction information services.

225. In 1974, a UNIDO mission visited Turkey to identify the present and future needs of the country with regard to construction design and technology. The mission

drafted a project document for the establishment of an industrial project construction centre, a three-year project starting 1 January 1975. The centre will be attached to the General Directorate for Research, Planning and Projects of the Ministry of Industry and Technology, Ankara. This project has already been included in the country programme of Turkey.

### **Implementation and construction of industrial projects (30.8.03)**

226. The experience of developing countries indicates that the implementation and construction of industrial projects are phases in which such countries face major problems; shortcomings in this area are detrimental not only to the industrial projects being constructed but also to the industrial development as a whole. Lengthy delays and overrun of cost have time and again impeded the timely completion of projects to the extent that the implementation and construction of projects have frequently fallen far short of expectations. As projects are the life-blood of the development process, developing countries encounter the challenge of mobilizing their resources and directing them to the successful implementation and construction of industrial projects.

227. Bearing these problems in mind, UNIDO is providing assistance to developing countries in the implementation and construction of industrial projects, assistance that covers both technical and managerial aspects. Assistance related to the technical aspects deals with the phases of project implementation and construction such as project design, tendering, contracting, construction and initial operations. Assistance in managerial aspects involves planning, scheduling, organizing, monitoring and supervising of the undertaking of these phases through the application of adequate management techniques, such as those required for the supervision of construction work (including that of the contractors), and reporting on the progress achieved. UNIDO also provides assistance in the transfer of construction know-how and in upgrading the skills of local industrial construction firms and contractors. In this connexion, UNIDO is advising developing countries in the use of computers in order to make fast and reliable analyses and transmissions of information needed for decision-making in these fields.

228. The implementation and construction of industrial projects represent a good part of the activities of the industrial project construction centre, to be established in Ankara, Turkey (see para. 225 above).

229. From 4 to 15 November 1974, UNIDO held in Ankara, Turkey, a training seminar on the implementation and construction of investment and industrial projects for representatives from the public and private sectors. At the seminar, about 50 participants discussed the technical and managerial problems in this field and came up with more effective techniques to cope with the ever-increasing complexity of implementing and constructing these projects in Turkey. Measures were proposed and adopted for an effective follow-up of the issues discussed at the seminar.

230. From 4 to 7 December 1974, UNIDO organized in Cairo, jointly with the General Organization for International Exhibitions and Fairs of the Egyptian Ministry of Finance, Economy and Foreign Trade, a symposium on modern office

management and electronic data processing (applications for developing countries). The symposium was attended by executives and managers from Egypt (the host country) as well as by participants from several countries of Africa and the Middle East. In addition to serving as a vehicle for informing the participants about computers and their appropriate use, the symposium was a forum to promote co-operation among the participating developing countries in this field. The proceedings of the symposium will be distributed to developing countries as they might be useful in organizing similar seminars for other regions.

231. During 1974, UNIDO completed two studies for publication. One was entitled "A systematic approach to the initiation, implementation and construction of industrial projects in developing countries"; a case study was used to illustrate the approach, thus ensuring its direct and practical application. The second study was entitled "Management information systems for industrial project implementation and construction"; the study describes the steps to be followed in establishing and operating such systems for planning, scheduling, monitoring and control of project implementation and construction. The two studies will be disseminated to developing countries where, it is hoped, they can be directly applied and also used for the training of local personnel.

*Chapter IV*

**INDUSTRIAL SERVICES  
AND INSTITUTIONS PROGRAMME**

(31.0.00)

**INTRODUCTION**

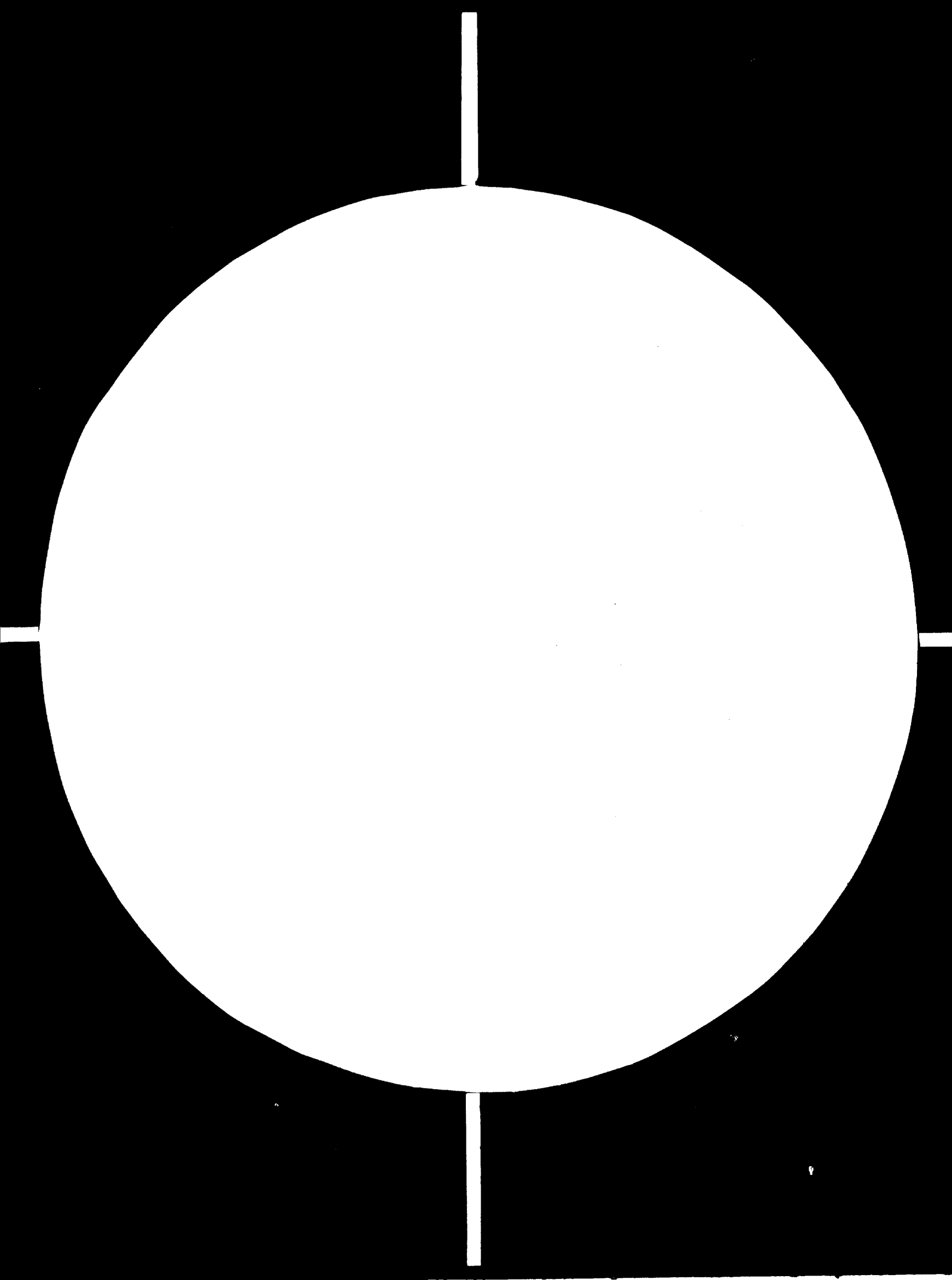
1. As an immediate result of the relatively small but continuing progress in the industrialization of developing countries and of a growing understanding that industries are one of the few means to improve essentially the economic situation, there is a growing demand for technical assistance covering areas of UNIDO activity that, while not directly linked to factory building, are essential to, and instrumental for, successful industrialization.
2. The developing countries are recognizing more and more that industrial services and institutions, the establishment of an industrial infrastructure and the development of human potential are indispensable: to arrive at the best possible and commercially suitable choice of technologies, equipment and raw materials (information, research); to improve design and quality of manufactured goods (research, standardization, quality control, metrology); to disclose market opportunities (marketing, fairs, co-operatives, information); to update and upgrade national human potential for management (training, management development and consultancy); and, for the less and least developed countries, to stimulate and support small and rural industries as an important step towards industrialization.
3. Distinct trends can be identified that influence the present and future work of this substantive programme of UNIDO. Generally speaking, there is a move to request advice and technical assistance not only for the establishment of institutions but also for the initial operational phase of running them. Such assistance requires a new type of expert prepared to provide operational assistance in addition to studies and recommendations. To find suitable counterparts for the activities carried out under the Industrial Services and Institutions programme is thus becoming more difficult.
4. There is also a growing demand for technical and commercial information services and for all kinds of training, as well as for assistance in the establishment of local facilities for both. The common target of information and training is the development of local capacities to make the best possible choice and the right decisions, based on the knowledge of available alternatives.



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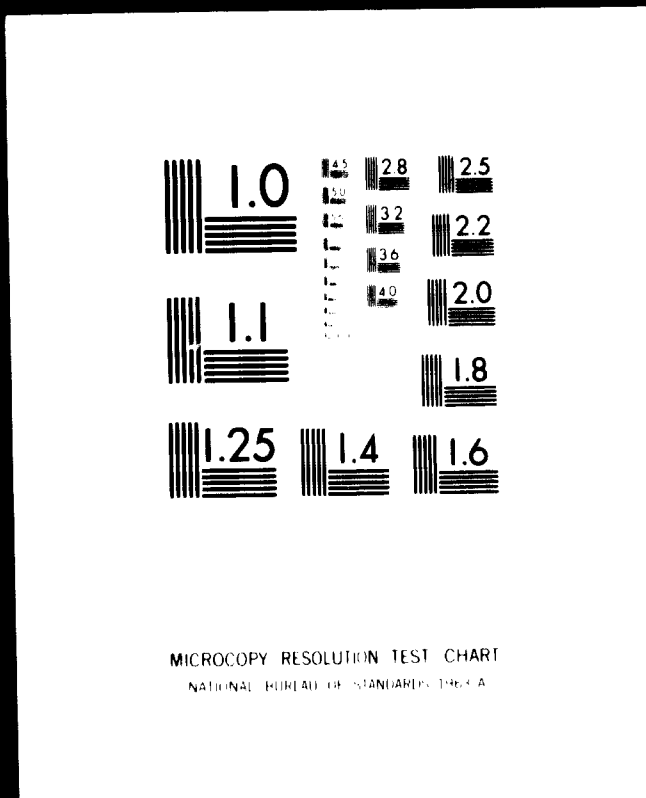


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5. As a result of past experience the importance of good factory management, of market research and marketing in general is more and more felt and recognized. Throughout the programme, the need for more functional specialization can be identified. Developing countries do not need generalized advice and recommendations but assistance that is concentrated on practical results in specific cases. This is especially important in the activities related to the promotion of small and rural industries as well as in functional assistance related to standardization, quality control, metrology, licensing practices etc.

6. These trends are not fully reflected in 1974 project deliveries. Some more time is needed to formulate requests for assistance and to develop projects appropriate for the countries involved in areas of activity that are relatively new to most of the developing countries and for which national counterparts have not yet been trained.

7. Another important element is the increasing differentiation of needs, both globally and within geographical areas. While technical assistance to promote, to establish and to assist small and rural industries is still concentrated in the less and least developed countries and while training needs are common to nearly all developing countries, the more sophisticated areas of technical assistance—research, standardization, marketing, management and information—are characteristic for those developing countries that have already reached a relatively advanced level of industrialization.

8. In 1974, total UNIDO technical assistance delivery under the Industrial Services and Institutions programme amounted to \$7,912,000 as compared to the 1973 figure of \$7,154,000—an increase of 10.6 per cent. Figure 1 shows 1974 and 1973 implementation, in terms of total expenditure, under the industrial services and institutions programme, broken down by its five programme components. The 1974 expenditures under this programme, broken down by sources of funds, are shown in figure 2. The target delivery figure of UNIDO under this programme in 1975 is \$9,100,000.

## INDUSTRIAL INSTITUTIONS

(31.1.00)

9. Under its industrial institutions programme component, UNIDO carries out the following specific activities: industrial research; standardization, quality control and metrology, industrial fairs and exhibitions; chambers of industry, industrial co-operatives and other institutions; and licensing and patents.

10. During 1974, there was a trend in the programme component of industrial institutions towards projects relating to standardization and quality control, industrial fairs, chambers of industry and licensing, but a slight decrease in projects relating to industrial research. There are clear indications, however, that industrial research will regain its momentum in 1975. In 1974 the total amount of delivery of technical assistance amounted to approximately \$2.4 million as compared to \$2.1 million in 1973, an increase of 11.5 per cent.

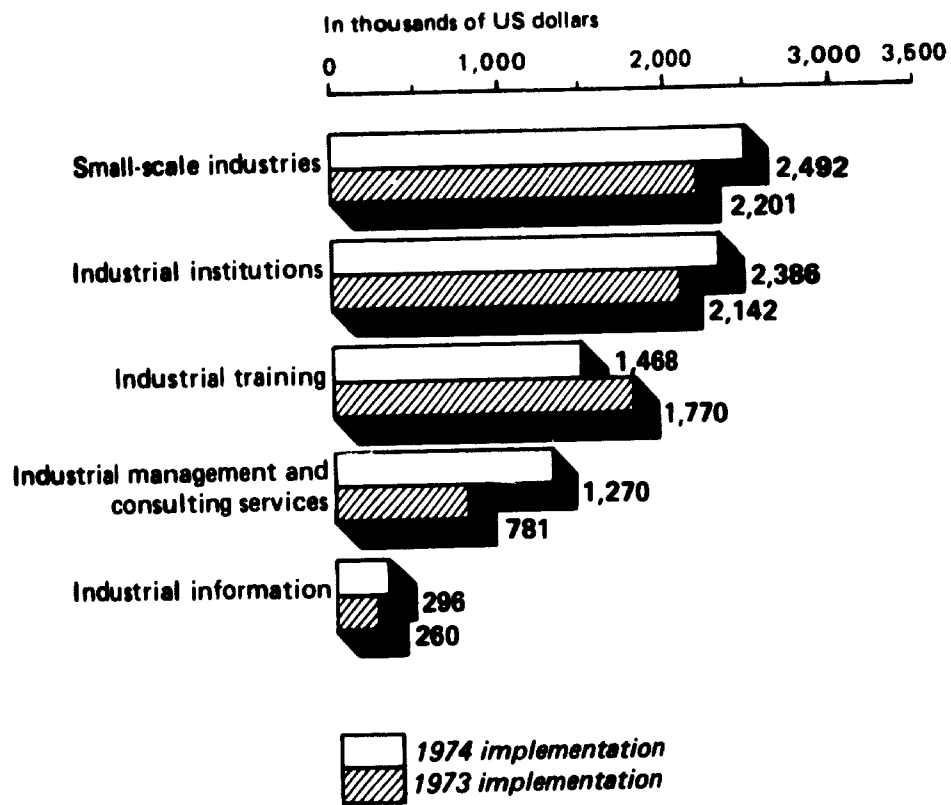


Figure 1. Expenditures in 1974 and 1973, under the industrial services and institutions programme, by programme component

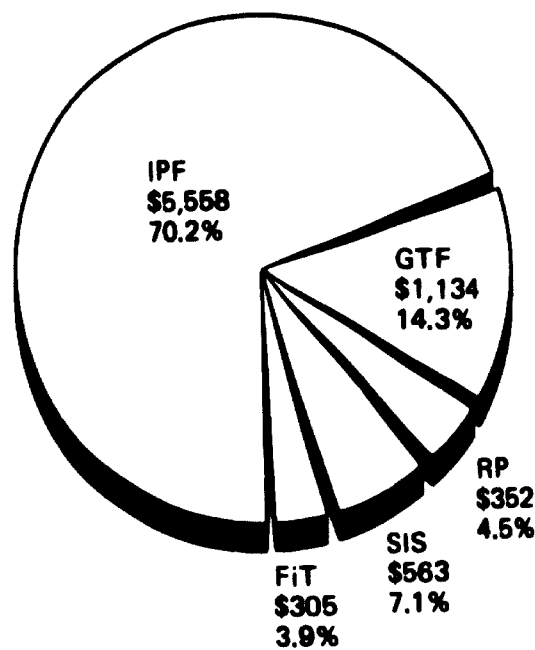


Figure 2. Actual expenditures of the industrial services and institutions programme in 1974, by sources of funds (in thousands of US dollars)

## **Industrial research (31.1.01)**

11. In the field of industrial research, UNIDO continued to provide assistance in the establishment and strengthening of industrial research institutions. Such national institutions are important sources of technological innovations and play an important role in a country's industrial development through utilization of local raw materials, development and introduction of new, appropriate technologies and through their technical services to industry. They are often the technical arm of the Government and a vital link between industry and the suppliers of technological know-how. Ultimately, these institutions should become focal points in the developing countries for technological development and innovations.

12. During 1974, UNIDO provided assistance involving experts, equipment and fellowships to establish and improve industrial research centres in Israel, the Libyan Arab Republic, Malaysia, Paraguay, Sudan, Syrian Arab Republic, Trinidad and Tobago, and Zaire. The project in Israel was essentially phased out by the end of the year and only minor assistance was provided to the Sudan project, which was also essentially phased out in 1973 (cf. ID/B/140, para. 416).

13. The project in Trinidad and Tobago, the Caribbean Industrial Research Institute (CARIRI), which has been extended by a second phase to 1978, is a good example of the technical assistance provided by UNIDO in the field of industrial research. Though established only in 1970 with the assistance of UNDP/UNIDO, CARIRI now has good management, competent local staff and excellent laboratories for testing and development work; it is already supplying consultancy services to both industry and Government. Experts in chemical, mechanical and industrial engineering, building materials, industrial economics and chemical materials testing have been provided by UNDP/UNIDO, and short-term consultants have been assisting the Institute in its work on silicate industries, plastics, food marketing and packaging, electronics and mining and quarrying. Nearly ten local staff have also benefited from training abroad in most of the above-mentioned industrial fields.

14. Although barely five years old, CARIRI has proven to be a successful institute. It co-operates closely with the Industrial Development Corporation (IDC) in Port of Spain and with various investment banks in pre-investment studies of industrial ventures. For example, CARIRI is co-operating with the Agricultural Development Bank, the Ministry of Agriculture and the University of the West Indies in the development of animal feed based on local raw materials as well as with IDC in appraising the country's lime industry. A preliminary market study carried out by CARIRI for the IDC with regard to the establishment of an integrated tool industry for the production of artisan and agricultural tools and household utensils has resulted in a major UNDP/UNIDO assisted project for the establishment, by the IDC, of a tool and die industry.

15. A special relationship and co-operation have also been developed with the University of the West Indies for the joint use of laboratories and staff. Some of the university professors serve from time to time as part-time consultants in some of CARIRI's projects. CARIRI also undertakes, at the University, the testing and analysis of some products, particularly in the ceramics field, for its clients or for internal development work.

16. CARIRI acts as the technical arm of the Ministry of Petroleum and operates a petroleum products laboratory on a contractual basis for the Ministry, earning an actual annual income in the order of \$200,000.

17. Through good management, CARIRI has been able to choose projects that are in line with national development goals and that are relevant to the needs of industry. The food product development programme of the Institute is an example: a project sponsored by the Ministry of Agriculture is concerned with the utilization of species of edible fish which are little known but which are expected to be available in large quantities when Trinidad and Tobago begins trawling operations in the near future. A laboratory-scale programme has been completed aimed at the utilization of this fish species to produce canned fish in tomato sauce, dried salted fish, fish sausages, fish burgers and fish cakes. A second phase of the programme, entailing pilot-plant production, test marketing and detailed feasibility studies, has been initiated.

18. CARIRI has been especially successful in developing and maintaining good contacts with its clients, particularly industry. Such contacts have brought about its acceptance by the Government and the business community, whose confidence CARIRI enjoys. As a result, CARIRI is now already earning over 15 per cent of its income from contract work. In view of the success it has achieved in Trinidad and Tobago, CARIRI has begun to promote greater utilization of its services by other Caribbean islands, particularly the smaller ones.

19. Another interesting project started by UNIDO in 1974 was the inter-institutional pairing scheme (cf. ID/B/140, paras. 907-908). In such a pairing exercise an advanced research institution of a developing or industrialized country is linked with a developing institute. A developing institute cannot possibly have the wealth of expertise, information and experience that an advanced institution has built up over the years. In order to utilize this enormous technological capacity of an advanced institute for developing a younger institute, a back-up arrangement or pairing scheme is set up as an effective means to strengthen the developing institution. An advanced institute can provide specific expertise, back-up laboratory work, training of technical as well as supervisory and administrative personnel and usually much needed scientific, technical and technological information services, through their extensive library and documentation facilities.

20. Such a pairing of institutions has been started between CARIRI and the Research Productivity Council (RPC) in New Brunswick, Canada. The specific purpose of this pairing exercise is to provide CARIRI with general technological experience and know-how over three years, to enable CARIRI to build up its competence in providing consultancy services to industry. The achievement of this objective is envisaged through participation, at the request of CARIRI, of RPC staff in specific CARIRI projects, carrying out laboratory development by CARIRI staff at RPC, and supply of specialized technological information and backstopping services by RPC to CARIRI for its consulting work with industry. The above activities will be concentrated on specific industrial branches to make the maximum impact.

21. For the reason of fostering co-operation between developed and developing industrial research institutions, UNIDO continued its close co-operation with the World Association of Industrial and Technological Research Organizations

(WAITRO) (cf. ID/B/140, paras. 907-909), WAITRO held its Second Biennial General Meeting in Beirut in October 1974, in which UNIDO participated and presented a short paper on "Interaction among WAITRO members". At this meeting UNIDO stressed that pairing schemes in industrial research would be of great value to the developing countries, particularly through their accelerating effect on the transfer and adaptation of technologies, a point that was endorsed by the participants.

22. Within the scope of its efforts to stimulate industrial research activities in the developing countries, UNIDO continued in 1974 with its programme of joint consultations with government authorities, representatives of local private and public business, and officials from industrial research institutes (cf. ID/B/140, para. 425). Such consultations were held, at the national level, in Ghana and Zaire.

23. In addition to the stimulation of industrial research, an important concern of various Governments is the fact that industrial research institutions are having problems in establishing good contacts and a sound working relationship with local industry. As a result, local industry experiences difficulties in obtaining the effective utilization of the services provided by such institutions. One of the difficulties has to do with the commercialization of research results, a problem that needs attention and assistance if co-operation among research institutions and industry is to be improved. A national consultation to tackle this specific problem was held in the Philippines. The same subject was also discussed during the joint consultations in Ghana and Zaire. Considerable attention will be paid by UNIDO in the future to this problem of co-operation between institutions and industry, since this is one of the corner stones to the success of an industrial research institute.

24. As a means of sharing the experience UNIDO has acquired over the years in helping developing countries to set up industrial research institutes, work was initiated in 1974 on the preparation of a publication on the effective organization and utilization of industrial research. This publication is intended to be a summary compilation of the various reports of meetings, seminars, workshops and joint consultations related to industrial research.

25. During the years that UNIDO has provided assistance to developing countries in establishing industrial research institutions, the problem has often come up of designing buildings and facilities for industrial research centres. The work involved in the design and construction of research facilities is highly specialized, and most of the experience and know-how that has been developed needs to be adapted to local conditions and requirements of the individual developing countries. To explore the problems and to define the parameters for planning and building research facilities in the developing countries, an expert group meeting was convened by UNIDO in Innsbruck, Austria, from 23 to 27 September 1974 attended by nine representatives from outstanding organizations specializing in one or more aspects of laboratory design and construction. About 15 observers from international, national and private organizations in industrialized and developing countries also participated in the meeting. It is hoped that the value of this meeting will manifest itself in the future when new and better functioning research facilities will be built more economically in the developing countries. A follow-up publication is planned to disseminate the conclusions reached by the experts to interested developing countries.



26. Assistance in the field of industrial research will remain an important activity of UNIDO. Present indications are that emphasis will shift from the establishment of new institutions to the strengthening of existing ones. In this respect, pairing of institutions (cf. paras. 19-20 above) will play an increasingly important role. Management training of the administrative and executive personnel of industrial institutions will also become an important activity. Proposals for financing training programmes for personnel of institutions in the Middle East and in Asia and the Far East have been submitted to UNDP for approval. The programme proposal submitted in 1973 for Latin America (cf. ID/B/140, para. 427) is at the final stage of UNDP approval, and implementation plans have progressed significantly, with Brazil as the host country.

### **Standardization, quality control and metrology (31.1.02)**

27. During 1974, UNIDO continued its activities, both promotional and operational, in this field with a view to assisting developing countries in the establishment and strengthening of national institutions and their activities in standardization and quality control in order to make these institutions an effective instrument for accelerating the process of industrialization and to facilitate the achievement of over-all economic development objectives. The number and the rate of implementation of projects in this field continued to increase during 1974, largely as a result of UNIDO exploratory and promotional activities and of the country programming exercise. The technical assistance projects of UNIDO in this field during 1974 covered developing countries in all geographical regions.

28. As an integral part of the industrial institutional infrastructure of a country, national standardization bodies and national metrological services create favourable conditions for building up industries as well as for solving specific problems of export promotion and import substitution, consumer protection etc. In 1974, long-term UNIDO experts continued to provide assistance in the formulation and realization of plans on establishing and operating national standardization and quality control institutions in Barbados, Ethiopia, Ivory Coast, Kuwait, Sudan and Zaire. In Mauritius, the implementation of a project aimed at establishing a national bureau of standards was continued in 1974 and a small-scale project on metrology and metrication was started.

29. UNIDO experts in quality control also assisted in 1974 the respective national organizations in Ecuador, Hong Kong and Peru in the introduction of quality control and certification marking systems for industrial products.

30. During 1974, UNIDO continued implementation of a large-scale project in Iran through assisting in the establishment of the Metrology Centre of the Institute of Standards and Industrial Research (ISIRI) (cf. ID/B/140, para. 430). In Brazil, UNIDO provided further assistance to the Instituto Nacional de Metrologia, Normalização e Qualidade Industrial (INMETRO) (cf. ID/B/140, para. 431). Moreover, UNIDO experts are in the process of preparing a proposal for a large-scale assistance project to organize in Brazil a national system of standardization and industrial quality control.

31. The successful implementation of the second phase of a UNIDO assisted project in the Thai Industrial Standards Institute resulted in a considerable growth of the standardization and quality control activities in Thailand. In Jordan, UNIDO continued its assistance in establishing a national standards body and industrial testing and quality control laboratories, which will play an important role in the diversification of exports and in the acceleration and harmonization of the industrial growth of the country. (For both projects see also ID/B/140, para. 430).

32. In 1974, UNIDO continued its assistance to regional standards organizations. Further, UNIDO has consistently promoted the idea of establishing co-operation among the developing countries in the field of standardization, quality control and metrology on a regional or subregional basis. Thus, UNIDO provided further assistance to the Arab Organization for Standardization and Metrology (ASMO) in carrying out its activities aimed at bringing the national standards of the member countries in line with the international standards issued by the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) and the International Organization of Legal Metrology (OIML) (cf. ID/B/140, para. 432).

33. A preliminary UNIDO project of technical assistance to the Comisión Panamericana de Normas Técnicas (COPANT) was approved in 1974; UNIDO has also been in close contact with the Commission of the Cartagena Agreement for rendering assistance in the field of standardization, quality control and metrology.

34. UNIDO co-operated with the Turkish Government and the Turkish National Productivity Centre in organizing a quality control symposium at Ankara from 8 to 13 April 1974. At this symposium, attended by about 200 participants from government departments, industrial enterprises in the public and private sectors, and from universities, UNIDO experts presented six papers and delivered a number of lectures. The experts also visited several plants and institutions in which they assessed quality control procedures and informed interested parties about a large range of quality control subjects. On the basis of the discussions at the symposium and of visits to industries, institutions and enterprises in Turkey, the experts made a number of recommendations for the establishment of a national quality control system.

35. A subregional study tour workshop on quality control and certification marking for industrial products was organized by UNIDO in co-operation with the Singapore Institute of Standards and Industrial Research (SISIR), from 20 to 24 May 1974 in Singapore. The participants from seven developing countries of South East Asia discussed the problems involved in the organization and implementation of national quality control and certification marking programmes, using the successful experience of SISIR as a practical model for analysis and study.

36. Towards the end of 1974, it became apparent that a dramatic upsurge in requests for technical assistance in the fields of standardization and quality control was taking place, and that this upsurge could be expected to continue for some time. This development is very encouraging, demonstrating as it does the industrial maturing of developing countries, for a sound industrial economy cannot function properly without a well organized standardization system and efficient quality control.

## **Industrial fairs and exhibitions**

(31.1.03)

37. The aim of UNIDO through this specific activity is to use international fairs and exhibitions as institutions for the promotion and acceleration of industrial development of developing countries. In 1974, UNIDO utilized several international fairs for its Fair Promotional Activities (FPA) and continued its efforts to strengthen and improve the structure, organization and operation of international fairs in developing countries.

38. A UNIDO promotional programme was organized on the occasion of the 11th International Fair of Algiers, from 30 August to 15 September 1974. Through this programme, over 150 business representatives from 11 industrialized and 14 developing countries, including representatives from the Algerian business community, got together during an Industry Day, which was organized by UNIDO on 7 September 1974. The Industry Day provided an opportunity for the participants to meet and discuss informally their industrial needs and projects, ranging from the chemical industry to textiles, mining equipment, construction, ceramics, electronics, metal working and food industry.

39. At the Bucharest International Fair, held from 13 to 22 October 1974, UNIDO conducted a similar programme during which over 100 participants from industrialized and developing countries came together and discussed commercial aspects of chemical industry projects as well as recent advances in related technology and know-how. Arrangements were made for the participants to discuss potential projects privately after the programme.

40. During the Pacific International Trade Fair-TECNOMIN 74, which took place from 3 to 12 November 1974, a programme was designed, with the co-operation of the Lima Fair authorities, to promote contractual relationships among industrialized and developing countries, in particular the Andean Group. Through this programme, Latin American business representatives in the metalworking, mining and engineering industries met at Industry Day, held on 7 November 1974, when they discussed informally their industrial projects. Assistance was given to participants from the Andean Group of countries in the selection of new machinery, equipment, accessories and tools for the branches of industry mentioned above. This promotional programme also facilitated discussions and negotiations among more than 400 manufacturers of equipment from industrialized countries and industrial representatives from Latin America on financial and commercial aspects of purchasing machinery and other equipment.

41. UNIDO assistance was also requested in organizing jointly with the Marketing and Export Office of Morocco, the first African exhibition of food processing equipment and manufactured goods, AFRIFOOD 74. The main objectives of the exhibition held in Casablanca, Morocco, from 23 to 28 June 1974, were: to encourage participating companies from developing, and industrialized countries to co-operate in, food processing industries; to acquaint industrialists of African countries with the latest market developments, equipment and technology in the food processing and packaging industries; and to promote commercial and other

contacts between business representatives from African countries and their counterparts from industrialized countries. A total of 23 countries participated in the exhibition.

42. In 1974, UNIDO continued its preparatory work for the founding of an Afro-Asian association of international fairs, in which some 50 countries of Africa and Asia have expressed their interest (cf. ID/B/140, para. 441). Moreover, the bye-laws, statutes and work programme for the planned association were prepared by UNIDO. It has been agreed with the representatives of the Afro-Asian countries that the founding congress of the association be organized in Algiers in autumn 1975.

43. During 1974, UNIDO also rendered further assistance to the Association of Fair Directors in Latin America in restructuring its organization so as to include additional fairs in Latin America (cf. ID/B/140, para. 442), with the intention of promoting co-ordination and co-operation among them.

44. Requests had been received for UNIDO assistance in the establishment and improvement of fairs in Costa Rica, Guatemala, Indonesia, Mexico and Morocco, and relevant projects were under implementation during 1974.

45. The manuscript of the UNIDO manual on fairs and exhibitions (cf. ID/B/140, para. 440) was completed in 1974; it is scheduled for publication in 1975. The manual is intended to serve as a basis and guidelines for the preparation and operation of fairs as well as a reference book for directors of fairs in developing countries.

### **Chambers of industry, industrial co-operatives and other institutions (31.1.04)**

46. Under this specific activity UNIDO aims at assisting chambers of industry, industrial co-operatives and their associations and similar other institutions to improve their structures and operations so that they can expand their scope of industrial development activities by providing effective services to industry. This objective is being accomplished through the provision of advisory services, training and assistance to Governments and to the organizations mentioned above.

47. During 1974, there was an increase in the level of technical assistance delivery of this specific activity that gives an indication of an increased awareness of the developing countries of the importance of the above-mentioned institutions.

48. An illustration of technical assistance related to chambers of industry is the work carried out by UNIDO in Iraq, where assistance was given in the organization of an industrial development department within the National Federation of Industries, and in Bahrain, where assistance was provided to the Chamber of Industry in reorganizing its structure and in improving and expanding its services to industry.

49. With regard to joint development activities and co-operation with other international organizations, UNIDO held in 1974 two further meetings with the Committee of Workers' Co-operative Productive and Artisanal Societies of the International Co-operative Alliance (ICA), and a further meeting with a delegation of the International Chamber of Commerce (ICC). The meetings of UNIDO with both

organizations focused on taking stock of the projects already undertaken as a result of co-operative efforts, and on exploring new areas of co-operation (cf. ID/B/140, paras. 443, 445).

50. Illustrations of the contribution of UNIDO in 1974 to the promotion and development of industrial co-operatives in the developing countries are: the implementation of the first in a series of in-plant training programmes in industrial co-operatives, held in Poland in co-operation with the Polish Central Union of Workers' Productive Co-operatives, for 15 participants from 9 Latin American countries (cf. ID/B/140, para. 446); and the establishment in Warsaw, Poland, of an International Centre for the Promotion of Industrial Co-operatives, a project in which UNIDO participated in formulating the objectives and functions of the Centre. Both these projects are reflections not only of the recommendations contained in resolution 21 (III) of the Industrial Development Board but also of the close co-operation between UNIDO and the ICA.

51. A regional seminar for managers of chambers of commerce and industry of Arab countries was organized in Beirut by UNIDO in co-operation with the General Union of Chambers of Commerce, Industry and Agriculture for Arab Countries and with the participation of ICC. The discussions resulted in a series of recommendations for increasing the role of chambers, associations and federations of industry in promoting, co-ordinating and assisting industrial development. The seminar also served as a stimulus for creating an awareness among Governments of the region for the need to strengthen chambers and federations of industry so they can become active partners in promoting the industrialization process in the developing countries. That the stimulus was effective is evidenced by the number of technical assistance requests received in this field.

52. In 1974, UNIDO implemented a second in a series of joint national consultations with chambers of commerce and industry at Caracas, Venezuela from 13 to 21 December 1974. The consultation took place with the Federación Venezolana de Cámaras y Asociaciones de Comercio y Producción (FEDECAMARAS), in which chamber officials, industrialists, businessmen and members of the Venezuelan Government participated. Preparatory work was begun in 1974 for similar consultations to be conducted in 1975 in Guatemala and Kuwait. The first such consultation was held in Turkey in 1973 (cf. ID/B/140, para. 444). These consultations help to identify the real needs of the countries' industries, to define the types of industrial service required and to propose practical ways and means for providing such services.

53. In 1974, UNIDO finalized two studies in the field of industrial co-operatives. One of the studies dealt with a comparative survey of problems and experiences in the Andean Group of countries and the other with surveying the possibilities of establishing industrial co-operatives producing building materials and of linking these co-operatives with low-cost housing project co-operatives.

54. Further in 1974, preparatory work was carried out for an international survey on activities of chambers and federations of industry; the survey itself is to be undertaken in 1975 in co-operation with ICC. A training workshop for government officials of chambers and federations of industry is scheduled to be held in 1975, in co-operation with the Austrian Federal Chamber of Economy, and preparations for this workshop were completed in 1974.

## **Licensing and patents (31.1.05)**

55. The increasing importance of technology transfer as a crucial element in the national economies and industrial development of developing countries has been recognized in recent years. Licensing and patent arrangements play a major role in this process of transference of technology, and such arrangements are of particular importance in relations between developed and developing countries as well as between developing countries themselves. In view of this fact, UNIDO is undertaking various activities in the field of technology transfer, licensing and patents with a view to ensuring that the developing countries can acquire technology under equitable conditions to both the licensor and licensee. UNIDO pays particular attention to the strengthening of national machineries for handling licensing agreements.

56. In this specific activity, national and international seminars, expert meetings, studies and publications are of particular importance. UNIDO therefore held from 30 May to 6 June 1974 at Manila a seminar for the Asia and Far East region on know-how about licensing arrangements and from 11 to 15 November 1974 at Mexico City an interregional consultation on exchange of experience on the transfer of technology between developing countries. The interregional consultations were devoted to the formulation and application of the Mexican law on licensing and patents and to comparable experience in other developing countries. At these meetings, the situation and problems of developing countries were analysed and their experiences discussed in detail in an effort to improve the over-all licensing situation.

57. UNIDO devoted special attention in 1974 to ways of establishing and strengthening national institutions dealing with technology transfer and licensing. Based on its experience in this area, UNIDO intends to start preparations for the organization of a transfer of technology centre for use by the developing countries.

58. The two studies carried out by UNIDO in 1973 (cf. ID/B/140, para. 449), were prepared in 1974 for publication under the title "National approaches to the acquisition and adaptation of technology in selected countries"; the first of the two parts of this publication is scheduled to be issued during 1975. Another study, on the role of compulsory licensing in development of indigenous technology, was undertaken in 1974. This study contains special reference to such licensing experiences in the Federal Republic of Germany, India, Israel, Sweden and the United Kingdom of Great Britain and Northern Ireland and should be useful in determining whether the compulsory utilization of patents without know-how support can be of substantial benefit to the developing countries.

59. During 1974, a UNIDO expert specializing in industrial property legislation and licensing carried out a successful mission to the Ministry of Commerce and Industry in Ethiopia. Another UNIDO expert worked in co-operation with the Ministry of Industry and the National Patent Office of Guatemala. A post for a regional adviser on technology transfer and licensing has been established for the ECLA countries, and another regional adviser post on licensing for ESCAP countries is under implementation. New projects have been initiated and are under various stages of implementation in Mexico (assistance to the Ministry of Commerce and Industry), Thailand (assistance to National Economic and Social Development Board) and Yugoslavia (assistance to Yugoslav Chamber of Economy).

## **INDUSTRIAL INFORMATION**

**(31.2.00)**

60. Information is a very basic need for industry regardless of the stage of planning or operation and regardless of the technological, techno-economic, managerial or commercial subject to which it may apply. Developing countries find it particularly difficult to meet this need as they have few information sources of their own to draw on, and as the structures to orient the flow from information sources in other countries for the purposes of their own industrial development are non-existent or ill-adapted.

61. Each of the various institutions that make up the infrastructure of industry deals with some aspects of information within its respective specialized field of action, and most of the institutions thus include the provision of information to industry as a supplementary service. Where the magnitude of demand for industrial information has reached a critical level, a certain type of institution can be devoted exclusively to meeting this demand and can thus become an industrial information centre serving important branches of industry.

62. Under this programme component UNIDO primarily provides clearing-house, documentation and publication services for industrial information. It also provides, as one of its four specific activities, technical assistance in the form of support to the establishment of full-fledged industrial information projects, and to information components of projects implemented in the main under other programme headings.

63. Technical assistance delivery in the field of industrial information amounted to \$296,000 in 1974 as compared to the 1973 figure of \$260,000, an increase of some 14 per cent. Emphasis on field projects under the information component is hardly appropriate, however, as the component serves developing countries in other important aspects and the above figures relate only to a very limited staff input.

64. The specific activities under this programme component are broken down into the four following headings: development of national industrial information facilities and media for industry; clearing-house services for industrial information; industrial information through publications; and industrial documentation and libraries.

### **Development of national information facilities and media for industry**

**(31.2.01)**

65. In the 1973 Annual Report, a detailed description was given of the series of annual regional seminars held in various parts of the world for officials from developing countries to discuss with them government responsibilities in the field of industrial information and UNIDO's capability for assisting them in discharging these responsibilities (cf. ID/B/140, paras. 453-458). The seminar on industrial information for participants from French-speaking countries, held in Rabat, Morocco, in 1973 resulted in an increased demand for industrial information clearing-house services from French-speaking African countries as well as in new efforts towards the training of industrial information officers from those countries.

66. In 1974, UNIDO and the International Development Research Centre (IDRC) of Canada organized jointly, in co-operation with the Governments of Singapore and Indonesia, a regional seminar from 21 to 30 October; the seminar was held for participants from countries in the ESCAP region. The IDRC has established in Singapore an industrial information centre (TECHNONET), the purpose of which is to promote and interlink industrial information centres in the area. The experience of three heads of national industrial information centres (from Canada, Denmark and Mexico) having extensive technical assistance experience was drawn upon at the seminar which took place partly in Singapore, and partly in Bandung, Indonesia.

67. After the visit of several UNIDO advisory missions to Mexico in 1972 and 1973, the actual implementation of preparatory assistance for a large-scale project on the establishment of an information system for industry in Mexico was started in 1974 (cf. ID/B/1 '0, para. 460). This is the first major industrial information project (UNDP contribution: \$500,000) to be executed by UNIDO. The general aim of the project is to create a national industrial information system as a network of specialized information centres with administrative autonomy and a central form of technological co-ordination. The national industrial information system will include: the Technical Information Service of the National Council for Science and Technology (CONACYT); the Industrial Information Service of the Ministry of Industry and Commerce; the Centre for Information on Arid Zones; the "Pecuarian" Information Centre; the Mexican Chemical Information Centre; and the Metallurgical Information Centre.

68. In the course of the preparatory assistance for this project, a UNIDO expert was sent on a 12-month assignment to assist the Ministry of Industry and Commerce to lay the foundations for its new Industrial Information Service and to formulate the detailed targets and work programme. The Ministry has already appointed some 20 counterpart personnel and has made space and secretarial facilities available to carry out the work programme of the Service under the supervision of the expert.

69. In addition, the services of a consulting firm were contracted by UNIDO to assist the Technical Information Service of CONACYT in developing its activities. The assistance provided by the consulting firm consists essentially of:

Evaluating the activities of the information centres comprising the project in order to achieve a central form of technological co-ordination;

Working out a long-range plan for the Technical Information Service of CONACYT, including strategic objectives and policies;

Training information officers.

In particular, the Technical Information Service disposes of a well functioning field liaison service that visits small enterprises to determine their information requirements, create a favourable climate for innovation, and provide technical and managerial knowledge to raise the quality and marketability of their products. The Technical Information Service also provides answers to technical inquiries from industrialists and maintains a monthly information service called "Technical News" which keeps industries informed of the latest technological developments.

70. Within the framework of a technical assistance project related to the Ministry of Industry in Thailand, UNIDO provided the services of an industrial information expert for a period of 21 months (starting February 1974) to assist, together with an



industrial economist, the Industrial Economics and Planning Division of the Ministry of Industry in organizing the Centre for Industrial Statistics, Information and Research (CISIR). The main objectives of the Centre are to collect, process and publish data on industry, conduct research, prepare studies in support of policy decisions and industrial planning, and solve problems related to the industrial development of the country.

71. The main duties of the industrial information expert are to design a system that will enable the Centre to respond to specific questions on industrial development put forward by private and public industrial enterprises as well as by government agencies, to advise on the type of data required to answer such questions and to train counterpart personnel on the job.

72. Training in the disciplines of industrial information was given to 23 holders of UNIDO fellowships and to 50 participants in training courses which included, as in previous years, the joint UNESCO/UNIDO undertaking hosted by VINITI in Moscow in 1974 (for participants from Latin America) and a new training course which was held in 1974, in Brussels, financed from a Belgian voluntary contribution, for the training of information officers coming mainly from the least developed among the French-speaking African developing countries.

73. Following the VINITI training course and the 1973 Rabat seminar, UNIDO received a request from the Government of Rwanda for assistance in the establishment of a national industrial information system. In July 1974, an industrial information expert was dispatched on a one-month preparatory mission to Kigali to assess, in particular, the industrial information requirements of the country, identify the existing local sources of information and advise on the structure and organization of the planned information services.

74. After completion of her mission, the expert submitted a report containing a number of recommendations which were incorporated in a draft project document for the implementation of the actual project. The project document, which has been submitted to the Government for its consideration, makes provisions for the services of two experts for 12 months each, fellowships of a total of 18 man-months and some reprographic equipment; the UNDP contribution for this three-year project is estimated at \$123,000. The work plan of the project document calls for the setting up of documentation services during the first year of implementation and for the establishment of services oriented towards the active dissemination of information, such as inquiry and promotional publications services, in the subsequent years.

75. The effectiveness of the UNIDO sponsored training courses in industrial information was borne out by a statement of the initiator of the project in Rwanda (described above) who wrote to UNIDO: "Efforts that led to this project derived from the knowledge acquired during my three-month study at VINITI, Moscow".

76. The above description of the work of UNIDO with regard to industrial information by no means represents the complete picture. In 1974, UNIDO had under implementation in this field 13 national and 2 regional projects, with 15 industrial information experts on individual assignments or under contract with a consulting firm.

### **Clearing-house services for industrial information (31.2.02)**

77. A review of the work of the Industrial Inquiry Service (IIS) since its inception in 1966 was conducted in 1974. It will be recalled that the IIS provides practical assistance to developing countries by answering, without charge, their inquiries on problems in industry. It is well known that much of the technical and industrial knowledge needed by developing countries is already available in the industrialized nations, and UNIDO is well placed to tap such information for the benefit of developing countries. The Service is available to officials and technical personnel of public and semi-public bodies concerned with industrial development as well as to industrial enterprises of all kinds.

78. By the end of 1974, 15,926 questions from 139 countries had been answered since the initiation of the Service in 1966; the rate of inquiries increased from 7 per month in 1966 to 400 per month in 1974. A breakdown by regions shows the following: 2,760 inquiries from Africa; 4,025 from Asia and the Far East; 4,589 from Latin America and 3,423 from Europe and the Middle East. Another 1,129 inquiries were received from international organizations and developed countries, in the latter case for development assistance purposes only. An analysis carried out at the end of 1973 of the source of inquirers revealed that the inquirers had been: government organizations (15.9 per cent); international organizations (8.0 per cent); firms, associations, corporations (27.4 per cent); consulting organizations (7.8 per cent); banks, chambers of commerce (7.0 per cent); information centres and industrial institutions (24.9 per cent); and individuals (9.8 per cent). A breakdown by subjects of inquiries gives a wide distribution across the fields of industry and subjects of concern. A qualitative analysis of answers provided for these inquiries as well as indications of appreciation from the users shows the general good quality of the services rendered. Owing to the expansion and specialization of the network of correspondents, from whom answers to inquiries are drawn and passed on according to the clearing-house principles, there has been a constant improvement in the Service. In 1974, efforts were brought to bear on expanding the network of correspondents to the developing countries themselves, in order to promote exchange of information between them.

79. As a result of consultations on the further course of the industrial information on equipment and connected technologies, action has been undertaken to develop a referral service of producers of industrial equipment as well as a system to retrieve, formalize and pass on information on technologies and equipment developed or adapted in developing countries themselves, appropriate to their own conditions. The co-operation of Japan and India in this project permitted the assignment of two additional staff members to this project in 1974.

### **Industrial information through publications (31.2.03)**

80. The dissemination of printed industrial information generated by UNIDO under this programme component in 1974 was continued with the publication of volumes 16 to 20 in the series of *Industrial Development Abstracts* (including an index to the first 5,000 documents) and volumes 8 to 13 in the popular series of *Guides to Information Sources*. Both series are now United Nations sales

publications. The series of *Guides to Information Sources* has met with success not only in developing countries but also in industrialized countries. Each of the guides is devoted to one particular branch of industry and contains lists of the following: professional trade and research organizations; learned societies and special information services; directories, general and by branch; sources of statistics and other economic data; basic handbooks, textbooks and manuals; periodicals; abstracting and indexing services; special documents; proceedings papers and reports; monographs, bibliographies and specialized dictionaries; other sources of information such as consulting and engineering services, fairs and exhibitions, meetings and conferences, patents and licences, standards and specifications; and last but not least, the activities of UNIDO in the particular branch of industry. The Guides that were published in 1974 were related to the following industries: pesticides, pulp and paper, printing, clothing, animal feed, glass, ceramics, paint and varnish, and non-alcoholic beverages.

81. The monthly *UNIDO Newsletter*, with an estimated pass-along readership of 50,000, added Arabic as the fifth of its language editions in 1974; this addition was made possible by a voluntary contribution from the Government of Egypt. Several of the columns in this publication (especially "Inter-link" and "Industrial Opportunities") have contributed to a cross-fertilization of industrial information and projects among the developing countries.

82. In 1974, UNIDO completed the first in a series of manufacturing guides. These guides are drawn from responses to the subjects handled by the Industrial Inquiry Service and are intended to serve as an interim reply to the inquirer pending receipt of more specific information from the Service's network of correspondents. Further guides will be prepared on those subject areas most frequently handled by the Service. The first manufacturing guide deals with the subject of furfural.

83. In 1974, UNIDO continued to disseminate information about existing industrial films with issuance of 12 numbers of the mimeographed "Ind-Film News Notes". By the end of 1974, UNIDO had distributed 242 films to 122 field experts and had 133 projects on the waiting list for films already in circulation; at the end of the year, 49 films were in circulation.

84. The United Nations publication, production and distribution policies continued to pose difficulties for the industrial information functions of UNIDO in general and its Industrial Information Clearing-house in particular, and attracted the attention of both the Permanent Committee at its fourth session and the Industrial Development Board at its eighth session. Increasing use was made during 1974 of the 18,000-plus computerized reader profiles in order to reach more precisely defined, targeted end-users of industrial information than had been possible through the formal distribution channels.

### **Industrial documentation and library**

(31.2.04)

85. The services and collections of the Industrial Documentation Unit were further improved and extended in 1974. A particular effort was made to update the contents of the country and subject files and to increase selective dissemination of information to the field. Under this specific activity a number of UNIDO fellowship holders were trained in industrial documentation.

86. The Library received and processed over 42,000 items, provided answers to about 3,000 queries at Headquarters, and loaned above 3,700 items to Headquarters staff. The Library also sent out over 15,000 documents in response to outside requests, and ordered about 3,200 books and periodicals for field projects.

87. The SDI Service circulated over 10,600 items to Headquarters staff and over 8,400 items to field advisers, project managers and experts.

88. Nearly 1,300 UNIDO documents were abstracted and indexed for computerized information storage and retrieval and for publication in *Industrial Development Abstracts*. The processing, which includes microficheing, was extended to copies of the documents in the various official languages.

89. During 1974 the briefing of field and Headquarters staff became a full-fledged activity of the Industrial Documentation Unit, which registered over 370 such briefings.

### **INDUSTRIAL MANAGEMENT AND CONSULTING SERVICES** (31.3.00)

90. The specific objectives of UNIDO under this programme component include both short-term activities to improve management performance and long-term development of national management resources. The objectives may be summarized as follows:

- To provide direct assistance to industrial enterprises in developing countries in establishing and improving the management of production, financial, and commercial functions;
- To provide assistance to developing countries in the further development of national management institutions such as management consulting organizations;
- To provide assistance to governmental agencies of developing countries concerned with the need to improve management of public sector enterprises;
- To provide developing countries assistance, as appropriate, related to joint development activities of other international and professional organizations.

91. The activities of UNIDO in 1974 under this programme component were in keeping with the programme budget for the biennium 1974-1975 and were based upon the increasing need for, and growing responsibilities of, industrial management in the developing world. To a large extent, the effective and efficient planning and utilization of industrial resources are dependent upon sound management skills and practices at the governmental, institutional and enterprise levels. Accordingly, the management programme component of UNIDO is addressed to two related criteria of industrial development, namely, the promotion and development of improved management performance generally and the co-ordination and integration of required management expertise in the implementation of industrial strategies and other related activities such as problems of unemployment, transfer of appropriate technology, and industrial training.

92. In 1974, UNIDO technical assistance in this field amounted to approximately \$1.3 million as compared to \$781,000 in 1973, an increase of 62.6 per cent. The total value of new projects in this field, approved in 1974, amounts to about \$3.8 million, which includes more than \$2 million for projects in Ghana and Uganda.

93. The programme component is broken down into four specific activities: management consultancy, management techniques, management at the sectoral level, and industrial administration and legislation.

### Management consultancy (31.3.01)

94. The work of UNIDO in the field of management consultancy is based not only upon the need for short-term problem-solving assistance to industrial managers in the developing world but also upon the need for long-term improvement of industrial performance through the development of national consulting resources. This activity has received continuous support at the Industrial Development Board.

95. Evidence of the mounting understanding of the importance of management consultancy services is borne out by requests within the country programmes; in general, large-scale interdisciplinary projects have increasingly included a management consultancy component, particularly as the co-ordinating activity is required for the maximization of planning and controlling of industrial resources.

96. Illustrative of the increased value of management consultancy services in the planning and implementation of large-scale technical assistance is a project in Ecuador on technical advisory services to industry; this is one of the major operational UNIDO projects in the field of industrial management consultancy in Latin America. The main objectives of the project are to establish an integrated system to provide advisory services to industry in the fields of industrial engineering, industrial management, technology, marketing, industrial information and standardization.

97. The government counterpart agency is the "Centro de Desarrollo" (CENDES), and more than eight national institutions of various types are actively participating in the project.

98. Although the project document was signed and approved by UNDP in November 1973, the work in the field started with the arrival of the project manager in Quito at the beginning of April 1973. Up to a certain point, the delay in signing the project document represented an advantage since the project manager had the opportunity to get acquainted with local conditions and with the actual needs of the industry; moreover, periodic visits are made to UNIDO Headquarters by the project manager.

99. Up to now, the main efforts of UNIDO have been devoted to organizing a group of national consultants and to establishing a *modus operandi* for a more efficient operation with client industries. The contribution of UNIDO comprises 21 experts, plus short-term consultants totalling 372 man-months. Moreover, 25 fellowships for the counterpart personnel and a substantial amount of equipment are

foreseen. It is worth noting that the work already carried out in cost accounting and financial management has produced good results; several industrial enterprises have received assistance both in the setting up of standard accounting procedures and in the training of client personnel.

100. This project is an exemplary one. At the national level, it co-ordinates the work of the different institutions and governmental bodies associated with the project, and at the international level, UNIDO is providing the expertise since industrial advisory services include not only management aspects but also technological advice for crucial manufacturing branches in Ecuador. It is believed that this project could be useful as a model for other developing countries.

101. As a follow-up to the UNIDO expert group meeting held from 3 to 7 September 1973 (cf. ID/B/140, para. 484) with a view to identifying priority areas of industry/university linkage for appropriate development activities, a UNIDO consultant carried out a mission to the Malaysian Institute of Management in 1974. Although the findings of the consultant are currently under negotiation, a general agreement has been reached with the Government and the Malaysian Institute of Management to implement an industry/university linkage programme, financed by UNDP.

102. In 1975, UNIDO intends to continue its follow-up to industry/university linkage programme in the management field through a project on the establishment of a programme of consultancy and in-service training for industry in the Dominican Republic.

103. Mention may also be made of management consultancy services to be provided by UNIDO, in co-operation with an ILO project of management development and productivity institute in Ghana. Under subcontract, a UNIDO expert is providing in-plant consultancy services as part of the broader activities of ILO connected with management training and development in this project.

### **Management techniques (31.3.02)**

104. The importance of the activities of UNIDO in this field was underscored by the General Assembly at its sixth special session in resolution 3202 (S-VI), particularly in section III (d) in which it recommended, *inter alia*, that attention be given the need for management development activities of the developing countries. Throughout 1974, UNIDO continued to implement a wide range of projects related to the transfer and adaptation of appropriate management concepts and techniques as a form of direct assistance in training industrial managers in the developing world.

105. In 1974, UNIDO supplemented its ongoing activities of technical assistance, studies and publications (cf. ID/B/140, paras. 485-486) by finalizing a working relationship with the International Institute of Applied Systems Analysis (IIASA). It is envisaged that the expertise of IIASA in applying systems analysis can be utilized for the management of such systems as industries or the industrial sector as a whole in developing countries. Negotiations were initiated in 1974 to start a model technical assistance project in this area.

106. UNIDO is attempting to provide not only short-term problem solving assistance at the industrial enterprise level but also diagnostic planning of large-scale management assistance in an effort to improve management practices and techniques. As an example of the work of UNIDO in diagnostic planning, reference may be made to a project for improving the management system of an enterprise producing electric machinery in Hungary. The Government of Hungary requested the services of an industrial management expert team under the SIS programme. The team, which was assigned to the Ministry of Metallurgy and Machine Industry, was to assist in improving the management system of the United Electric Machine Works (EVIG) founded in 1963 through the merger of five previously independent factories; EVIG is an autonomous industrial enterprise within the Ministry of Metallurgy and Machine Industry and its total production represents about 20 per cent of the output of the Hungarian high voltage equipment industry.

107. The project began with the arrival of the team leader, an industrial management and organization expert, on 10 March 1974. On 8 April 1974, the other two UNIDO experts (one in systems analysis and design and the other in value analysis and marketing) arrived in Budapest. The experts undertook an analysis of the operating and management procedures at the EVIG-Group as well as at the enterprise level; the team's study concurred with the results of a previous study by a UNIDO staff member to the effect that the crucial problem facing the company was a need to match manufacturing technology with the information flow and processing technology.

108. The major priority areas were isolated so that the team could contribute to the development of EVIG's management control and its ability to utilize better its available resources. The team undertook the following actions:

- A detailed analysis of the group's purchasing and material supply activities;
- The development of a proposal for optimum control of raw material investment;
- A detailed critical analysis of the present production control and planning system;
- A critical appraisal of the present management organization.

109. Following this analysis, the team is to provide proposals with regard to the need for the development of systems modules providing specific management information. There are seven permanent counterparts in the day-to-day running of the projects, all of whom are from the EVIG's organization department.

110. During the project, the UNIDO team members will separately or together hold regular discussion sessions and seminars for groups of EVIG managers and/or workers to familiarize EVIG staff members with the team's activities and its objective. At the same time, the team will serve as a vehicle for the transfer of specific knowledge. The selection of subjects for these sessions will be made mutually by the Director General of EVIG and the project team leader.

### **Management at the sectoral level**

(31.3.03)

111. The scope of the UNIDO industrial marketing management activities, in accordance with the recommendations and requirements of various Governments of developing countries, focuses on the need and urgency of developing and least

developed countries to improve the policies, methods, structures and systems of marketing, with a view to expanding the local demand for, and promoting the competitive offer of, locally manufactured products, while improving national marketing expertise, facilities and strategies.

112. During 1974, technical assistance in marketing was provided by UNIDO in a number of countries including Ecuador, India, Pakistan, Saudi Arabia, Singapore, Somalia, Uganda and Upper Volta. In addition, supporting work was directed towards the study of domestic marketing and distribution problems in 17 developing countries, with a view to initiating a series of projects to be carried out during the period 1975-1977.

113. During 1974, UNIDO planned and carried out systematic research in order to ascertain local marketing conditions and to investigate critical factors concerning domestic distribution, pricing and credit systems, merchandizing and promotional methods, marketing policies and characteristics of the local marketing environment. A questionnaire was forwarded to ministers of commerce and industry of 50 selected developing and least developed countries; 43 of the questionnaires were filled out and returned to UNIDO. All the Governments that participated expressed their deep interest in this project and provided UNIDO with details concerning problems, priorities and requirements of the respective countries; they welcomed the assistance of UNIDO in domestic marketing development.

114. During 1974, UNIDO undertook two exploratory missions—one to Ivory Coast, the other to Zaire at the invitation of the Governments to discuss assistance in the field of industrial marketing and domestic distribution. As a result, a large project is expected to be initiated in the Ivory Coast, aiming at the creation of an industrial marketing centre for the stimulation of the national market.

115. In December 1974, UNIDO organized an expert group meeting on marketing management and strategy for the developing world, with the participation of government officials and industrialists from 20 developing and least developed countries. At the meeting, the experts discussed the major aspects of, and the technical problems relating to, industrial marketing development. The experts encouraged UNIDO to develop its programme of technical assistance in marketing with a view to improving government and industry levels of marketing expertise and to assisting in the creation and development of the relevant national and subregional institutions.

116. In 1974, preparatory work for a large-scale project of assistance to the jute industry in Bangladesh (cf. ID/B/140, paras. 488-490) was further advanced. The finalization of the project document took more time than had been expected, however; operational activities under the project are expected to be carried out in 1975.

### **Industrial administration and legislation**

(31.3.04)

117. The subject of industrial administration and legislation, now fully incorporated in the programme component of industrial management and consulting services, is evincing a growing interest from developing countries. Work in this field requires a



relatively high amount of research, systematic collection and evaluation of data and constant analysis of problems, so as to produce valid and practical solutions for use at country level.

118. The number of operational projects increased in 1974, although owing to the kind and type of expertise requested so far (mainly individual experts on a short-term basis), the total quantitative value of the projects remains small. For the same reason it is not expected that there will be a strong quantitative increase of technical assistance deliveries under this heading in 1975.

119. A monograph on improving industrial administration, which was prepared in 1973, was published and distributed by UNIDO in 1974. The monograph contains summaries of the thinking and experience of a number of meetings on industrial administration and includes views on such aspects as the role and objectives of industrial administration as well as systems and ways to strengthen it. A case study of administrative and legislative measures in the context of regional integration has been undertaken in 1974.

120. During 1974, UNIDO made efforts to develop, on a regional basis, a long-term programme for the improvement of industrial administration, comprising different aspects such as training, inter-country exchange of experience and joint workshops. The programme is being designed to take into consideration the particular conditions of the geographical area and of the special situation of the least developed countries. UNIDO will seek the close co-operation of ECA and the other regional economic commissions in this activity.

121. Exchange of views and the examination of possibilities with the Austrian Institute of Research in Education and Development were continued in 1974 on the subject of the possible establishment of an international centre for industrial administration for developing countries. Efforts will be continued in 1975 to develop further this supporting activity so as to make available more information and expertise directly from UNIDO Headquarters.

### **SMALL-SCALE INDUSTRIES** (31.4.00)

122. In accordance with the objectives and programme of work for the biennium 1974-1975, the activities of UNIDO under this programme component during 1974 were concentrated on:

Intensification of assistance to the less and least developed countries in establishing industrial extension services, industrial estates and programmes for small industry development;

Assistance to less developed areas of many developing countries in programmes of decentralization of industry through provincial or regional technical services, industrial estates, financing programmes and incentives for the rapid development of small-scale industries;

Guidance to developing countries in the selection of product lines and appropriate technology for small-scale industry;

Increasing co-operation with the World Bank and with bilateral financial agencies in the provision of financing linked to technical assistance for small-scale industry;

Promotion of domestic subcontracting and marketing programmes in developing countries with a view to strengthening linkages within industry and thereby promoting the marketing of small industry products.

123. As forecast in paragraph 495 of the Annual Report of the Executive Director for 1973, the value of technical assistance delivered under this component increased in 1974, reaching a figure of \$2.5 million as compared to the 1973 figure of \$2.2 million, an increase of 13.2 per cent. With the approved projects on hand and the projects in the pipeline expected to be approved in the near future, the small-scale industry programme component will continue to be one of the leading areas of UNIDO in terms of technical assistance delivery.

124. Progress was achieved in projects executed in the 15 least developed countries mentioned in paragraph 497 of last year's report; in addition to the projects in those countries, preparatory work on new projects was carried out during 1974 in Afghanistan, Laos, Malawi, Mali and Nepal. Thus, 20 out of the 25 countries classified as the least developed among the developing countries are expected to receive assistance from UNIDO in the promotion of small-scale industry during the biennium 1974-1975.

125. In the United Republic of Tanzania, a Small Industry Development Organization (SIDO) has been established with UNIDO assistance to carry out an intensive programme throughout the country. A comprehensive programme for small-scale industrial enterprises has been initiated by the new organization, including preparation of feasibility studies and the provision of extension services in technology management and marketing. SIDO will also concentrate on the establishment of new small industries in rural areas. The UNIDO senior adviser, one of the two UNIDO experts assisting SIDO, has developed a bilateral programme of assistance with India in the training of 25 Tanzanian nationals in the operation of extension services and in small-scale metal-working, wood-working and village industries. Nine Indian economists and engineers have been recruited under Commonwealth aid to work in the United Republic of Tanzania to assist nationals in setting up and managing small-scale industries. Efforts are now being made to obtain further assistance from the Swedish International Development Authority (SIDA).

126. In Yemen, UNIDO provided assistance in 1974 in the establishment and operation of the Industrial Promotion and Advisory Unit (IPAU) within the Ministry of Economy. This Unit is providing assistance to the Government in industrial policy, licensing and incentives and to entrepreneurs and existing enterprises through feasibility studies and assistance in improvement of production and management. UNIDO also co-operated during 1974 with the World Bank in the establishment of an industrial estate in Sana'a, for which the World Bank provided a loan of \$2.3 million early in 1974. The Managing Director of the Industrial Estate Development Authority has been trained under a UNIDO fellowship in Kenya, India and Saudi Arabia. The two UNIDO experts in the IPAU have been working closely with the Managing Director of the Industrial Estate Development Authority in the preparatory work for the construction of the industrial estate.

127. UNIDO organized and conducted a training workshop on small-scale industry in the least developed countries of Asia, the Far East and the Middle East, in Kathmandu, Nepal, from 1 to 12 April 1974. The training workshop was followed by a study tour of facilities for the promotion of small-scale industries in India from 13 to 23 April 1974, organized and financed by the Indian Government. The participants in the training workshop came from Afghanistan, Bangladesh, Indonesia, Laos, Nepal, Sri Lanka, Western Samoa and Yemen. The purpose of the training workshop-cum-study tour was to sensitize government officials from the participating countries to the role and importance of small industry development in industrialization programmes, to train and orient them in development techniques and methods, and to stimulate requests for technical assistance in that area.

128. The workshop included lectures and discussions on the role of small-scale industry in industrialization programmes of least developed countries; strategies and methods for the modernization of the traditional sector; organization and operation of industrial extension services; stimulation of entrepreneurship and establishment of new industries; establishment of demonstration plants and joint ventures; the role of industrial estates and common facilities; financing of small-scale industry; the role of the Government and of business associations; and technical co-operation for the promotion of small-scale industry.

129. An evaluation of the training workshop revealed that the objectives of sensitizing the participants and orienting them in development techniques had been achieved to a large extent. Since most of the participants were involved in small industry promotion programmes in their respective countries, it is to be expected that the training will lead to better national programmes and more effective technical co-operation projects.

130. Although in most of the less and least developed countries, small industry promotion is being concentrated in the capital cities or in the major urban areas of the country, there are several projects that are promoting rural industrialization. Among such UNIDO projects in operation or in preparation are those in Botswana, Lesotho, Liberia, Senegal, Swaziland, the United Republic of Tanzania and Zambia.

131. The UNIDO project in Zambia (cf. ID/B/140, paras. 499-504) entered into its second phase during 1974; during this phase, efforts will be concentrated on setting up new rural enterprises in the metal-working, wood-working, game-skin tanning, brickmaking and food processing sectors. A novel project for the setting up of a rural industrial estate in Liberia, based on agro-industrial development and service industries, was agreed upon after a long period of preparation.

132. Mention was made in last year's report of the efforts of UNIDO in the relatively advanced among the developing countries to promote small-scale industry in provincial towns, thereby contributing to industrial decentralization (cf. ID/B/140, paras. 505-517). The UNIDO project in the State of Bahia in north-east Brazil was successfully completed during the year; it has contributed to the growth of industry in the interior of the State of Bahia specifically through assisting in the development of industrial estates. During 1974, a major effort was made by UNIDO in Mexico to help in the implementation of a large-scale programme for setting up 18 industrial complexes throughout the country. This programme,

carried out by Nacional Financiera, the largest financial institution in Mexico, will now expand with UNIDO assistance into projects for creating common services for groups of small-scale industrialists.

133. UNIDO industrial decentralization projects in Greece (Salonika), Turkey (Gaziantep) and Thailand (Chiang Mai) progressed during the year. In Greece, the planning of an industrial estate for small-scale industry was completed and the estate is under construction; a technical services centre is also under establishment. In Turkey, a model industrial estate for 50 enterprises was under construction and the common service facilities are in operation. A new project for a National Small Industries Development Centre in Ankara will become operational early in 1975 with a view to providing a network of assistance to small-scale industry on a country-wide basis.

134. In Thailand, the UNIDO project in Chiang Mai now has fully operational workshop facilities; through this project, significant assistance has been rendered in the design of agricultural implements for the crop replacement project of the United Nations Narcotics Division. A new project has been initiated in Indonesia for the development of a local support network providing extension services and financial assistance to small-scale industry in selected provincial areas.

135. The first industrial estate project of UNIDO in Ahwaz, Iran, made considerable progress in 1974. UNDP equipment and facilities in the industrial estate were handed over to the Government early in 1974 and the estate now operates without direct United Nations assistance. It has been reported that capital investment in the enterprises in the estate increased by 38.7 per cent and value added by manufacture has increased by 48 per cent as compared to similar figures for the previous year. The income of the central workshop increased during the same year by 120 per cent.

136. During 1974, UNIDO carried out preparatory assistance for the development of new projects providing extension and technical services to small-scale industries and/or for the establishment of industrial estates in Belize, Costa Rica, Democratic Yemen, Fiji, Nicaragua, Oman and Papua New Guinea. In Nicaragua, assistance was provided by UNIDO to a programme of industrial estates development in connexion with the reconstruction in new locations of small industry destroyed in the Managua earthquake of December 1972.

137. In addition to the projects in the countries mentioned earlier, projects for developing provincial industrial estates in Argentina and Ecuador were successfully implemented during 1974. In Togo, a consulting firm was contracted to provide a team for a period of two years to assist the National Centre for the Promotion of Small and Medium Industries and to help in the establishment of the industrial estate at Lomé. In Gabon, assistance was given to Promogabon, the local organization for promoting Gabonese industries.

138. Co-operation with the World Bank has been strengthened. Besides assistance to Yemen, mentioned earlier, UNIDO also prepared two feasibility studies in Thailand: one for the extension of the Bang Chan industrial estate and the other for the establishment of an export processing zone in the Bangkok harbour. These studies were appraised by the World Bank and further assistance to the Industrial Estate

Development Authority of Thailand is envisaged in 1975 from both the World Bank and UNIDO. UNIDO also co-operated with the World Bank in Nigeria where a small industries programme is to be assisted by both the IBRD and UNIDO.

139. Another notable development in the field of industrial estates has been the agreement reached with the Swedish International Development Authority for evaluating the effectiveness of industrial estates as an instrument of small industry development in six countries, namely, Ecuador, Iran, Senegal, Sri Lanka, Togo and Turkey. This evaluation study commenced in 1974 and is expected to be completed in 1975.

140. Activities relating to production improvement in small-scale industry were carried out by UNIDO through experts in over 40 developing countries as well as through answering inquiries for technological information, appropriate schemes and reports, received from government agencies, associations and individuals in developing countries. During 1974, over 100 such inquiries were answered by UNIDO staff with this programme component. A study on the appropriate choice of machinery for small and medium industry was also prepared by UNIDO in 1974.

141. Assistance to Governments and financing institutions in setting up and improving financing and supervised credit schemes for small-scale industry was undertaken by UNIDO in several countries. In Colombia, two experts are assisting the Corporación Financiera Popular to improve its credit programme for small and medium industries and to develop an extension service to be linked to the financial assistance given. In the Republic of Korea, assistance is being provided by three UNIDO experts to the Medium Industry Bank in improving loan appraisal procedures and in identifying new projects for financing. In Zaire, a team of six UNIDO experts has been assisting in the transfer of former foreign enterprises to local ownership as well as in the establishment of new indigenous enterprises through the Office de promotion de l'entreprise zairoise (OPEZ).

142. Linkages between small industry and large industry have been promoted in several countries through measures for increasing the volume of subcontracting. In projects in Iran, the Ivory Coast and Turkey, UNIDO has devoted special attention to this aspect. The meeting on subcontracting scheduled to be held in 1974 in Latin America had to be postponed to 1975.

143. Preparations for an expert group meeting on self-help programmes in small-scale industry were continued during the year. However, owing to the inadequacy of resources the meeting could not be held as scheduled (cf. ID/B/140, para. 521) and is now planned to be held in 1975.

144. Work continued on the promotion of co-operation among the developing countries in the field of small-scale industry and on the partnerships project. In addition to the partnerships arrangement reported last year (cf. ID/B/140, para. 523), another partnerships arrangement involving a small-scale enterprise in Kenya and a large-scale firm in Austria was established during the year. The firm in Kenya will manufacture low-pressure boilers with technical assistance and training facilities from the Austrian firm.

145. The publication *Subcontracting for Modernizing Economies* (cf. ID/B/140, para. 523) was issued in 1974.

## INDUSTRIAL TRAINING

(31.5.00)

146. Training of personnel or, expressed in other words, the development of human potentials, is a determining factor in the process of industrial development. In dealing with this factor, UNIDO is aware that it addresses thousands of highly educated individuals having a dual capacity, namely that of major contributors to, and that of major beneficiaries from, industrial development. Thus in its training activities, UNIDO must take into account not only technical and economic, but also psychological, sociological, cultural, methodological and other aspects. In the opinion of UNIDO, developing countries should be given as much opportunity as possible to tailor and schedule industrial training activities in line with their industrialization plans which, after all, form part of the over-all development plans of those countries. As a consequence, proper training of high-level industrial personnel cannot be carried out on an *ad-hoc* or haphazard basis, but must by nature be co-ordinated with the over-all framework of technological, economic and social development if the true objectives of training are to be achieved.

147. In 1974, UNIDO made a major break-through in this direction; after careful preparation, the concept of a UNIDO integrated training offer programme was established. The programme should give developing countries more opportunity than ever before to make the most beneficial use of industrial training opportunities offered or made available by UNIDO. A basic element of the programme is comprehensive information disseminated to developing countries about training opportunities such as in-plant group training programmes, individual fellowships, fellowship group programmes, group study tours, seminars and workshops that UNIDO plans to organize in the foreseeable future, as well as about suitable training courses offered by outside institutions.

148. In line with these considerations, UNIDO proposed in 1974 a re-shaping of the fellowship component of the UNIDO regular programme of technical assistance, a proposal that was agreed to by the Industrial Development Board at its eighth session. The first information of this type will be circulated to Governments in early 1975.

149. UNIDO has also been making efforts to ensure that training abroad for nationals of developing countries will increasingly be organized in other developing countries that have achieved high standards in the respective fields of study. This procedure is in accordance with the UNIDO training policy, as laid down in the "Report on the Training of National Personnel for Industrial Development" (ID/B/101, para. 24) and concurs also with the efforts of UNIDO to foster co-operation among developing countries, in compliance with Industrial Development Board resolution 36 (VII). UNIDO has also been attempting to involve itself more deeply in specific training activities for participants from the least developed countries.

150. Co-operation with other agencies and organizations such as UNESCO, ILO and the International Centre for Advanced Technical and Vocational Training in Turin, has been strengthened further. In 1974, UNIDO participated in international working groups on education-industry co-operation and on environmental aspects of technical education and training as well as in the Second Meeting of the ACC Subcommittee on Education and Training.

151. In 1974, technical assistance expenditures under the programme component of industrial training amounted to \$1.5 million as compared to \$1.8 million for 1973, a decrease of 21 per cent. There were several reasons for the decrease in technical assistance delivery in 1974. First, less in-plant group training programmes were carried out in 1974 than in 1973 as several of the scheduled programmes were postponed to 1975 at the request of the host Governments. Second, UNIDO did not hold any seminars on UNIDO operations in 1974, while four such seminars had been held in 1973. Third, during 1973, the number of field projects under this programme component declined and this decline naturally found reflection in the implementation figures for 1974. As pointed out below, however, the number of field projects in the pipeline has increased during 1974, so that UNIDO does not feel overly optimistic in setting a target delivery figure under this programme component of \$2 million for 1975.

152. The component of industrial training is divided into three specific activities: training methods and techniques (31.5.01), in-plant group training (31.5.02) and seminars on UNIDO operations (31.5.03). In order to make the present text more readable, however, and to provide a more comprehensive picture of the training activities being carried out by UNIDO, different sub-titles have been injected into the present text.

### **In-plant group training**

153. In 1974, UNIDO held 20 in-plant group training programmes with a total of 366 participants (see appendix E). All but two of the programmes carried out in 1974 were repeated programmes; seven programmes that had been planned in fields of training not covered heretofore had to be postponed to 1975 owing to financial restraints as well as to the time required to have the programmes designed and to finalize negotiations with the industries concerned. Programmes were repeated in those fields where the need for training was greatest; for several of the programmes, the number of applications exceed by far the number of places available. In view of the demand, UNIDO had decided to repeat those programmes in 1975. Moreover, the Secretariat is taking the necessary measures to have the programmes financed on a long-term basis rather than on a year-to-year basis as has been the case up to now.

154. All the 1974 in-plant group training programmes were organized on an interregional basis; although some were organized for participants from Latin America only, they formed part of a series of industrial training programmes already carried out, or to be repeated, for participants from other geographical regions. Through the introduction of specially designed questionnaires (cf. ID/B/140, para. 532) to be completed by potential candidates, in addition to the official nomination forms, it became possible to have more homogeneous groups of participants and to make last-minute adjustments in the programmes, e.g. sub-groups could be formed for the in-plant training phases and study assignments could be designed in such a way that specific training needs and interests of individual participants were taken into consideration to the maximum extent possible.

155. Through consistent efforts, the actual training cost of some of the programmes was reduced, and some additional savings resulted from fluctuations in the rates of currency exchange. The savings were however offset by a continuous increase of other cost factors such as air fares during the year. In this connexion it should be

mentioned that, apart from the financial sources available to UNIDO for in-plant group training programmes, a number of Governments contributed in 1974, as in the past, directly to such programmes hosted by them. Those contributions amounted to approximately \$450,000 in 1974, and this figure is not reflected in UNIDO accounts.

156. The evaluation of the in-plant group training programmes is a continuous activity. As in 1973, end-programme evaluations were made by the UNDP project co-ordinator and by UNIDO staff. Two follow-up missions covering eight programmes were made by the UNDP project co-ordinator in 1974. One mission visited Afghanistan, India, the Philippines and Thailand; the other was made to Indonesia and Singapore in conjunction with a visit to an in-plant group training programme in Japan. A compilation of the replies to the follow-up questionnaires (cf. ID/B/140, para. 536) was made, and the results of those evaluation exercises, which have been brought to the attention of, and discussed with, the training staff in the host countries, will contribute to an improvement of the programmes and to adapting them to the most recent and urgent training needs. Regretfully, owing to shortage of clerical staff, follow-up questionnaires to former participants could not be sent out.

157. A number of applications had to be rejected as some of the nominated candidates were too highly qualified for the respective training programmes. Of the total number of participants in UNIDO in-plant group training programmes in 1974 approximately 7 per cent came from Europe, 9 per cent from the Middle East, somewhat over 30 per cent from Asia and the Far East, approximately 20 per cent from Latin America and slightly over 30 per cent from Africa.

158. UNIDO is making special efforts to include participants from the least developed countries, although in a number of these countries industrialization is at such a level that it is difficult to nominate and release qualified candidates for the training programmes which are designed for high-level personnel already employed in industry. In spite of these difficulties, approximately 10 per cent of the in-plant group training programme participants in 1974 came from the least developed countries.

159. Environmental questions are becoming of increasing interest to practising engineers in a number of industrial sectors in the developing countries. In order to provide the engineers with the knowledge and expertise to cope with environmental problems, UNIDO has been paying greater attention to environmental aspects in its in-plant group training programmes. In 1974, a special paper on environmental aspects was prepared by outside consultants and presented to the participants of four programmes: iron and steel (Zaporozhye, Ukrainian Soviet Socialist Republic); petrochemical industry (Bucharest, Romania); pulp and paper industry (Markaryd, Sweden); and textile industry (Łódz, Poland). Funds to undertake these studies and to make them available to the participants of the programmes were contributed by UNEP.

160. From 2 to 6 September 1974 an expert group meeting was held in Vienna in which 28 training directors participated from 16 present and potential host countries of in-plant group training programmes. In addition, the meeting was attended by six observers from four countries representing government organizations responsible for local arrangements for in-plant group training programmes.



161. At the meeting, the experts discussed a large number of aspects, ranging from how to organize actual in-plant studies, the applicability of newly acquired experience to conditions prevailing in home countries of participants, the pros and cons of organizing in-plant group training programmes in advanced developing countries, to evaluation and follow-up. A number of useful suggestions were made for UNIDO and the exchange of experience among the directors contributed greatly to the introduction of programme innovations. As an outcome of a similar meeting held in 1972, there has already been a continuing exchange of views and training material between a number of training directors; it is expected that this exchange will be intensified after the 1974 meeting.

### Individual fellowships

162. The individual fellowship programme of UNIDO continued to give high-level professionals engaged in industry in developing and other aid-receiving countries the opportunity for tailor-made training abroad in specialized fields according to their individual requirements. The problems encountered by UNIDO in its fellowship programme were mentioned in the 1973 Annual Report (ID/B/140, paras. 538-542). Compared with 1973, there was a slight decrease in 1974 of approximately 2 per cent (561 *versus* 572) in fellowship awards and a more serious decrease of approximately 15 per cent (617 including carried over 1973 awards—*versus* 729) in fellowship implementation. The main reason for the decrease of awards was that nominations for established fellowship posts came in too late. As of 15 September, the deadline for submission, nominations for only 55 per cent of the regular programme fellowship posts had been received. (This situation should improve from 1975 onwards as a result of the re-shaping of the regular programme.) The main reason for the decrease in fellowship implementation was that proper placement of individual fellows in industrialized countries, which was already becoming increasingly difficult in 1973, took an alarming turn for the worse in 1974, particularly with regard to placement for practical training in industrial enterprises.

163. One of the essential components of the new UNIDO industrial training offer programme will be the concept of fellowship group training programmes. The concept provides for putting individual fellows who have the same or very similar fields of study, comparable professional levels and a common training language into small groups. A suitable group training programme will be designed for such fellows. The training programme and the training facilities should be such that individual needs can be satisfied to the extent possible. This new type of programme has the advantages of: a better training programme design; training programme components that are normally not available to individual fellows (e.g. specific seminars tailor-made for such small groups); intensive supervision of the training programme; reinforcement by the group-effect; and last not least, less difficult placement (an enterprise may be more willing to accept a small group of, say, five fellows as a group than five individual fellows scattered over a year).

164. Another new development with regard to fellowships is that UNIDO has taken charge of placing individual fellows in host countries outside Europe and North America; thus UNIDO has become responsible for placing fellows from developing countries in other developing countries. In this new effort, UNIDO is seeking the co-operation of all countries involved, regardless of their stage of development, in

order to make available suitable training facilities in developing countries for fellows from abroad and to overcome the psychological barriers that might exist vis-à-vis training abroad in developing countries.

165. As mentioned in the 1973 Annual Report, training costs continued to increase considerably and this calls for more economical ways of conducting training programmes. It is hoped that the introduction of fellowship group training programmes as well as placement in developing countries may contribute to holding the increase of training costs to a minimum and to overcoming the placement bottle-neck that has plagued the UNIDO fellowship programme during 1974.

### **Field projects**

166. The work of UNIDO training experts and advisers in the field has often been regarded as a minor activity owing to the comparatively small number of experts involved; in reality, however, it represents a fundamental part of the Organization's mission. Training carried on in the field can reach more people at lower cost, can be more readily adapted to the unique needs and circumstances of the country involved, and permits more immediate and—hopefully—more effective on-the-job application. During the year 1973, for a variety of reasons, the number of field projects declined; 1974, however, has seen a reversal of this picture so that, by the end of the year, UNIDO had field projects in operation in Barbados, Brazil, Iran, Pakistan, Poland, Saudi Arabia, Turkey and Zambia. Field projects in Afghanistan, Ecuador, Indonesia, Ivory Coast, Nigeria and the United Republic of Tanzania are in the pipeline and should reach the implementation stage in 1975.

167. Training field projects vary widely in form and content. In Iran, UNIDO co-operated with industry and the University of Teheran in arranging and co-ordinating in-plant training for students and recent graduates to provide them with on-the-job practical industrial experience prior to their assuming regular jobs in industry. In Saudi Arabia, UNIDO provided a consultant in training to the PETROMIN company to advise in the design and development of an internal company-wide management development department. In Poland, UNIDO has provided basic training in achievement motivation and entrepreneurial development and has trained nationals to carry on the programme independently.

168. In its field training projects, UNIDO has encountered the same problems as in its other activities, namely, those of finding qualified experts and counterparts, and getting the right people into the field at the right time. These problems are difficult but not insurmountable, and gratifying progress is being made in overcoming them.

### **Seminars on UNIDO operations**

169. In line with resolution 37 (VII) adopted by the Industrial Development Board at its eighth session in which the Executive Director was requested to organize seminars with a view to evolving programmes of action for the benefit of the least developed countries, negotiations were initiated at the beginning of 1974 with a host Government to organize a fifth regional seminar on UNIDO operations. The seminar

was originally scheduled to take place during November and December 1974, but for administrative reasons it was deferred to the second half of 1975. The seminar is scheduled to include, as a major item, discussions on co-operation among the developing countries of the region.

170. The over-all programme of seminars on UNIDO operations, financed by voluntary contributions from the Swiss Government during the period 1969 to 1973, was evaluated by two independent consultants at the request and the cost of the Swiss Government. Their evaluation report, which was transmitted to UNIDO in August 1974, analysed in detail the organization and achievements of the third regional seminar on UNIDO operations, held in Addis Ababa (29 January to 9 February 1973), and of the fourteenth seminar on UNIDO operations, held in Vienna. The evaluation included interviews with participants in various former seminars.

171. During the eighth session of the Industrial Development Board in 1974, the Swiss Government announced its intention to grant a third voluntary contribution to UNIDO. The modalities of this contribution have been agreed between the Swiss Government and UNIDO, and funds have been earmarked for two seminars on UNIDO operations, to be held in Vienna, to accommodate principally participants of countries that have never participated or that have participated only on a limited scale. The regional seminars on UNIDO operations will be organized mainly for the group of 28 developing countries that are most affected by the rising costs of fuel. A third type of seminar to be financed from this contribution will bring together Swiss industrialists, representatives of developing countries and UNIDO officials.

#### Headquarters activities

172. The third issue of the UNIDO "Guide to Training Opportunities for Industrial Development" was published in 1974; and more than 4,000 copies have been distributed. The Guide includes a list of approximately 420 training courses suitable for high-level industrial personnel from developing countries; more than 30 per cent of the courses are offered from institutions in developing countries. This Guide is part of the UNIDO integrated training offer programme.

173. In 1974, UNIDO also completed a pilot study on training needs, using Indonesian textile enterprises as an example. During the year, two basic studies on evaluation, one of in-plant group training programmes and the other of individual fellowships, were carried out.

174. An evaluation of the final reports of former individual fellows (1968-1972), with emphasis on the assessment of those fellows on their respective training facilities, has been made in order to design a guide for placement proposals. An evaluation and follow-up mission was carried out to Egypt and the Sudan, where former individual fellows, their employers, supervisors and government officials concerned were interviewed. It is expected that the results of this mission will lead to further improvements in the UNIDO fellowship programme.

175. During 1974, preparations on a handbook on UNIDO operations were completed; the handbook is scheduled to be published early in 1975. The purpose of the handbook is to give comprehensive information about UNIDO to a large public

including government officials, industrialists, consulting firms and chambers of commerce. The handbook includes a brief summary of the history of UNIDO, an indication of the sources of finance and a description of the criteria governing the use of funds, practical information about the forms of technical assistance that are available through UNIDO, and the ways in which such assistance is administered and requested.

176. At the beginning of 1974, the Executive Director decided to initiate the preparation of a UNIDO procedures manual which was intended to provide UNIDO staff members, both at Headquarters and in the field, with information concerning the functions and organization of UNIDO, its policies and procedures. The manual is to serve as an instrument of instruction and in-house training, and will provide guidelines to staff members about procedures and opportunities concerning themselves and their career with UNIDO. The manual will not be published as a whole, but will be built up gradually; a number of sections are already in various stages of preparation.

## Chapter V

# INDUSTRIAL POLICIES AND PROGRAMMING PROGRAMME

(32.0.00)

## INTRODUCTION

1. The objectives of UNIDO through its substantive programme of industrial policies and programming are to help the developing countries in gaining a better understanding of the problems they have to face in their industrial development, in formulating their industrial development strategies, plans and policies, and in preparing, evaluating and implementing their industrial projects. UNIDO seeks to provide assistance to the developing countries through this programme in preparing studies and participating in monitoring and appraisal of industrial development; in promoting industrial co-operation as one of the principal means to stimulate exports of manufactured goods; and in stimulating the flow of resources, such as finances and know-how, from the developed countries.
2. The workload of technical assistance activities is shared by the four components of the programme, the largest delivery being under the industrial programming component followed by the components of industrial financing and investment promotion, industrial studies and surveys, and promotion of export-oriented industries.
3. In 1974, the total delivery of UNIDO technical co-operation activities under the programme of industrial policies and programming amounted to \$4,592,000 as compared to \$3,955,000 in 1973, an increase of 16.1 per cent. The technical assistance delivery under this programme in 1974 represented 19.2 per cent of the total technical assistance delivered by UNIDO during the year. Figure 1 shows the technical assistance expenditures under this programme in 1974 and 1973 by programme component. Figure 2 provides a breakdown of the programme's technical assistance expenditures in 1974 by source of funds.
4. The implementation of the programme of industrial policies and programming is based on the performance of three broad categories of activities: (a) studies on strategies and policies of industrialization, (b) technical assistance to developing countries, and (c) promotional activities. Activities under the first two categories have been carried out bearing in mind the priorities established in Recommendations I and III of the Group of High-Level Experts on a Long-Range Strategy for UNIDO and the subsequent conclusions of the *Ad Hoc* Committee on Long-Range Strategy for UNIDO.

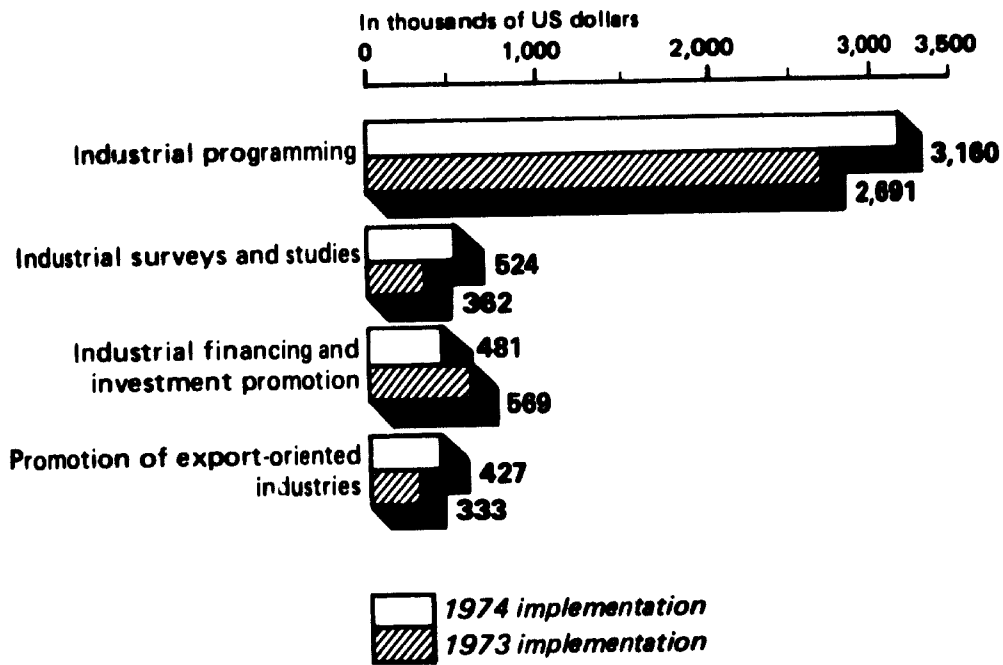


Figure 1. Expenditures in 1974 and 1973 under the industrial policies and programming programme, by programme component

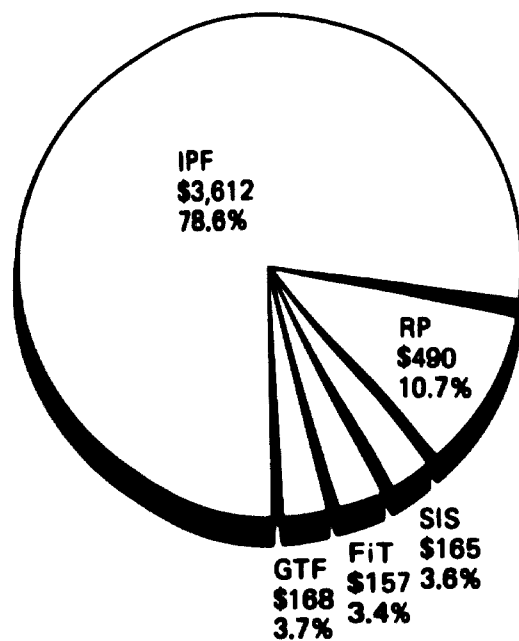


Figure 2. Actual expenditures under the industrial policies and programming programme in 1974, by source of funds (in thousands of US dollars)

5. The work related to studies on strategies and policies of industrialization includes the carrying out of research, studies and surveys on industrial development as well as the undertaking of comparative analyses of policy instruments and measures to promote industrial development at national and regional levels, with special attention to the strengthening of international co-operation and the achievement of a new international division of labour. This category of activity involves mainly two of the four components of the present programme: industrial programming, and industrial surveys and studies.

6. The third category of activity, concerned with promotion, generally takes one of four specific forms: investment promotion; co-operation among development banks and industrial financing institutions; product adaptation for export; and development of export industries and international subcontracting. Particular attention is paid to the establishment, whenever possible, of self-sustaining schemes in order to avoid the financial difficulties that have been encountered in the implementation of promotional activities.

7. During 1974, in addition to the current workload, the main part of the preparatory work of the Second General Conference of UNIDO also fell to this programme. The preparatory work included, in particular, the elaboration of the special issue of the *Industrial Development Survey* and the majority of the documentation to be presented at the Conference.

### INDUSTRIAL PROGRAMMING (32.1.00)

8. In order to accelerate the industrialization process in the developing countries, UNIDO is rendering assistance to those countries in the formulation and revision of their industrial policies and strategies and in the formulation of the industrial parts of their development plans and is helping them in the selection and design of their industrial projects as well as in the development of regional industrial co-operation.

9. During 1974, considerable preparatory work was carried out under this programme component on documentation for the Second General Conference of UNIDO. In this connexion, several documents were prepared for the third, fourth and fifth sessions of the Intergovernmental Preparatory Committee. UNIDO staff in this programme component contributed to the collection and formulation of factual and analytical material relevant to the Declaration and Plan of Action on Industrialization, to be adopted by the Second General Conference. Preliminary research was also undertaken in connexion with the long-term targets for industrial output which were formulated by developing countries in the course of regional meetings held in preparation for the Second General Conference. Working documents were also prepared for the tenth session of the Committee for Development Planning (CDP), which met in Vienna from 25 March to 3 April 1974; at that session, the CDP devoted its deliberations to the principal aspects of industrialization in developing countries.

10. In the year under review UNIDO, under this programme component, designed for officials from developing countries holding UNIDO fellowships some 60

practice-oriented training programmes related to: industrial planning; policy measures; and the formulation, appraisal and implementation of industrial projects. In the design of the programmes, account was taken not only of the interests of the trainee but also of the specific needs of his country as well as of other forms of assistance provided by UNIDO in the field of industrial planning and programming. When the training programme was directly related to industrial planning and programming, UNIDO sought to attach the trainee to Government or to other institutions and agencies concerned with industrial planning and development, so as to enable him to understand the planning and promotion of industrial development in the country in which he was being trained. In view of the growing realization by the developing countries of the need of developing and refreshing skills in industrial planning and programming, it seems likely that UNIDO will become increasingly involved in the design and monitoring of such training programmes.

11. In 1974, UNIDO was responsible, under this programme component, for technical assistance delivery amounting to \$3,160,000 as compared to the 1973 figure of \$2,691,000—an increase of 17.4 per cent.

12. The activities under the industrial programming component have been divided into the following four specific activities: strategies, plans and policies for industrialization; industrial project preparation and evaluation; regional industrial co-operation; and use of computers in industrial development. The work previously carried out under the specific activity "Planning and control of industrial project implementation" is now being implemented under the industrial technology programme.

### **Strategies, plans and policies for industrialization (32.1.01)**

13. The assistance of UNIDO in formulating a set of policies to implement industrial development programmes is often combined with broad advice on the planning for future industrial development. In some developing countries, the impact of government policies is examined at the branch level; other countries request advice on redesigning a specific instrument of policy or a specific area of policy. To support such advisory services, UNIDO activities are aimed at the dissemination of knowledge of industrial planning and at developing methods and techniques of industrial planning.

14. In the course of studying the problems and techniques related to formulation of strategies and the selection of industrial priorities, UNIDO has begun a study on strategic industrial planning that is meant to present practical approaches and techniques for designing a strategy. The study is based on the actual experiences in the implementation of a field project in which lack of data and of defined priorities hindered the use of traditional methods and forced the emergence of special approaches.

15. Together with UNDP, a critical evaluation was started of all field projects in industrial strategies, programming and policies. The main aim of the review was to draw lessons from the past when designing new projects.



16. With respect to UNIDO work on multi-level, multi-sectoral planning models, 1974 saw the completion of the basic theoretical framework which allows four levels of decentralized information gathering and decision-making processes within an over-all scheme of maximizing national economic objectives. The decomposition algorithm used in the UNIDO model has yet to be tested empirically, however. The operational implications of a four- rather than the traditional two-level simulation models also require examination and verification through field experimentation. It is hoped that the first empirically testable UNIDO prototype model will be finished by the end of 1975. Work on custom-tailored versions for individually requesting countries can, therefore, not commence before 1976. The individual country planning models would eventually provide the information needed to compile the guidelines on planning methodology mentioned in the 1973 Annual Report (cf. ID/B/140, para. 583).

17. During 1974, UNIDO instituted a series of studies on how industrial priorities are selected in practice in a number of developing countries. Various methods of selecting industrial priorities in developing countries have been proposed during the last few years, but since very little is known about procedures actually in use, it is difficult to say if the assumptions upon which the new methodologies are based reflect the realities of choice among industrial priorities in the developing countries and if the new methodologies are likely to be a substantial improvement over current practices. The purpose of these studies is to help fill the gap in our knowledge so as to strengthen the basis for future academic work on the methodology of selecting industrial priorities in the developing countries and to develop practicable proposals for improving the existing system of selecting industrial priorities. The studies will be continued during 1975 and are expected to be published early in 1976.

18. Preparatory work has been carried out during 1974 for an interregional training course on industrial planning, to be financed from voluntary contributions and to be held in the German Democratic Republic, during the autumn of 1975 or early 1976. The training course will cover the following major topics: unified system of industrial planning; procedures and stages for drafting, discussing and approving the plans; principal sections of the plan; co-ordination of national plans at multi-national level; the role of the economic incentives and policy measures with regard to elaboration and fulfilment of the plan; and industrial plan implementation and follow-up.

19. In connexion with the capital goods industry project in Mexico and the Vienna meeting in October 1973 with a delegation of the Mexican Government and its Development Bank (cf. ID/B/140, paras. 573-576), the Mexican Government requested assistance from UNIDO in the formulation and preparation of specific industrial projects. Consequently, UNIDO is presently undertaking special studies on subjects such as diesel engines, pumps, compressors and machine tools.

20. Following the initial project on industrial investigations in Guatemala, a large-scale technical assistance project for industrial development and promotion was prepared in 1973 and 1974 (cf. ID/B/140, paras. 579-581). A joint UNDP/UNIDO mission was fielded in March 1974 to draft the project document; after intensive discussions with the Guatemalan institutions engaged in industrialization, it was agreed that UNIDO assistance would be required to:

Advise the Secretaría General de Planificación Económica on the preparation of the industrial development plan for the 1975-1979 period and on the corresponding policies;

Carry out studies with a view to selecting priority industries;

Prepare and evaluate industrial projects in accordance with the framework established by the industrial development plan and the recommendations on industrial location of the final report of the technical assistance project on industrial investigations;

Advise on how to improve capacity utilization in industry in accordance with the recommendations in the above-mentioned report;

Advise the Corporación Financiera Nacional (CORFINA) on the techniques of promoting investment in industry.

21. Two phases of this project were immediately approved at a value of \$465,700, and it is expected that the project will become fully operational by January 1975.

### **Industrial project preparation and evaluation (32.1.02)**

22. The purpose of UNIDO through this specific activity is to provide assistance in (a) the preparation of industrial studies on the type and extent of information required to formulate bankable projects capable of meeting the demands of international lending institutions; and (b) the development of techniques for evaluating industrial projects, within the context of national priority plans and policies. Attention is paid to the tasks of assembling and analysing data, executing advisory missions and of preparing training workshops as well as relevant manuals and guidelines.

23. The preparation of an operational manual for industrial project evaluation in Arab countries is in process (cf. ID/B/140, para. 587). Three meetings have been held so far at which experts have discussed the drafts and made suggestions. The manual comprises an introduction, basic concepts of project evaluation, commercial profitability evaluation, national profitability evaluation, case studies and appendices. The manual will be submitted to the organizing agencies, UNIDO and IDCAS, in the spring of 1975. A meeting will be held in Vienna in 1975 for the final substantive editing of the manual.

24. Preparation is also in progress for two international training workshops on project formulation and evaluation, to be held in Warsaw, Poland, in May 1975 and Sofia, Bulgaria, in June 1975. These workshops, to be financed from voluntary contributions, will cover the following aspects: interrelationship between sectoral and project planning; procedures and techniques of project development; methodology for national benefit-cost analysis and its actual application in evaluating investment projects.

25. In 1974, a first draft of the manual on project preparation was finalized. It is currently being reviewed by a group of consultants and is expected to be available for distribution in 1975.

26. A study on *Contract Planning and Organization* (cf. ID/B/140, para. 597) was published by UNIDO in 1974. The contracting guidelines for industrial projects in developing countries have been finalized in co-operation with the IBRD and are scheduled for publication in 1975.

27. The field of project preparation and evaluation continued to receive particular attention in 1974 in the technical assistance programme of UNIDO. Phase II of the Industrial Studies and Development Centre in Riyadh, Saudi Arabia, started on 1 August 1974 (for Phase I, see ID/B/140, paras. 589-591). The second phase will last until 31 December 1976. The identification of investment opportunities, the preparation of pre-investment studies, the preparation of the chapter on industry of the forthcoming economic development plan and advice on policy measures are some of the objectives of UNIDO assistance to the Centre. A total of 369 man-months or \$988,650 are to be spent during Phase II.

28. In January 1974, UNIDO began operation of the Centre d'études et de promotion des entreprises dahoméennes (CEPED) in Cotonou, Dahomey. During a three-year period, some \$455,000 will be utilized in the fields of pre-investment studies, project preparation, extension services, training of counterparts etc. In 1974, UNIDO also started to render assistance to the Dahomean Ministry of Planning. With these two projects, UNIDO is now rendering assistance to Dahomey at both the macro- and micro-planning levels. Together with an additional \$200,000 for feasibility studies and \$100,000 for assistance to industrial enterprises, provided from the UNDP for the least developed countries, a concentrated attempt is being made to accelerate the industrial development of Dahomey. Since the projects started in the course of 1974, we are not yet in a position to report on the results. The Dahomean Government has agreed to channel all industrial development projects through CEPED, which will later also become responsible for the financing of the projects.

29. During 1974, UNIDO conducted training workshops in industrial project preparation and evaluation in a number of countries: some of the workshops were carried out in co-operation with other international and bilateral organizations. In January 1974, a national UNIDO/IDCAS training workshop on project preparation and evaluation was held in Aden, Democratic Yemen. In February 1974, a regional training workshop in project preparation and evaluation was conducted in Addis Ababa, Ethiopia, in co-operation with ECA. Another national UNIDO/IDCAS training workshop took place in Khartoum, Sudan, in August-September 1974, also covering project preparation and evaluation.

30. The UNIDO regional training workshop for the benefit of the UDEAC countries, viz, Central African Republic, Congo, Gabon and United Republic of Cameroon, mentioned in the 1973 Annual Report (cf. ID/B/140, para. 593) was implemented in September 1974.

### **Regional industrial co-operation** (32.1.03)

31. This specific activity has been oriented towards the support of technical assistance projects and the development of a methodology for the identification and evaluation of projects set up for regional co-operation purposes. As a first step, a paper on evaluating multinational projects was prepared by a consultant in 1974. Further during that year, a study was initiated with the purpose of investigating methods of measuring the distribution of costs and benefits of multinational projects. UNIDO is also planning to prepare, jointly with IDCAS, an operational manual for the evaluation of projects of interest to regional groupings. The available

experience and reference material in this field will first be studied and summarized, and work on the manual itself is scheduled to start in the autumn of 1975 so the manual can be completed by the end of 1976.

32. UNIDO is studying existing schemes and possible models for economic and industrial co-operation at the subregional and regional levels and is working out concrete proposals for intercountry industrial co-operation as outlined in the conclusions of the *Ad Hoc* Committee on Long-Range Strategy for UNIDO (ID/B/142, paras. 26 and 39) which were endorsed by the Industrial Development Board in resolution 32 (VIII).

33. UNIDO continued its technical assistance to the Centre d'études industrielles du Maghreb in 1974, which was the first year of the revised project. The main objective is the promotion of regional co-operation in industry through studies on specific branches of industry such as machine-tools, non-ferrous metals, electric domestic appliances; other studies will be focused on co-operation at the enterprise level in the Maghreb and on the future regional utilization of rock salts and tin plate. A significant aspect of the Maghreb project is its training component, since it includes 41 fellowships and 3 seminars on different levels of industrial programming. The entire project counts on a UNDP contribution of approximately \$1.3 million and is expected to be completed by December 1975.

34. During 1974, close co-operation was maintained with UNCTAD. UNIDO prepared a paper for, and participated in, a meeting of an *ad hoc* group of UNCTAD on the role of multilateral financial institutions in promoting economic integration among developing countries.

#### **Use of computers in industrial development (32.1.04)**

35. Under this specific activity, work continued on the preparation of a survey on computer utilization for industrial development in the developing countries (cf. ID/B/140, para. 603).

36. Preparatory work was also carried out on the compilation of training material for a workshop on computer utilization. Since the collection of the necessary training material was not completed in time, the workshop, scheduled to take place in 1974, had to be postponed.

37. Assistance in the development of advisory services and technical assistance activities as well as in field-oriented research on problems related to electronic data processing techniques is envisaged. More specifically, this assistance will touch on the following areas: processing programmes, worksheet calculations, econometrics and statistical calculations, optimization applications and integrated data base.

#### **INDUSTRIAL FINANCING AND INVESTMENT PROMOTION (32.2.00)**

38. The objectives of UNIDO under this programme component are to assist developing countries in the establishment and the improvement of operational

efficiency of industrial development financing and investment promotion institutions, and to provide follow-up assistance on pre-investment studies. In 1974 UNIDO sought to meet those objectives through projects related to promotional activities, meetings, group training, operational activities and studies. A large portion of the resources under this component was devoted to promotional activities, namely to: identification and follow-up of investment opportunities in developing countries; preparation of investment proposals for dissemination to potential investors; preparation and organization of promotional meetings, servicing of private business contacts; and follow-up of project proposals to the point of investment decision. The primary aim of UNIDO in these activities is to stimulate the generation of domestic resources for industry and to encourage an increased flow of external resources (finance, technology, managerial know-how and marketing) for the industrial development of the developing countries.

39. In 1974 delivery of technical assistance under this programme component amounted to \$481,000 as compared to \$569,000 in 1973. In comparing annual implementation figures of technical assistance under this programme component account should be taken of the fellowship component of technical assistance. The fellowship component, which constituted almost a fifth of the 1974 delivery forecast, was hardly implemented owing, to a large extent, to procrastination on the part of recipient Governments in nominating fellows for award, and, to a lesser extent, to placement difficulties.

40. The work carried out under the programme component is broken down into four specific activities: national policies and institutions for financing industrial development; industrial financing; investment promotion machinery in developing countries, and promotion of specific industrial projects.

#### **National policies and institutions for financing industrial development (32.2.01)**

41. As a means of promoting the transfer of resources and experience among industrial development financing institutions, UNIDO is contributing towards the promotion of co-operation among industrial development financing institutions in developing and industrialized countries. For this purpose, a programme has been developed through which representatives of development banks and similar institutions from developing and developed countries meet annually for confidential discussions of problems of mutual interest (cf. ID/B/140, para. 619).

42. The fifth meeting in the series, which was held in Tunis in co-operation with the Société tunisienne de banque, was the first such meeting to be held in a developing country. At the meeting, 175 participants (99 from developing countries, 58 from industrialized countries and 18 from regional financing and international institutions) were given the opportunity to discuss problems of mutual interest. The participants represented a total of 58 countries. As in previous meetings, facilities were provided for over 900 private and confidential contacts among the development bankers. The sixth meeting is scheduled to be held in Caracas, Venezuela in 1975.

43. With the help of two voluntary contributions from the Government of the Federal Republic of Germany, totalling \$90,000, and under the guidance of an advisory committee consisting of 19 executives of industrial development financing institutions from both developing and industrialized countries, UNIDO launched in

1973/1974 a scheme for the exchange of information among development financing institutions on industrial projects in developing countries (cf. ID/B/140, para. 620). The key to the scheme is a data bank in which a minimum of information is collected on industrial projects financed by participating institutions. At quarterly intervals UNIDO informs, through project lists, participating institutions of a few key facts about those projects, so that the participants can decide whether they wish to make direct contact with the originating institutions for detailed information and discussion. Up to the end of 1974, UNIDO had issued five lists on more than 2,000 industrial projects financed by almost 100 participating institutions.

44. At the fifth annual meeting, held in Tunis, the members of the scheme for the exchange of industrial information requested UNIDO to publish a technical assistance list that would include the needs of participating institutions for technical assistance of all kinds. It was agreed to invite UNIDO to circulate such a list as widely as possible, even beyond the membership of the scheme, so that potential assistance, particularly to the younger financing institutions with the least resources and those located in the least developed countries, could be generated from institutions with larger resources and greater experience. This would strengthen substantially the co-operative and coherent nature of the scheme.

45. In view of the fact that the voluntary contributions from the Government of the Federal Republic of Germany, which had sustained the scheme for its two-year formative period in 1973 and 1974, were not expected to continue, the members of the scheme decided at the Tunis meeting that it should be operated on a self-financing basis. To this effect, members agreed to support the scheme by annual contributions, and by the end of 1974, a total contribution of \$20,000 had been made. Arrangements are being made for the transfer of these funds to UNIDO to enable the scheme to continue operation on a permanent basis.

46. It is planned to orient these two activities, namely the annual meeting of representatives of development banks and the scheme for the exchange of information among financial institutions, more specifically to the support of field operations. For example, regional and large-scale industrial projects identified through UNDP/UNIDO pre-investment studies will be presented to the annual meetings of bankers for discussion with a view to mobilizing financing through consortia arrangements. The first exercise in this direction will be conducted at the sixth annual meeting of bankers, to be held at Caracas, Venezuela in 1975.

### **Industrial financing** (32.2.02)

47. In response to the specific needs of the developing countries in industrial financing, UNIDO instituted in 1968 a series of training workshops in techniques and other aspects of financial analysis and planning (cf. ID/B/140, para. 630). The ninth such workshop was held at Palembang, Indonesia, from 4 to 30 November 1974, and was attended by 31 officials from the Asian region. The objectives of the Palembang workshop were to review modern techniques and methods, to demonstrate their application to specific cases and conditions in developing countries, and to assist the participants in the use of those techniques to improve operational efficiency in their respective fields of endeavour. On the basis of its experience and the teaching materials prepared for the workshops, UNIDO -with the assistance of a

consultant—embarked in 1974 on the preparation of a guidebook on financial analysis and planning for industrial projects for the use of industrial planners and officials of financing institutions in the financial appraisal of their industrial projects.

48. As a follow-up of a survey mission to five African countries on possibilities of mobilizing domestic financial resources for industrial development, and in keeping with the recommendations of the mission, UNIDO held an expert group meeting on the mobilization of domestic financial resources at Vienna on 14 and 15 October 1974. The objectives of the expert group meeting were to discuss the experts' experiences with particular reference to on-going projects and the identification of problem areas in this field. Various ways and means were discussed to improve the mobilization of domestic financial resources and the channelling of these resources into industrial projects and to explore possibilities of co-operation between UNIDO and national as well as international organizations in this field. As a result of the mission, the Government of the United Republic of Tanzania requested UNIDO assistance in transforming its Post Office Savings Bank into the Peoples Savings and Credit Bank with a view to providing the public with a banking institution capable of channelling mobilized savings into the industrial sector in line with the targets set forth in the National Development Plan.

49. Work continued in 1974 on a special report that is to incorporate the training material and case studies prepared for the 1973 training workshop on industrial joint ventures, held in Kuala Lumpur, Malaysia (cf. ID/B/140, para. 631). The final report, originally scheduled for publication in 1974, will go to press in 1975. The second workshop on industrial joint ventures, which was planned to be held for participants from East African countries (cf. ID/B/140, para. 631), had to be postponed to 1975 owing to lack of funds.

50. Advisory and training services were provided to the Industrial Development Bank of the Philippines in 1974 (cf. ID/B/140, para. 632) through two UNIDO experts who, *inter alia*, provided on-the-job training for 96 bankers in industrial banking techniques. The positive results of this project have encouraged UNIDO to try to repeat the exercise on a regular basis in future years if funds become available.

### **Investment promotion machinery in developing countries (32.2.03)**

51. The promotion of investment projects is the responsibility of developing countries themselves, and the role of UNIDO, as in previous years, has been the provision of technical assistance to those countries in establishing and strengthening national and overseas promotion agencies and in training national personnel in techniques of promotion. In 1974, UNIDO organized, at the request of the Government of Egypt, a training and advisory programme on project evaluation and techniques of investment promotion for the benefit of 40 officials from Egypt and 9 from the Sudan (see also section on "Promotion of export-oriented industries").

52. For the benefit of developing countries that are unable to establish and operate their own overseas promotion agencies, UNIDO is seeking the co-operation and support of developed countries in establishing and operating in capital-exporting centres special investment offices to provide common promotional facilities and services. Consultations were held in 1974 with Belgian authorities who had expressed

special interest in this activity for establishing an Overseas Promotion Centre in Brussels; final agreements on the legal and financing aspects are expected to be concluded in 1975. When operational, the Brussels Centre will provide for developing countries needed promotional facilities and services in Belgium and other countries of the European Community. Attempt to establish similar facilities in East European countries will be made after the initial trial period of the Brussels experiment.

### **Promotion of specific industrial projects (32.2.04)**

53. As in previous years, UNIDO continued its efforts in 1974 to introduce promotional elements into various specialized meetings. In 1974, those efforts were focused on three sectoral meetings designed to stimulate the flow of investment from developed to developing countries in specific branches of industry. The meetings were: the symposium on the development of the plastics industries in Latin America (Buenos Aires, 8 to 15 September 1974); the UNIDO/FAO joint meeting to promote investment and industrial co-operation in selected food processing industries (Amsterdam, 21 to 25 October 1974); and the investment promotion meeting and technological consultations on chemical industries in developing countries (Bucharest, 2 to 6 December 1974).

54. As part of the Buenos Aires symposium (see chapter III, section on "Fertilizer, pesticide and petrochemical industries"), UNIDO organized an investment promotion programme to provide opportunities for contacts among representatives so that they could explore possibilities for financial, licensing, technical, managerial and commercial co-operation in specific plastics industries in Latin America and the Caribbean countries.

55. The Amsterdam meeting, which was organized jointly with FAO in co-operation with the Council of the Netherlands Industrial Federations focused attention on a specific industrial sector on the global basis. Nearly 70 participants from 28 countries submitted to the meeting 80 specific project proposals that were discussed in private confidential meetings with 111 representatives of industrial firms or financing institutions from 19 developed countries. Among the participants from developing countries, those from the countries of the African region were predominant. The Amsterdam meeting has proved that the sectoral approach significantly improves the average quality of background information on specific projects. (For further details of this meeting, see chapter VIII, section on "Inter-agency co-operation and co-ordination".)

56. As the vast majority of the industrial projects submitted at the Amsterdam meeting were at the prefeasibility level of formulation, their evolution into firm investments will necessarily take some time. However, information received so far indicates that the Amsterdam meeting effectively performed the catalytic function for which it was designed. By way of example, UNIDO was formally informed by the Government of Swaziland a few days prior to the meeting that it had reached agreement with an investor group for the implementation of a \$65 million sugar mill project which was promoted within the context of the Amsterdam meeting. A number of project sponsors continued negotiations after Amsterdam at the European headquarters of the industrial enterprises and potential investors with whom they had held discussions during the bilateral meetings at Amsterdam. In the few months



since the conclusion of the meeting, UNIDO has received several requests for further technical assistance in evaluating firm offers made by interested investors and for feasibility studies to upgrade the investment potential of some of the projects submitted at Amsterdam. To cite only two examples, an SIS project is now being finalized to provide an expert to revise a feasibility study for a fruit and vegetable processing plant in Mali, taking into account the issues raised during discussions with potential investors at the Amsterdam meeting. Similarly, a fellowship was arranged for an official from Dahomey to investigate and select the necessary equipment for a large citrus fruit processing plant in Dahomey. These examples illustrate the direct link between investment promotion meetings and the generation of technical assistance projects in the field of industry.

57. The Bucharest meeting, which was organized in co-operation with the Joint UNIDO/Romania Centre, had as its ultimate objective the promotion of the establishment of chemical and petrochemical industries in developing countries. To this end, the meeting provided an opportunity for industrialists and investment decision makers from both developing and developed countries to hold technological and economic consultations relating to those industries under the present world economic conditions and to negotiate possible co-operation for the implementation of specific investment projects submitted for promotion by the participating developing countries. The consultations themselves were carried out in plenary sessions attended by about 200 participants, while the project promotion discussions were organized through private bilateral meetings between the project sponsors and potential foreign partners. More than 90 specific chemical projects from 23 developing countries were discussed in about 330 private meetings prescheduled by UNIDO. Many additional project discussions and other business contacts were arranged directly by participants.

58. The project under the portfolio of industrial projects (cf. ID/B/140, para. 616) was redesigned and given a new approach in 1974, in keeping with the UNDP investment follow-up guidelines. The redesigning was done to take into account the increasing need for a continuous and systematic identification of industrial projects, their formulation and promotion, especially with regard to the least developed countries.

### **PROMOTION OF EXPORT-ORIENTED INDUSTRIES (32.3.00)**

59. In 1974, UNIDO continued to promote industrial co-operation as one of the foremost means to stimulate exports from developing countries. In each of the four specific activities being carried out by UNIDO under this programme component, industrial co-operation is a key factor.

60. During 1974, there was a certain change in the orientation of this programme component. Previously UNIDO was largely concerned with direct promotional activities in such areas as international subcontracting and product adaptation and development, but in 1974, though continuing the promotional activities, great emphasis was given to the establishment of machinery in developing countries through which the local industrialists themselves could undertake promotional activities in direct contact with counterpart organizations in the developed countries.

61. In 1974, the total delivery of technical assistance under this programme component was \$427,000 as against \$333,000 in 1973, an increase of 28.2 per cent. The increase in 1974 delivery was due to a number of large-scale projects that was approved in 1973 and became operational in the year under review. The inflow of new technical assistance projects in 1974 amounted to \$1,182,000 which is anticipated to lead to increased technical assistance delivery in 1975.

62. The four specific activities under this programme component are: identification, selection and development of manufacturing industries with export potential; product adaptation and development for export-oriented industries; promotion of international subcontracting arrangements; and industrial free zones and other incentives for export-oriented industries.

**Identification, selection and development of manufacturing industries  
with export potential  
(32.3.01)**

63. In this area, technical assistance projects of UNIDO are generally aimed at offering policy advice on industrial planning to ensure the development of sound export industries. A good example of this type of assistance was the project initiated by UNIDO in 1974 in the Netherlands Antilles. This country urgently needs the creation of new employment opportunities and, with the limited possibilities offered by the local market, considerable stress has to be placed on the development of export-oriented industries. UNIDO therefore started in 1974 to assist the Government in formulating an industrial strategy to attract export-oriented investment and to identify industrial branches with definite export potential.

64. In 1973, UNIDO and the Hungarian Government signed a memorandum of the establishment of a joint UNIDO/Hungarian programme for international co-operation in the instrument, electronic and telecommunication industries for the benefit of the developing countries (cf. ID/B/140, paras. 911-913). Within the framework of this joint programme, preparatory work was carried out in 1974 for the holding of a consultant panel in Hungary in 1975 to: select specific product groups in which the joint programme could achieve maximum results; identify problems confronting developing countries in the fields of management, technology, marketing and financing that hamper the expansion of the specific branches of industry; and develop a plan of action for the joint UNIDO/Hungarian programme. This panel, which represents one of the initial steps in the implementation of the joint UNIDO/Hungarian programme, will consist of manufacturers from developing countries and their Hungarian counterparts, and will be organized in close co-operation with the programme component of engineering industries within the industrial technology programme.

65. Preparatory action on a similar project, to be carried out on a subregional basis, was initiated in 1974 in the South East Asian region. The project provides assistance to the medium and small-scale industry sector and will concentrate on accelerating manufactured exports through businesslike, practical promotional activities fostering international industrial co-operation among producers. It is expected that the project will be implemented in early 1975, utilizing the voluntary contribution offered for this purpose by the Government of Japan.

66. During 1974, UNIDO in association with UNCTAD continued the implementation of the project offering training and advisory services on the Generalized System of Preferences (GSP). In addition, as the GSP offers only limited benefits to the least developed and landlocked countries, preparations were undertaken in 1974 for an orientation programme, to be held in 1975, in industrial programming and planning for the least developed and landlocked countries, with special emphasis on the development of export-oriented industries.

67. During 1974, 18 fellowship projects were implemented; these were divided into 6 fellowships of a general nature, offering training in export development techniques, and 12 specialized fellowships concerned with industrial free zone development.

68. The training programme in the development of industrial exports (cf. ID/B/140, para. 641), was continued in 1974. A training course was sponsored by UNIDO and the Ministry of International Trade and Industry of Japan and implemented in co-operation with the Association of Overseas Technical Scholarship of Japan. Ten participants from the ESCAP region took part in the course, which was held from 28 January to 23 March 1974 in Tokyo. During 1975, the training programme will be continued; to offer a broader insight into export development requirements, greater co-operation with the training programme of the International Trade Centre will be introduced.

#### **Product adaptation and development for export-oriented industries (32.3.02)**

69. This specific activity was established in response to resolution 17 (III) of the Industrial Development Board, in which the Board requested that in promoting export-oriented industries within the developing countries special emphasis be given "to standardization, quality control, product improvement, design, packaging and similar measures, as well as subcontracting and licensing arrangements aimed at improving the market acceptance and competitiveness of industrial products from the developing countries". In 1974, the emphasis in this specific activity was again on the stimulation of direct contacts between manufacturers and importers from developed countries and industrialists from developing countries.

70. The main way in which such contacts are achieved is the organization of product adaptation consultation meetings. Following the 1972 and 1973 consultation meetings in New York and Brussels, respectively (cf. ID/B/140, paras. 642-646), UNIDO organized in Tokyo, from 20 to 29 November 1974, in co-operation with the Japan External Trade Organization (JETRO), a third consultation meeting on product adaptation and development for export-oriented industries. The meeting was attended by 48 manufacturers and government officials from developing countries and about 200 Japanese businessmen. The consultation concentrated on two industrial sectors, sports goods (excluding leather items), and household and office articles. The main purpose of the meeting was to familiarize manufacturers from developing countries with the requirements of the Japanese market as a test market, and to advise them how their products should be adapted, including help in overcoming shortcomings through technical assistance from UNIDO. During 1974, as a result of the New York and Brussels meetings, requests for technical assistance to help solve the identified needs of adaptation have been received from Costa Rica, India, Indonesia, Pakistan, the Philippines and Sri Lanka.

71. A noteworthy feature under this specific activity in 1974 was the strengthening of co-operation between UNIDO and the UNCTAD/GATT International Trade Centre. A number of developing countries requested, within the framework of the country programmes, separate but complementary projects in the field of export marketing and product adaptation. For instance, Pakistan requested assistance from the UNCTAD/GATT International Trade Centre in identifying the requirements of overseas markets for a number of specific products. Following the identification of market requirements, UNIDO will then offer advice at the factory level to upgrade the products to meet the requirements. A similar joint approach is also being undertaken in Kenya and Ethiopia. In addition a number of large-scale regional projects based on the concept of a joint project—namely, export market advice from the International Trade Centre, complemented by product adaptation advice from UNIDO—are being formulated. It is anticipated that the first of these regional projects will be initiated in the ESCAP region in 1975.

72. A new feature of the product adaptation programme in 1974 was the utilization of testing house facilities in selected developed countries. The aim of this new trend in the programme is to enable manufacturers from developing countries, with the assistance of UNIDO, to have their products tested for market acceptability at favourable financial rates. Naturally, such a programme requires considerable preparatory work; in 1974 the preparatory activities of UNIDO were aimed at building up contacts with testing houses in Europe and the United States of America that would be prepared to participate in this programme.

### **Promotion of international subcontracting arrangements (32.3.03)**

73. During 1974, UNIDO continued its international subcontracting programme of channelling subcontracting offers from companies in developed countries to manufacturers in developing countries capable of undertaking international subcontracting activities. The roster of firms in developing countries participating in the international subcontracting programme steadily expanded during 1974 and now includes some 600 firms. Offers were channelled in the following industrial fields: mechanical engineering, electrical and electronic components, clothing industry. At the same time, the programme was expanded to service the ESCAP region (cf. ID/B/140, para. 658) with the appointment of an international subcontracting expert who is located in Japan.

74. For the second consecutive year, the Royal Netherlands Industrial Fair organized an exhibition for subcontracting industries, VAT 74, at Utrecht from 13 to 18 May 1974. UNIDO, in co-operation with the Centre for the Promotion of Imports from Developing Countries (CBI), Netherlands, organized a joint project to assist selected groups of firms and organizations from developing countries to participate in VAT 74. The countries represented in the joint UNIDO/CBI project were: India, Jamaica, Malta, Mexico, Pakistan, Tunisia, Turkey and Zaire as well as the Central American Programme for Export Development.

75. As in 1973 (cf. ID/B/140, paras. 653-657), the developing countries' participation in VAT 74 stimulated considerable interest. More than 200 concrete subcontracting inquiries were received by participants from developing countries in the following fields: automobile components, heavy casting, electronics, sanitary and

plumbing fittings, rubber and synthetic products and woodworking items. Actual orders were placed for such items as lock components, cast iron machine parts and solar water heating components. In view of the practical results achieved by UNIDO's participation in VAT 74 it is planned to continue this type of activity, extending it to specialized subcontracting fairs in other European countries and, to the extent possible, in Japan and the United States of America.

76. In accordance with its policy of setting up subcontracting machinery at the national level, UNIDO has developed a co-ordinated technical assistance programme and has helped some developing countries in exploring possibilities of establishing local international subcontracting promotional centres. Projects of this nature were undertaken, for instance, in Kenya, Malta and Pakistan. In 1975, it is planned to expand this type of assistance in order to enable more developing countries to undertake direct international subcontracting promotional activities.

### **Industrial free zones and other incentives for export-oriented industries (32.3.04)**

77. Requests for assistance in industrial free zones in 1974 were related mainly to planning studies for industrial free zone development. A number of developing countries such as Egypt, Gambia, Ivory Coast, Kenya, Senegal and Sri Lanka requested short-term prefeasibility studies, while other countries including Colombia, Jamaica, Liberia, Syrian Arab Republic, Trinidad and Tobago, asked for full-scale planning studies to determine the viability and costing aspects of establishing an industrial free zone. In undertaking these planning studies, UNIDO is restricted to a certain extent by the lack of available expertise on the establishment of industrial free zones. UNIDO has therefore established a close working relationship with the Shannon Free Airport Development Company Limited (SFADCO) in order to meet the requests of developing countries for advice in this area. Efforts are being made to develop similar relationships with other free zone managements, particularly with those in developing countries.

78. An example of the effectiveness of such a working relationship is the assistance being rendered to the Government of Egypt. In 1971, the Egyptian Government formulated a programme to attract foreign investment and to establish industrial free zones. The programme was examined by a group of free zone experts from SFADCO, recruited by UNIDO. In 1974, the team recommended certain improvements in the legislation to attract overseas investment and also reviewed the location of the proposed free zones which are to be developed in the following order: El Nasr City, Alexandria, Port Said and Suez. In addition, preliminary advice was offered in the organization and investment promotion aspects involved in the development of a successful free zone area, in co-operation with the programme component of industrial financing and investment promotion.

79. Following the first phase of the project, UNIDO organized a training course, held at Cairo, Egypt, from 27 April to 18 May 1974, in project evaluation and techniques of investment promotion. The course was attended by 6 international consultants, 40 Egyptian staff of the Authority for Investment and Free Zones, ministry and bank officials and 9 Sudanese government officials. This course also dealt with the question of the industrial free zones.

80. In the second and main phase of the project, which will be undertaken in 1975, UNIDO will assist by giving advice through subcontracted services from operating free zones, on the construction and initial operations of industrial zones. In short, UNIDO will be closely associated with all phases of the development of the Egyptian industrial free zone programme.

81. UNIDO, aware of the possible dangers of proliferation of industrial free zone areas in developing countries, is organizing a series of regional group meetings on free zone development to acquaint government officials concerned with free zone development of the range of incentives being offered and, to the extent possible, encouraging a co-ordinated policy of free zone development in the specific regions.

82. The first of the regional expert working group meetings was held in Barranquilla, Colombia, from 5 to 11 October 1974; it was organized by UNIDO in co-operation with the Zona Franca Industrial y Comercial de Barranquilla. Attending the meeting were six international consultants and representatives from the following countries in the region: Barbados, Belize, Colombia, Dominican Republic, El Salvador, Guatemala, Haiti, Jamaica, Mexico, Nicaragua, Surinam, Trinidad and Tobago, Uruguay and Venezuela. At the meeting clear guidelines were established to assist developing countries to promote orderly free zone development that would not endanger national interests. The expert working group recommended that UNIDO take appropriate steps towards the consideration of some form of international association of export processing zones.

83. The results achieved by the Barranquilla meeting have encouraged UNIDO to continue this series of meetings in other regions in 1975 and 1976.

84. Experience has shown that a number of developing countries are faced with difficulties in the establishment of industrial free zone areas resulting from insufficient investment capital to establish the zone. UNIDO has therefore established co-operation with the International Bank of Reconstruction and Development to secure funds in certain cases from the Bank to assist in initial development of an industrial free zone. In undertaking projects in this area, UNIDO will take into account the requirements of IBRD in carrying out feasibility studies on industrial free zone development.

### **INDUSTRIAL SURVEYS AND STUDIES (32.4.00)**

85. As explained in the 1973 Annual Report (cf. ID/B/140, para. 671), much of the work carried out by UNIDO under this programme component focuses on the preparation of studies and surveys as well as on the collection of statistical material relevant to the objectives of the Organization. The greater part of the work carried out in 1974 under this component was concerned with the preparations for the Second General Conference of UNIDO. The share of the component in the technical assistance rendered by UNIDO as a whole was relatively small since the major part of the resources available under this component was devoted to research activities. Nevertheless, the volume of technical assistance delivered in 1974 under this component increased by 44.7 per cent over the 1973 figure. In absolute terms, the volume of technical assistance deliveries amounted to \$524,000 in 1974 as compared with \$362,000 in 1973.

86. A major part of the research work carried out under this component in connexion with the Second General Conference was devoted to the preparation and publication of the special issue of the *Industrial Development Survey*. The special issue covered a much wider range of subjects than previous volumes of the *Survey* and dealt with a variety of questions that have direct bearing on the prospects for industrialization in the developing countries. The special issue is the most comprehensive analytical paper that is being submitted to the Second General Conference.

87. Another document prepared under this programme component for submission to the Second General Conference was "Industrialization of the developing countries: basic problems and issues for action". The document, which was prepared on the basis of the issues and problems discussed in the *Survey*, identified the basic problems in the developing countries and reviewed the alternatives and recommendations for action at the country, regional and international levels.

88. The Second General Conference coincides with the mid-term review and appraisal of progress for the Second United Nations Development Decade, and work was undertaken by UNIDO in 1974 on the monitoring and appraisal of progress in the industrial sector in connexion with the International Development Strategy (cf. ID/B/140, para. 671). The special issue of the *Survey* was designed to reflect the contribution of UNIDO to this effort.

89. Contributions were made under this programme component to the preparation of other documentation associated directly or indirectly with the Second General Conference including three joint policy papers submitted to the Conference in co-operation with FAO, ILO and UNCTAD. The three latter papers elaborated on specific areas of interagency co-operation with particular emphasis on the technical assistance needs of developing countries in areas delineated in the study of development problems. The joint FAO/UNIDO paper on the interrelationship between industry and agriculture in the process of development highlighted the more important policy issues relevant to both industry and agriculture in the process of development.

90. During 1974, UNIDO continued to co-operate with ILO in connexion with the ILO World Employment Programme (cf. ID/B/140, para. 685) and participated in preparations for an ILO mission to the Sudan. UNIDO continued to work jointly with ILO on industrial employment promotion in the context of the Regional Employment Programme for Latin America and the Caribbean (PREALC) and of the Asian Regional Project for Employment Promotion (ARTEP). Further, UNIDO took part in the preparatory arrangements for the World Food Conference, held in Rome in November 1974, and prepared a paper for the Preparatory Committee of the Conference. As a follow-up of the Conference, UNIDO prepared a paper on the implications for the activities of UNIDO of the recommendations of the World Food Conference for submission to the Second General Conference of UNIDO.

91. As part of the background documentation prepared for the tenth session of the Committee for Development Planning a paper was prepared on "International co-operation for industrialization: towards a new international division of labour". In this paper some preliminary ideas including discussions on optimal patterns for the transfer of industries, employment generation, human capital formation and income distribution were presented for the consideration of the Committee.

92. In 1974, UNIDO elaborated the proceedings of the expert group meeting on projections of industrial development, held in Vienna in 1973 (cf. ID/B/140, para. 686) with a view to publishing them as guidelines for industrial projection. Within this context, UNIDO commenced preparation in 1974 of a workshop for statisticians from the developing countries for the purpose of disseminating methodological improvements; the workshop is scheduled to be held in 1976.

93. During 1974, the National Planning Institute, Cairo, Egypt, undertook the preparations, jointly with UNIDO, of an Egyptian industrialization survey. The survey was designed to review the state of industrial development at a time when the country was approaching the point of consolidation in its industrialization efforts. The Egyptian industrialization survey was to cover four main aspects: small-scale industry, the structure and organization of the manufacturing sector, export prospects of manufactured goods, and the choice of industrial technology.

94. In 1974, UNIDO began work leading to the preparation of a manual for industrial surveys, which is to include a comprehensive review of industrial survey methods, setting forth the scope and basic principles and techniques for the organization and implementation of national industrial surveys in the developing countries. The manual is intended as a guide to the developing countries in survey methods so they will be able to undertake survey operations independently. The publication of the manual is scheduled for 1976, subject to the availability of resources.

95. In line with increased emphasis on monitoring and appraisal of industrial progress within the Second United Nations Development Decade, UNIDO assisted, in consultation with ECA, in the preparation of a regional project in Africa on the review and appraisal of progress in industry under the International Development Strategy. Another regional project, also prepared by UNIDO in consultation with ECA, entails the establishment of an industrial development team for the least developed and land-locked countries in Africa; the primary aim of the project is to train key government officials responsible for industrial development. Three regional advisers were attached to ECA, ECLA and ESCAP to provide UNIDO with essential economic information about the regions and to advise the countries of the respective regions on the type and nature of relevant data to be collected, the method of data collection, the type of economic analysis required and the development of an appropriate methodology.

96. As UNIDO has no data gathering facilities of its own, it continues to maintain close contact with the United Nations Statistical Office which supplies most of its needs. Nevertheless, UNIDO has continued its efforts towards the collection of data essential for the studies it undertakes and is striving to develop data facilities that are useful to technical assistance operations, to country programming, and to the research programme of UNIDO.

97. During 1974 UNIDO under this programme component continued to provide assistance to a number of on-going projects, namely the Industrial Survey and Promotion Centre (Kenya), the East African Development Bank, the East African Statistical Department in Nairobi, and the industrial unit of the East African Common Market and Economic Affairs Secretariat in Arusha (East African Community).



98. The Kenya project, which is a follow-up of a survey mission carried out in 1969 (ID/B/140, para. 673), has been reorganized in accordance with some of the recommendations made by the local review team in late 1973 (ID/B/140, para. 675). The Centre is now concentrating on sectoral studies and has produced a number of reports that proved useful for investment follow-ups. Although it experienced some shortcomings in the attainment of its objectives, the Centre and its activities are highly regarded by the Government; it is expected that the assistance to the Industrial Survey and Promotion Centre will be extended through 1977.

99. In mid-1974, a UNIDO expert in the field of industrial economics and statistical analysis completed a 12-month assignment with the East African Statistical Department in Nairobi (East African Community) on the harmonization of industrial statistics between the three partner States, Kenya, Uganda and the United Republic of Tanzania. The other East African Community project, the Industrial Unit of the Common Market and Economic Affairs Secretariat in Arusha, has been subject to continuous evaluation and it is anticipated that the project will be revised in the light of the current requirements of the Community.

100. UNIDO assistance to the East African Development Bank (EADB) also continued during 1974. An industrial economist has been assisting the Department of Research, Project Preparation and Promotion since the inception of the project in 1970 (cf. ID/B/140, paras. 676-678). In mid-1974, an industrial engineer/economist assumed his duties with EADB in Kampala. The project activities of this Department are geared to project identification, preparation of feasibility reports and to the promotion of projects in the partner States of the East African Community.

101. In accordance with current procedures, the EADB project was the subject of tripartite review in 1974; it is expected that increased emphasis will be put on the promotion of industrial projects in the East African Community.

102. Following the recommendations of the team that carried out a survey mission to Somalia in 1973 (cf. ID/B/140, paras. 679-680), the Government of Somalia requested UNIDO to provide assistance to its Ministry of Industry in the creation of an industrial development unit. This unit, which is to strengthen the Somali Ministry of Industry, began to be organized in the second half of 1974. The project manager arrived in Somalia in September 1974 and one of the industrial engineers joined the project at year's end. The recruitment of the remaining experts (specialist in industrial management, industrial chemical engineer and industrial economist for marketing) is being initiated. The project includes also 38 man-months consultancies and 96 man-months fellowships.

103. The immediate objectives of the three-year project in Somalia are: to improve the efficiency and profitability of the public sector enterprises under the Ministry of Industry; to strengthen the planning, programming and implementation of industrial development activities in the country; to develop small-scale industries, and to train Somali staff, through their full involvement in all project activities and through fellowships abroad, to undertake project activities upon completion of UNDP/UNIDO assistance.

104. A number of country survey missions were planned for the biennium 1974-1975. One of these missions, to the United Arab Emirates (UAE), was nearly completed by the end of 1974. The terms of reference of the mission included:

**assessment of the economic setting and structure of the UAE and, to the extent possible, determination of the adequacy of this structure to the needs of industrial development; assessment and quantification of the basic materials available to the UAE; identification of the difficulties and problems of, and bottlenecks to, industrial development in the UAE; formulation of an industrial development strategy for the UAE; and assessment of pipeline projects and identification of new industrial opportunities.**

**105. Preparatory work has been initiated for the fielding of similar missions in Ivory Coast, Mauritania and Paraguay in 1975. In addition to these projects, UNIDO has been engaged in the preparation of a number of other new technical assistance activities in this field, including a regional industrial survey of the South Pacific Islands and an industrial survey of the Kagera River Basin (Burundi, Rwanda and United Republic of Tanzania).**

## *Chapter VI*

# **HEADQUARTERS AND FIELD MACHINERY**

## **CENTRAL MANAGEMENT**

1. As explained in the 1973 Annual Report (ID/B/140, para. 687), the UNIDO Secretariat is headed by an Executive Director who has over-all responsibility for the administrative and research activities as well as for the operational activities of the Organization as a whole. In the present chapter, an attempt is made to describe the pertinent developments with regard to machinery that has been set up to assist the Executive Director in discharging his responsibilities.

### **Policy formulation and guidance**

2. As in the past, the policy formulation and guidance provided by the various intergovernmental policy-making organs of UNIDO are translated into substantive programmes and activities at the regular Meetings of Directors of Divisions with the Executive Director. The purpose of these Meetings, several of which were held during the year under review, was explained in detail in the 1973 Annual Report (ID/B/140, para. 688).

### **Planning and programming machinery**

3. The new system of medium-term planning and the biennial cycle of programming and budgeting, adopted by the General Assembly in the late autumn of 1972, represented a first major step towards the achievement of an integrated programme planning and budgeting system. Following an examination and review of the medium-term plan for 1974-1977 and the programme budget for the biennium 1974-1975, the process of formulation has been further developed and refined. In its resolution 3199 (XXVIII), the General Assembly requested the Secretary-General to put special emphasis on the preparation of the medium-term plan for 1976-1979 in order to provide a framework for the biennial programme budgets. In addition, the General Assembly requested the Secretary-General to continue to evaluate the effectiveness of programmes and to redeploy resources where necessary while ensuring a meaningful element of real growth in important programmes.

4. The planning and programming implications of such an undertaking were enormous: the preparation of a medium-term plan, on the basis of which the General Assembly would be able to discuss and decide on priorities, called for a high degree

of harmonization not only among the various programmes within UNIDO but also among the organizations of the United Nations system as a whole, not to mention such bodies as the regional economic commissions.

5. In May 1974, a planning, programming and evaluation section was set up in UNIDO which was to be responsible for studying and proposing action relating to:

The evaluation and assessment of current programmes and activities and their implementation;

The development and formulation of programmes and projects on the basis of the evaluation of past and current programmes, the policy objectives and directives;

The formulation of guidelines and directives for the preparation of the biennial programme and budget and the medium-term plan.

6. The newly established section set about the task of familiarizing the various programmes of UNIDO with the revised instructions for the preparation of the medium-term plan and programme budget. In July 1974, a Programming Task Force, in which all divisions of UNIDO were represented, was established and made responsible for the co-ordination, review and examination in detail of the documentation to be submitted in relation to the biennial programme budget 1976-1977 and the medium-term plan 1976-1979.

7. The Task Force, with the planning, programming and evaluation section serving as its secretariat, started its work by establishing the theme and general guidelines governing the budgetary requirements for the biennium 1974-1975 and subsequent years. Due consideration was given to the expanding operational programmes and other activities arising from priorities set by various intergovernmental policy-making organs.

8. In August 1974, the Task Force was charged with the additional responsibility of developing, in consultation with the divisions, proposals and plans for the integrated and harmonized programming of supporting and operational activities, giving due regard to the interdependence of supporting and operational activities. At this juncture, the Task Force was also entrusted with the elaboration of proposals for improving the quarterly reporting procedures pertaining to both the implementation and forecasts of operational and supporting activities.

9. Thus organized, UNIDO prepared a draft of the medium-term plan 1976-1979 and submitted it to the Budget Division in New York in August 1974. The programme budget 1976-1977 was elaborated in detail and submitted to the Budget Division in early October 1974; thereafter a revised version of the medium-term plan 1976-1979 was prepared in the light of the final instructions and guidelines received from United Nations Headquarters in New York in September 1974, and transmitted to the Budget Division in New York at the end of October 1974.

10. In the course of the budgeting and programming exercise, the Secretariat established the relative weight of each programme and programme component on the basis of the anticipated demand for technical assistance (financed from all sources of funds) from developing countries during the biennium. This analysis, further to reflecting the priorities of the developing countries requesting UNIDO assistance, also enables the Organization to concentrate its resources and ensure a more effective response.

11. This establishment of relative weights among the various programmes and programme components of UNIDO was not a task restricted to the planning, programming and evaluation section alone: it also involved the steering committee, which reviewed periodically the status of implementation of projects under the UNIDO regular programme of technical assistance, the planning level of which is to be increased to \$2 million annually in 1975. Reviewing and following-up on the progress and implementation of projects financed from the UNIDO General Trust Fund is one of the tasks incumbent upon the committee on voluntary contributions (CVC), over and above its basic responsibility of selecting projects to be financed from the voluntary contributions pledged to UNIDO.

12. Further to the UNIDO publications committee, which continued its work in 1974 of reviewing the publications proposed by the various divisions of the Organization so as to ensure that the publications programme of UNIDO is appropriate to the objectives of the Organization, a number of *ad hoc* groups have continued their specific tasks. The *ad hoc* group set up for the follow-up and implementation of Industrial Development Board resolutions 36 (VII) and 37 (VII) pertaining to a programme of co-operation among developing countries and to a programme of action for the least developed among the developing countries initiated, in August 1974, a survey as a first step towards the implementation of a systematic and long-term programme of action. By means of this survey, directed towards the Governments of the developing countries, areas can be identified in which developing countries could offer technical assistance or would need and welcome assistance from other developing countries. Further details of this survey and the envisaged follow-up action are contained in chapter II, section on "Special programmes".

13. One of the most important planning and programming tools of the Secretariat, however, is without doubt the formal periodic review of implementation of the programme of UNIDO which is carried out at the Quarterly Review Meetings, chaired by the Executive Director and attended by Directors and other senior officials of the Organization. In 1974, the system of review was refined still further by the phased introduction of standardized forms for completion by all organizational segments of UNIDO in an attempt to facilitate comparative analysis. Furthermore, the availability of detailed records relating to each industrial project in 1973 permitted the introduction of "indicators" which assisted the meetings to assess whether performance in the various quarters of 1974 was adequate in relation to the target for the whole year.

14. The Quarterly Review Meetings, which were held on 25-26 April, 29-31 July, 5 August, 4 and 11 November 1974, contributed to a greater spirit of participation and co-ordination among the various programmes. The project-by-project review not only permitted the correction of natural discrepancies between figures prepared in the Finance Section and those submitted by the substantive programmes, but it also ensured that evaluation became a continuous process with a high degree of personal involvement on the part of the individual industrial development officers.

15. Another management tool contributed extensively to the effectiveness of the Quarterly Reviews: namely, the cost measurement system, by means of which the Secretariat was able to point up certain constraints upon its current and planned activities—in particular, the inadequacy of the project support costs reimbursed to UNIDO by UNDP (see chapter VII, section on "UNIDO regular budget") as well as the comparatively large percentage of small-scale projects handled by UNIDO.

16. The Quarterly Review Meetings represent a regular synthesis of hard thinking on the Organization's activities, on-going and planned. They permit a meaningful exchange of informed opinion (a plethora of tables and charts are prepared and distributed prior to each meeting) which ineluctably leads to an improvement in the policies and procedures of UNIDO.

### Evaluation

17. The Special Programming Group, established in 1972, and the working group on evaluation of UNIDO activities, established in 1971, were discontinued in May 1974, their roles being adopted by the planning, programming and evaluation section described above.

18. At its eighth session, the Industrial Development Board considered the question of the evaluation of UNIDO activities on the basis of an earlier discussion of this subject by the Permanent Committee at its fourth session (ID/B/143 and Corr.1). However, in the course of the discussions, no conclusion was reached and it was decided to defer consideration of the matter to the fifth session of the Permanent Committee, upon which occasion delegations would be free to bring forward specific proposals for evaluation guidelines, should they wish to do so.

19. In the report which it submitted to the Board at its seventh session, the Group of High-Level Experts on a Long-Range Strategy for UNIDO attached the highest importance to UNIDO developing outstanding competence for assisting the developing countries in the formulation and execution of national industrial policies and strategies; in fact, this represented the essence of the Group's first recommendation (ID/B/133, para. 24).

20. In its report and conclusions, the *Ad Hoc* Committee on Long-Range Strategy for UNIDO stated "that UNIDO should examine, in consultation with UNDP and other agencies, the present concepts and methodologies for the provision of technical assistance, in order to make it sufficiently responsive to the complex nature of industrial development" (ID/B/142, para. 43). The *Ad Hoc* Committee also attached considerable importance to the development by UNIDO of a system of continuous evaluation of its operational activities in the light of the recommendations on industrial strategies and policies, and identified the aims of such evaluation as follows:

- (a) To help improve the effectiveness and relevance of operational activities to the plans and programmes of the country and its development goals;
- (b) To help identify new approaches to project design and selection, with a view to assisting developing countries generally in the achievement of their development goals; and
- (c) To help provide a better basis for necessary adjustments for future programme planning.

21. In accordance with the above conclusion of the *Ad Hoc* Committee, UNDP and UNIDO agreed to undertake a joint evaluation of selected UNIDO projects financed by UNDP. In view of the generally accepted importance of the assistance provided in the field of industrial strategies, programmes and policies, it was decided that the initial evaluation exercise would be restricted to 25 on-going or recently completed projects in that particular field.

22. In the course of this examination, an assessment was made of the extent to which the assistance provided had met the requirements of the developing countries in terms of both policy formulation and implementation. The basic issues covered ranged from the design of the project, the adequacy of desirable prerequisites, the execution of the project, the effectiveness of backstopping, as well as the monitoring, revision and possible re-scheduling of the operation. A summary was also made of each project assessment.

23. Two divisions were concerned with the assessment of the selected projects: the Technical Advisory Division of UNDP and the industrial policies and programming programme of UNIDO (more specifically, the industrial programming component). While UNIDO subjected each project to a close investigation and prepared an initial working draft of the assessment study, UNDP carried out a separate study directed towards the design of the projects as such. These findings were duly exchanged, and a meeting at UNDP headquarters took place in November 1974, at which the results were reviewed and steps were taken to finalize and follow-up the assessment.

24. It is expected that this joint approach and the direct exchange of ideas between the staffs of the two organizations will result in constructive suggestions for future technical assistance activities which could be profitably incorporated in guidelines for the selection and design of operational activities in this specific field, in keeping with the *Ad Hoc* Committee's conclusion on the matter (ID/B/142, para. 27).

### **Co-ordination machinery**

25. Further to the established machinery of meetings and consultations between the Executive Director and the executive heads of other agencies, government representatives, and heads of intergovernmental and non-governmental organizations (see the relevant sections of chapter VIII), the primary responsibility for co-ordinating the work of UNIDO with that of external bodies had previously been entrusted to the co-ordination and external relations section within the Office of the Executive Director. However, in August 1974 a broad reorganization of the Office of the Executive Director took place involving a general redistribution of the major responsibilities within that Office and the discontinuance of the co-ordination and external relations section.

26. The major functions of the Office of the Executive Director fell into three main groups: programming and co-ordination; external relations; and field support.

### **Programming and co-ordination**

27. This function, which includes the work of the planning, programming and evaluation section, is supervised by the Senior Adviser to the Executive Director. The programming aspect of the function includes the preparation of directives and guidelines for UNIDO Headquarters and field activities; the preparation of official documents related to programmes; the preparation of reviews of the implementation of operational and supporting programmes; the conduct of evaluation activities; and the formulation of proposals for the revision of programmes. It also includes the central management and co-ordination of UNIDO participation in meetings to which the Organization or its staff is officially invited. In this regard, particular attention is

paid to the usefulness of participation in UNIDO policies and programmes, and priority is given to strengthening the links between UNIDO and the developing countries.

28. The co-ordination aspect includes the central backstopping and support for UNIDO participation, with the United Nations, the specialized agencies and other organizations of the United Nations system, in the co-ordination and harmonization of programmes and activities. In particular, it includes all activities related to the Administrative Committee on Co-ordination (ACC) and its subsidiary bodies, and bilateral consultations at the Secretariat level with specialized agencies and other organizations of the United Nations system. It also includes the co-ordination of activities between UNIDO and Governments under special programmes of co-operation (with the exception of relations with UNDP), and in respect of the Economic and Social Council and the General Assembly (in so far as their deliberations affect the programmes of UNIDO), the preparation of documents, participation in discussion and follow-up of decisions.

### **External relations**

29. The functions of the Secretariat of the Industrial Development Board remain as heretofore (cf. ID/B/140, para. 709). In addition, however, the Secretariat of the Board was made responsible for external relations with Governments, intergovernmental and non-governmental organizations and National Committees for UNIDO in all matters that are not directly related to operational activities. This includes discussions and exchanges of information relating to the policies and activities of UNIDO in general, as well as the policies and programmes of the Governments concerning industrial development, and to their views and standpoints in the UNIDO and United Nations legislative bodies. Due attention is given to liaison and discussion with the intergovernmental regional groups and their representatives in matters of general import which could stimulate the active interest and support of Governments individually and collectively for the policies and activities of UNIDO.

30. Since relations between UNIDO and Governments include to an ever-increasing degree voluntary financial contributions both directly and through the Annual Pledging Conference of UNIDO, the external relations function specifically covers the development of such extra-budgetary contributions to UNIDO, including contributions in kind and associated resources.

31. In the course of the reorganization, and as part of this specific function, the Protocol and Liaison Officer dealing with the Austrian Government was transferred to the Secretariat of the Industrial Development Board.

32. The Secretariat of the Board is also responsible for drafting the Annual Report of the Executive Director to the Industrial Development Board on the activities of UNIDO.

### **Field support**

33. Field support functions were entrusted to a newly established field support section, since renamed field liaison section, which replaced the previous field support



unit in the technical co-operation division. The field liaison section is responsible for the central management of the Industrial Development Field Advisers, regional industrial development advisers, associate experts and Junior Professional Officers, so as to promote more effective co-operation at the field level as well as to help disseminate information and hold consultations about the policies and activities of UNIDO.

34. The field support function also includes the organization of briefing for the above categories of UNIDO field staff, as well as for the UNDP Resident Representatives and staff of the regional economic commissions on their visits to UNIDO Headquarters. Finally, the function includes the development and co-ordination of joint activities between UNIDO and the regional economic commissions.

35. Co-ordination within the house, particularly with respect to the follow-up and implementation of operational and related supporting activities, is also the concern of the consultative committee for technical co-operation. In the course of the last year, the committee devoted its attention to the adaptation of terminal report procedures to UNIDO requirements and to the co-ordination of the mechanical and logistic aspects of reporting within UNIDO. Other subjects of particular concern were measures designed to expedite and improve operational projects; the suggested measures were then duly referred to the Meetings of the Directors of Divisions.

## **PROGRAMME DELIVERY MACHINERY**

36. As stated in the 1973 Annual Report (ID/B/140, paras. 713-715), the primary components of UNIDO technical assistance activities in the field are expertise, equipment and training. In order to deliver the requested technical assistance to the developing countries, a machinery has been established which is, in effect, UNIDO itself. Not only Headquarters staff, but field staff and the New York Liaison Office are engaged in this delivery. In the following paragraphs, a brief account is given of the work carried out in 1974 under the programme delivery machinery.

### **Experts**

37. As anticipated, the upward trend in the gross input (posts established for recruitment) continued in 1974, a fact that is clearly reflected in the number of experts appointed in 1974 (641) as compared to the corresponding figure for 1973 (503). Thus, in 1974, UNIDO achieved an increase of 27.5 per cent in the number of experts appointed as compared to the number appointed in 1973.

38. It is presently estimated that an average gross monthly input of 110 job descriptions (requests) is necessary to generate a sustained output of 800 appointments per year. This estimate is made on the assumption that the rate of cancellation will remain constant and also taking into consideration the various constraints placed upon recruitment, to which reference was made in the 1973 Annual Report (ID/B/140, paras. 743-744).

39. Considering the number of posts under various phases of recruitment at 31 December 1974 (840), it would appear that the present stock of requests would be sufficient to generate an output of between 350 and 380 appointments in the first half of 1975. If the present upward trend continues, there is no doubt that implementation in the second half of 1975 will be significantly higher than in the first half. Consequently, the total output for the year may very well reach the 800 mark.

40. The problem of cancellation of posts continues to cause great concern to UNIDO. During 1974, the rate of cancellation represented 26 per cent of the gross input; moreover, an internal survey carried out by UNIDO revealed that the highest rate of cancellation occurs during the last phase of recruitment, i.e. once a candidate has been submitted to the Government for approval. The final decision on the execution of a project rests with the Government concerned, but recipient Governments should be more aware of the negative impact of cancellation on the total implementation of technical assistance activities by UNIDO.

41. Throughout 1974, the Secretariat continued its efforts to increase the number of qualified experts from the developing countries; in this connexion, it addressed itself to all Governments represented in the Group of 77 to enlist their assistance in supplying a greater number of suitable candidates for inclusion in the UNIDO computerized roster of experts. It is hoped that as a result of this appeal (which was also voiced by the Executive Director in his report to the Industrial Development Board at its eighth session in 1973) (ID/B/140, paras. 750, 756-760), some tangible progress will be made in this respect.

### **Purchasing and contracting**

42. The work levels in purchasing and contracting experienced sharp rises during 1974 with the combined output (represented by purchase orders and contracts issued) increasing by 100 per cent compared with 1973 value totals. These outputs, measured individually, have increased by 50 per cent for purchasing, and the subcontracting output shows an increase of 194 per cent in value totals.

43. While the year 1974 was one of continuing inflation in both equipment and contracting costs, the physical activity increased markedly with over 900 purchase orders totalling \$3.2 million being issued during the year and 70 new contracts for consultant services being written to a value of \$3.5 million.

44. There is a time lag between the ordering of goods and services and the payment for them; expenditures in 1974 will therefore not fully reflect the increased workload referred to above. Nevertheless, payments made during 1974 show a 36 per cent increase over 1973 totals and represent approximately 22 per cent in value of the total deliveries of technical assistance by UNIDO in terms of actual expenditures for the year 1974.

45. The variety of equipment required for the projects continued to increase, and orders in excess of \$10,000 each have been placed for foundry equipment, automotive workshop equipment, high precision machine tools, packaging equipment, legal metrology and quality testing equipment, food processing equipment, testing equipment for ores, iron and steel, environmental testing equipment and data recording and processing equipment.

46. At the end of 1974 the total value of requisitions under procurement was approximately \$1.5 million, purchase orders valued at \$3.2 million having been issued during that year.

47. Monetary instability and continuing inflation in the industrialized countries caused particular problems in budgeting for projects, as equipment costs rose and exceeded the original estimates. Generally, price validity on purchases shortened, and manufacturers sought to have price adjustment clauses included in their sale conditions.

48. In 1975, renewed attention will be given to the feasibility of bulk purchase of repetitive items in co-ordination with other United Nations agencies; the possibility of further standardization of equipment and procurement through the medium of open-end contract arrangements will also be examined.

49. The type of contracting services provided continued to increase in variety and complexity and included pre-investment and techno-economic feasibility studies, assistance in manufacturing technology, industrial planning and strategy, management and organization, plant rehabilitation, assistance in plant maintenance and repair, the testing and processing of raw materials (minerals, meat, hides and skins etc.), chemicals, planning of an agro-industrial complex, industrial assistance, free trade zones, ship-building repair and maintenance, and various seminars on industrial techniques.

50. The average value of individual contracts increased, consistent with the increased costs of consultant services and type of activity. Major contracts and achievements in 1974 included: commissioning of the UNIDO pilot asbestos plant in Bolivia; contracts with the People's Republic of China, utilizing voluntary contributions to the UNIDO General Trust Fund; a major contract with CITACO (Italy), utilizing voluntary contributions for assistance to Latin American countries in the field of electronics; and a contract with a Japanese firm for the provision of equipment and assistance in the establishment of a pilot plant for the processing of camel and goat hair in Mongolia.

51. During the year, man-month costs charged by consulting firms continued to escalate, and for 1975 it appears likely that such costs will rise to 40 to 50 per cent over 1973 costs.

52. For consultant services the increasing disparity between the original estimates for project costs and the actual implementation costs 2 or 3 years later, together with the general problem of mounting overhead costs for the programme as a whole, are likely to focus more attention in 1975 upon the refinement of internal United Nations procedures for the award of contracts to meet the new conditions in the world market. Improved arrangements for prospective contractors to familiarize themselves with the project areas and their particular problems would lead to more competitively and realistically priced proposals.

### **Field staff**

53. In addition to experts hired by UNIDO, the Organization has staff located in the field, namely Industrial Development Field Advisers, Junior Professional Officers

and regional industrial development advisers. As the regional industrial development advisers are attached to the regional economic commissions, their activities are described in chapter VIII, section on "Regional economic commissions".

54. During 1974, the Industrial Development Field Advisers continued their essential task of advising the authorities of the Governments in the regions they serve and UNDP Resident Representatives on technical co-operation matters, thus ensuring a regular flow of information between Headquarters and the field on project development and promotional purposes in the industrial field. The participation of these Advisers in the planning and formulation of UNDP country and inter-country programmes contributed to strengthening the industrial component in UNDP financed programmes. However, the limited number of posts and the strained capacity of UNDP to appoint Field Advisers nominated by UNIDO according to a reasonable timetable, has hampered the situation.

55. In the course of 1974, 23 Industrial Development Field Advisers (nine in Africa, seven in the Americas, five in Asia and two in the Middle East) were placed in the field, although their actual strength at any one time never exceeded 17.

56. The UNDP representative informed the Industrial Development Board at its eighth session that although the Governing Council of UNDP did not contemplate at present an increase in the number of Industrial Development Field Advisers, the Administrator of UNDP felt that after an examination of the programme with the Executive Director it might be found there was need to strengthen coverage in certain areas. The Executive Director welcomed the preparedness of the UNDP Administrator to request approval from the Governing Council for a limited expansion of the Industrial Development Field Adviser programme.<sup>1</sup> At the same session, the Industrial Development Board adopted resolution 39 (VIII) in which the Executive Director of UNIDO was requested to explore, with interested organizations, States Members of the United Nations or members of the specialized agencies or of the International Atomic Energy Agency, the possibility of obtaining the services of additional experienced and qualified Industrial Development Field Advisers, to be financed from sources other than UNDP, including the regular budget.

57. It may be recalled in this connexion that in the medium-term plan of UNIDO for 1974-1977, which was submitted by the Secretary-General to the General Assembly document in A/9006/Add.1, the possibility was envisaged that the regular budget of UNIDO would eventually assume a share of the cost of a larger number of Field Advisers. The subject has been referred to the Secretary-General for consideration.

58. In keeping with resolution 39 (VIII) of the Industrial Development Board, UNIDO has approached a number of Governments to see whether practical possibilities existed for them to finance Field Advisers from their budget. From the various reactions registered so far, one Government seems to be contemplating an active participation in the programme whereas others indicated that their budgets to

<sup>1</sup> A/9616, paras. 125-126.

the Field Advisers' programme will continue through the financing of a number of Junior Professional Officers (JPOs) to work under the Field Advisers.

59. Support grew throughout the year for the JPO programme. By the end of 1974 donor Governments had agreed to finance 25 posts.

60. In 1974, a meeting of Industrial Development Field Advisers was organized for the first time since the programme went into operation. Financed and hosted by the Belgian Government, this "Information Week", as it was termed, provided the Field Advisers with an unrivalled opportunity to familiarize themselves with the latest economic developments, and to exchange views and experience.

### New York Liaison Office

61. During 1974 there was a considerable increase in the number of United Nations intergovernmental meetings at Headquarters in New York dealing with economic activities of interest to UNIDO. In particular, the sixth special session of the General Assembly, held in April-May, and its follow-up, as well as the preparatory work for the special session of the General Assembly planned for September 1975, increased the intergovernmental and inter-secretariat consultation functions of the UNIDO New York Liaison Office. Consequently, the Office devoted most of its time to the functions involved in attendance and coverage of official meetings which normally take precedence over other activities.

62. A key element in the work of the Office is day-to-day liaison with permanent missions accredited at United Nations Headquarters. Co-operation with UNDP on matters related to the operational programme of UNIDO continued to receive high priority within the available resources. Activities during the period under review also covered policy questions of concern to UNIDO as well as substantive programmes of the different sectors of the United Nations Secretariat in the Headquarters area which have a bearing on matters related to industrialization. To the extent possible, the New York Liaison Office also covered official meetings in Washington, D.C. of the World Bank group, the Inter-American Development Bank and the Organization of American States.

63. The New York Liaison Office provided substantive backstopping for items of direct interest to UNIDO on the agenda of the General Assembly and its subsidiary organs. During the sixth special session of the General Assembly close contact was maintained with the drafting group which produced the Declaration and the Programme of Action on a New International Economic Order. The Liaison Office represented UNIDO at the first and second sessions of the General Assembly *Ad Hoc* Committee on the Special Programme which dealt with the implementation of the Programme of Action proposed at the sixth special session of the General Assembly.

64. Coverage was provided for the seventeenth session of the UNDP Governing Council as well as for its Budgetary and Finance Committee. The Governing Council took up the question of Industrial Development Field Advisers and matters concerning regional programmes of direct interest to UNIDO. Liaison with the UNDP secretariat involved discussions and consultations of more than 100 projects or country programmes.

65. Through the New York Liaison Office, UNIDO also participated in the first, second and third sessions of the UNDP Working Group on Technical Co-operation among Developing Countries. In this regard, the activities of UNIDO were outlined to the Committee in connexion with its consideration of proposals for the development of a programme of technical co-operation among developing countries.

66. The 1974 organizational session of ECOSOC was covered for UNIDO by the Liaison Office and servicing was extended to a number of meetings of the fifty-sixth resumed session of ECOSOC; one of the meetings dealt with the follow-up of the sixth special session of the General Assembly in respect of the emergency supply of fertilizers and pesticides.

67. The New York Office provided representation at the eighth session of the Committee of the Whole of the Economic Commission for Latin America at which it was decided to convene a special Latin American meeting on industrialization in Mexico in November 1974.

68. Representation on behalf of UNIDO was provided at the resumed fifty-seventh session of the ECOSOC and the meetings of its inter-sessional committees which took up matters such as the World Food Conference, establishment of a centre for transnational corporations and the Special Programme of Action decided upon by the General Assembly at its sixth special session.

69. UNIDO was represented at the January 1975 meeting of the Executive Secretaries of the regional economic commissions as well as at related meetings on the United Nations budget and programmes.

70. The New York Office was responsible for the preparatory work and organization of the 1974 United Nations Pledging Conference on UNIDO, which was held at United Nations Headquarters on 22 October. Follow-up action in respect of contributions and other matters connected with the annual Pledging Conference is a continuing concern of the Liaison Office.

71. In the course of 1974, UNIDO was represented at the regular inter-agency meetings held at United Nations Headquarters, as well as at meetings of the substantive subcommittees of the Administrative Committee on Co-ordination. The Liaison Office participated in the October meeting of the Preparatory Committee of the seventy-eighth session of the ACC. The fall meetings of the Inter-Agency Consultative Board of the UNDP and the Environmental Co-ordination Board were also covered.

72. UNIDO was represented at the first session of the Preparatory Committee of the World Food Conference. The Committee was informed of functions and activities of UNIDO that were relevant to the World Food Conference and an outline was presented of proposals for the contribution of UNIDO to the Conference. The viewpoints of UNIDO were also presented at the Agro-Industrial Consultation for the World Food Conference organized by the FAO in Toronto in September 1974.

73. The UNIDO Documentation Centre of the New York Office continued to be the main source and depository of UNIDO publications at United Nations Headquarters. The Centre provided UNIDO documents to members of the Permanent Missions accredited at United Nations Headquarters and serviced the requirements of

the international organizations in the North American area, manufacturing industry, technical specialists, universities and research institutions in respect of UNIDO technical publications.

74. Distribution of information material on the activities of UNIDO was undertaken in co-operation with the Office of Public Information of the United Nations, especially the Centre for Economic and Social Information (CESI). Activities in the area of public information also included group briefings, such as trainees of the World Bank and other international programmes, as well as lectures and presentations at seminars and meetings organized by other institutions, such as universities, engineering societies and industry associations.

75. Efforts were continued to enlarge contacts with professional associations and technical periodicals in different branches of industry leading to the mutual exchange of publications and information. Studies, documents and publications from United States and Canadian sources were obtained to meet requirements of the technical and professional staff at UNIDO Headquarters.

76. Special attention was given to all matters requiring appropriate reference to the activities of UNIDO within the broad policy responsibilities of the Secretary-General's Office. Liaison was maintained with the Office of the Under-Secretary-General for Inter-agency Affairs, including participation on behalf of UNIDO in activities carried out at United Nations Headquarters concerning co-ordination of programmes of work within the United Nations system as a whole.

77. Arrangements were undertaken with the United Nations Statistical Office for the compilation of detailed industrial data for different countries and regions to service the needs of various units at UNIDO Headquarters. Computer printouts and monthly statistical series were forwarded on a continuing basis to the user units at UNIDO Headquarters.

78. An important area of special support of UNIDO Headquarters activities in 1974 was the industrial investment promotion programme. The New York Office assisted in the dissemination of the relevant information and encouraged participation by United States and Canadian industrial companies in the Third Asian Meeting to promote industrial projects, the meeting to promote investment and co-operation in selected food industries, held in Amsterdam, and the investment promotion meeting and technological consultations on chemical industries in developing countries, held in Bucharest.

#### **Headquarters staff**

79. Out of 1,028 staff members serving at UNIDO Headquarters on 31 December 1974, approximately 35 per cent were in the Professional and higher categories, most of them occupying posts subject to geographical distribution.

80. The following table provides a breakdown of the number of staff members in each category, with comparative figures for 1972 and 1973. The figures reflect a net increase of approximately 0.7 per cent in staff strength at the end of 1974 compared to 1973 and of approximately 10 per cent compared to 1972.

*Comparative staffing situation, 1972 to 1974*

	1972 31 December	1973 31 December	1974 31 December
P-5 and above	73	78	80
P-1 through P-4	231	256	254
Field Service Officers	8	8	7
General Service staff	508	555	566
Manual Workers	117	124	121
	<hr/> 937	<hr/> 1,021	<hr/> 1,028

*Note:* The above figures include the 5 Interregional Advisers and 3 Special Technical Advisers attached to UNIDO Headquarters. They do not include short-term staff or the Industrial Development Field Advisers.

81. On 31 December 1974, UNIDO had 341 staff members in the Professional<sup>2</sup> and higher categories, including 320 charged against Regular Budget posts (i.e. the totality of such posts), 14 against overhead posts and 7 against other extrabudgetary posts. In addition to the 341 staff members referred to above, UNIDO had 20 staff members on short-term appointments. Of these, 2 were holding appointments in process of being regularized while the remaining 18 had non-renewable appointments. During the year, there were 37 new long-term appointments in the Professional and higher categories while 38 staff members were separated from service.

82. Of the 334 posts occupied by regular appointees at the Professional and higher levels, 278 were subject to geographical distribution. A breakdown of these posts, by region and nationality, appears in appendix I. As pointed out in the 1973 Annual Report (ID/B/140, para. 736), the Professional and higher level staff members assigned to UNIDO are appointed by the Secretary-General of the United Nations and not by UNIDO itself. The Secretary-General, in turn, is subject to over-all guidelines on geographical distribution affecting the United Nations Secretariat as a whole that are established by the General Assembly. Any action towards enabling UNIDO to appoint its own Professional staff would seem to depend on the settlement of the question of greater autonomy for UNIDO in administrative matters, a question raised in decision II (VII) of the Industrial Development Board.

83. Short-term expertise to supplement that internally available was provided, as in previous years, through the *ad hoc* use of outside experts and consultants with whom a total of 207 special service agreements were concluded in the course of the year. The special service agreements cost a total of \$482,455 out of an over-all allocation of \$631,600, of which \$420,000 was from the regular budget. For the most part, the special service agreements were for technical consultations at UNIDO Headquarters, the preparation of technical papers and reports envisaged in the work programme and participation of consultants in UNIDO expert group meetings and seminars.

84. In 1974, UNIDO continued to encourage career development training of its staff. During the year, two seminars/workshops were held, one in management information systems and the other in management decision-making. The majority of participants in the seminars were UNIDO staff at level P-4 and above, but several

<sup>2</sup> Including seven Field Service Officers.



senior staff of the IAEA were invited to participate. In addition, six senior UNIDO officers participated in a one-week joint UN/UNESCO advanced management seminar held at the UNESCO training centre.

85. Most of the skills' training is conducted on the job by supervisors, but some special skills' training courses are sponsored by UNIDO. In 1974, for example, a drafting seminar for Professional staff members was conducted by the staff of UNIDO Conference Services. UNIDO also provided off-duty training to improve English shorthand skills. In addition to the above-mentioned courses, some 20 staff members attended outside courses on electronic data processing to supplement the training they had received from the administrative management section of UNIDO.

86. Utilizing its own limited financial resources and the United Nations Professional Studies Programme, UNIDO sponsored several individual study projects of staff members. This type of training was to improve specific skills and/or professional knowledge in fields where there was an insufficient number of staff involved to warrant presenting courses at UNIDO.

87. During 1974, UNIDO continued its language training programme with the objective of improving the linguistic balance in the Secretariat as well as of enabling the staff to deal with the increasing number of projects requiring a knowledge of a second or third United Nations language. The off-duty language training programme continued at approximately the same level as in 1973; courses were given in English, French, Russian, Spanish and German. Nearly 400 students, mostly UNIDO staff members, were enrolled in each of the semesters; a few adult dependents of UNIDO staff, members of missions and IAEA staff members were also included on a space available basis. A number of staff participated in intensive language courses in France, Spain and the United Kingdom, combining annual and study leave to increase their proficiency of a working language important to their current assignment.

#### **Reimbursement of value-added tax**

88. In 1972, the Austrian Government legislated a new value-added tax (VAT) system, which entered into force on 1 January 1973, whereby all purchases made in Austria are subject to a tax of 8 or 16 per cent, depending upon the item. In line with the general exemption of UNIDO from taxation provided for in Section 16 of the Agreement between the United Nations and the Republic of Austria regarding the Headquarters of UNIDO, the Organization negotiated an agreement with the Government concerning the new VAT system. The Government agreed to reimburse UNIDO the tax on almost all goods delivered or services rendered to UNIDO having a net value, excluding the VAT, of ASI,000 or more. The agreement entered into force on 1 February 1975 and will be applied retroactively to purchases made and services rendered after 31 December 1972.

#### **Documentation**

89. In compliance with the decision of the General Assembly and the recommendation of the Secretary-General on the control and limitation of documentation, UNIDO achieved a saving in excess of the 37.9 per cent requested in

the total number of pages submitted for reproduction as compared to the 1970 level. This result was obtained although requests for document services increased substantially during the past year. The total output of documentation, forms and stationery produced internally or through the joint reproduction arrangements with the IAEA amounted to 53.8 million page units.

### **Physical facilities**

90. In its continuing efforts to accommodate UNIDO, the host country provided an additional 1,006 m<sup>2</sup> gross for office and storage space in a building convenient to the Lerchenfelderstrasse complex. At the end of 1974, the temporary headquarters of UNIDO were in 10 separate buildings, which were either wholly or partially assigned to UNIDO, with a total area of 29,912 m<sup>2</sup> gross. Another building, to be shared equally with the IAEA, is scheduled for occupancy early in 1975. Regrettably, but perhaps unavoidably, the building's location will contribute to the further dispersal of accommodations with a consequent increase in expenses.

91. At the site of the permanent Headquarters of UNIDO and the IAEA at the Donaupark, the dramatic rise of the various structural elements presents an impressive skyline. All of the seven buildings of the two organizations are in various phases of construction. By the end of 1974, the foundations of both organizations' office and conference buildings had been completed and those of the common services buildings were more than half completed. Additionally, shell construction of the staircase towers and concrete elements for utility services in the organizations' four administration buildings were 90 per cent completed while similar facilities in the conference building were 80 per cent completed. The construction deadlines are being met and occupancy by the organizations is still scheduled for late 1978.

92. Without detailing the problems which beset the Government in this major project, the unceasing efforts of Headquarters of International Organizations and Conference Centre Vienna<sup>3</sup> officials, their associates, consultants and construction consortiums call for unreserved appreciation and admiration.

### **PREPARATIONS FOR THE SECOND GENERAL CONFERENCE OF UNIDO**

93. The year 1974 saw considerable efforts by UNIDO in preparation for the Second General Conference of UNIDO, to be held at Lima, Peru, from 12 to 26 March 1975.

94. The Second General Conference of UNIDO, which is a world conference on industrialization, is one of a series of global conferences organized by the United Nations to consider development problems in the global context, in order to evolve a broad set of strategies to guide the economic future of all nations and establish the principles of co-operation among them.

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<sup>3</sup> The government-established company responsible for the realization of this project.

95. The adoption, on 1 May 1974, by the General Assembly at its sixth special session of the Declaration and Programme of Action on the Establishment of a New International Economic Order formalized a set of rules and principles of economic and social development relevant to all countries. A key role in this context is played by industry, for industrialization has often been termed a centre-piece in the development process. The international machinery for co-operation in accelerating efforts to deal with the complex problems connected with the achievement of the goal of substantially higher participation of the developing countries in world industrial production has thus been set in motion.

96. As mentioned earlier,<sup>4</sup> the General Assembly at its twenty-ninth session adopted on 14 December 1974 resolution 3306 (XXIX) on the Second General Conference of UNIDO. In the resolution, the General Assembly agreed that a fundamental objective of the Conference was to contribute to the establishment of a new international economic order through the adoption of an international declaration and the definition of a plan of action to lay down guidelines for a renewed and strengthened co-operation for the promotion of industrial development of the developing countries. The General Assembly considered that the Plan of Action should include concrete measures to assist developing countries in increasing significantly their industrial development as well as in establishing measures in support of international industrial co-operation, including schemes of concerted action among member States; defining quantitative targets to achieve the goal of substantially higher participation of the developing countries in world industrial production; and establishing appropriate machinery for their implementation. In this context, special attention is to be given to the least developed among the developing countries. The General Assembly also urged the Conference, on the basis of the Plan of Action, to decide on measures necessary to strengthen UNIDO to enable it to develop into an effective institutional framework, so that it could expand its activities in a manner consistent with the requirements of the developing countries and with the role of their industrialization within a new international economic order.

97. During the year under review, three sessions of the Intergovernmental Preparatory Committee were held in Vienna. The Secretariat serviced these sessions and, under the guidance of the Committee, prepared the background documentation necessary to the work of the Committee. It also provided a preliminary note for the preparation of a plan of action on industrialization (ID/B/C.3/27 and Corr.1). To enable the Preparatory Committee to fulfil its mandate in keeping with General Assembly resolution 2952 (XXVII), paragraph 4 (c), which directed the Permanent Committee to discuss and formulate draft proposals and recommendations for consideration by the Conference, the Executive Director of UNIDO wrote in June 1974 to Governments and requested their views and comments with respect to the conclusions and recommendations of the Second General Conference. The replies were fully documented and transmitted to the Conference in documents ID/CONF.3/8 and Add.1 and Corr.1. The report of the Preparatory Committee on the work of its five sessions was transmitted to the Conference in document ID/CONF.3/18.

98. Throughout the year UNIDO engaged in numerous consultations with Governments, regional groups and other international organizations in preparation

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<sup>4</sup> See chapter 1, section on "General Assembly".

for the Conference. The Secretariat participated actively, in co-operation with the regional economic commissions concerned, in the preparation and holding of meetings at the ministerial level in the various regions. The Follow-up Committee on Industrialization in Africa, established in December 1973 by the Second Conference of African Ministers of Industry to review progress in the implementation of the programme of action outlined in the Declaration on Industrialization in Africa, held its first meeting in Addis Ababa on 23 and 24 September 1974. The Committee elaborated on the Plan of Action set out in the Cairo Declaration of December 1973, in the light of more recent developments.

99. An expert group meeting, organized by ESCAP, was held in Bangkok, from 17 to 19 September 1974, in preparation for the meeting for Asia and the Pacific region. The meeting was held at ministerial level in two stages: the first stage (28 to 30 October) for the developing countries of the ESCAP region, and the second (31 October to 4 November) for the full membership of ESCAP. The meeting adopted a Declaration on Industrialization in Asia and the Pacific region--Principles and Programmes of Action.

100. From 30 September to 2 October, a Latin American Expert Group, organized by ECLA, met in Buenos Aires in preparation for the Latin American Industrialization Conference which was held at ministerial level, in Mexico City, from 25 to 29 November. The Conference adopted a Declaration on Industrialization in Latin America: Principles and Plan of Action.

101. The Third Conference on Industrial Development for Arab States, which met in Tripoli, Libyan Arab Republic, 7 to 14 April 1974, reviewed the position of the Arab countries and adopted a Declaration to be submitted to the Second General Conference of UNIDO.

102. The UNIDO Secretariat was also represented at the Ministerial Meeting of the Group of 77 held at Vienna from 5 to 11 December 1974 as well as at the Ministerial Conference of the Group of 77 held at Algiers from 15 to 18 February 1975. Both of these meetings were devoted to preparations for the Second General Conference.

103. Furthermore, contacts were maintained throughout the year with other regional groupings, such as the European Community (EC), and the Council for Mutual Economic Assistance (CMEA). A paper was prepared by the latter organization for presentation to the Second General Conference on the experience in co-operation by CMEA member countries in the field of industrial development and the influence of this development on the expansion of economic relations with other countries.

104. In September 1974, formal invitations to attend the Second General Conference of UNIDO were sent by the Executive Director to all Governments eligible for membership in the Industrial Development Board, to intergovernmental organizations and to international non-governmental organizations enjoying consultative status with UNIDO. Subsequently, the Secretariat sent to Governments a number of documents relevant to the Conference. These documents included the statement of the Executive Director to the Economic Committee of the fifty-seventh session of ECOSOC and the report of the Committee for Development Planning on

the work of its tenth session,<sup>5</sup> which was primarily devoted to an examination of the principal aspects of industrialization in developing countries and the basic issues involved.

105. Among the documents distributed to Governments in preparation for the Conference was the report of the Expert Group Meeting on International Industrial Co-operation which had been sponsored by UNIDO in co-operation with the Government of France and the Maison des sciences de l'homme and held in Paris on 21 and 22 June 1974. The participants, experts from developed and developing countries with different socio-economic systems, focused their attention on the concepts of a new international division of labour related to industry and a new international economic structure. They attached particular importance to the need for a plan of action, a consensus of all the Governments attending the Second General Conference. It was felt that the plan could be implemented through a system of intergovernmental consultations, initially on a global basis, covering the entire industrial system, and subsequently through consultations at the sectoral level.

106. Close co-operation was also maintained by UNIDO with international organizations and agencies throughout 1974 in preparation for the Conference. For example, in keeping with General Assembly resolution 3087 (XXVIII), in particular paragraph 4, the documentation submitted to the Economic and Social Council at its fifty-seventh session, held in Geneva from 3 July to 2 August 1974, included the report of the Intergovernmental Preparatory Committee and the report of the Executive Director of UNIDO on the progress of the preparatory work for the Second General Conference. Subsequently, in resolution 1909 (LVII), the Council took note of the preparatory work carried out hitherto by the Industrial Development Board and by the Permanent Committee in their capacity as the Intergovernmental Preparatory Committee for the Second General Conference of UNIDO, and recommended, *inter alia*, that the Conference formulate a comprehensive strategy to assist in accelerating the industrialization of the developing countries.

107. Furthermore, in view of the fact that specific aspects of industrialization in developing countries were to be dealt with at the Second General Conference, such as employment, trade, food and agriculture, UNIDO maintained close contact with the specialized agencies in preparations for the Conference. Following consultations between senior officials of UNIDO, UNCTAD, FAO and ILO, a number of joint papers were prepared for submission to the Conference, in accordance with the directions of the Intergovernmental Preparatory Committee.

108. The United Nations Advisory Committee on the Application of Science and Technology to Development (ACAST) also accepted an invitation to contribute a paper to the Conference. The paper took the form of a statement adopted at the twentieth session of ACAST held from 21 October to 1 November 1974.

109. Conference papers were also prepared concerning the implications for the activities of UNIDO of the recommendations of the United Nations World Food and World Population Conferences.

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<sup>5</sup> For further details of the tenth session of the Committee for Development Planning, see chapter I, section on "Economic and Social Council".

110. The preparatory work carried out within the UNIDO Secretariat itself was directed and co-ordinated by a steering committee. The bulk of the documentation prepared by the Secretariat for the Conference was formulated by UNIDO staff within the programme of industrial policies and programming; work in this connexion is described in more detail in chapter V.

111. UNIDO Conference Services remained in close contact with the General Co-ordinator of the Second General Conference of UNIDO, appointed by the Peruvian Government, in connexion with the physical facilities for the Conference.

## *Chapter VII*

# **SOURCES OF FINANCE**

1. The six sources from which UNIDO derives its finance are: the United Nations Regular Budget (RB); the United Nations Regular Programme of Technical Assistance (RP); the United Nations Development Programme (UNDP); the Special Industrial Services (SIS) programme; the UNIDO General Trust Fund (GTF); and Special-Purpose Trust Funds, formerly known as Funds-in-Trust (FiT). The characteristics of these sources of funds and their particular programmes, especially in relation to the activities of UNIDO, have been described extensively in the 1973 Annual Report (cf. ID/B/140, paras. 775-841). In the following paragraphs, a report is given on the development and utilization of the financial resources during the year 1974. In addition, a brief summary is provided of the situation with regard to overhead funds.

## **UNIDO REGULAR BUDGET**

2. In resolution 3043 (XXVII) of 19 December 1972, the General Assembly decided to introduce, on an experimental basis, a new system of medium-term (four-year) planning and a biennial cycle of programme budgeting for the United Nations beginning 1 January 1974. Accordingly, UNIDO prepared in 1972 its medium-term plan for the years 1974-1977 and its programme budget for the years 1974-1975 which, after endorsement by the Industrial Development Board at its seventh session and review by the Advisory Committee on Administrative and Budgetary Questions (ACABQ), were considered by the General Assembly at its twenty-eighth session. The General Assembly, in resolution 3195 (XXVIII) of 18 December 1973, approved appropriations amounting to \$30,798,000 for 1974-1975 (based on an exchange rate of AS21.00 per US dollar). Since January 1974 the official United Nations operational rate of exchange has always been below the assumed rate, falling to AS17.90 in November 1974. The UNIDO regular budget therefore incurred a serious deficit in 1974 which was attributable not only to the devaluation of the dollar but also to the high rate of inflation. In September 1974, UNIDO submitted a progress report to the Secretary-General together with a request for supplementary appropriations of \$2,846,000 for 1974 and \$3,613,000 for 1975, details for which are given below.

	\$U.S.
<b>1974</b>	
1. Inflation	997,000
2. Rates of exchange	1,276,000
3. Additional classes of post adjustment due to (1) and (2) above	573,000
	<u>2,846,000</u>
<b>1975</b>	
1. Inflation	849,000
2. Rates of exchange	1,553,000
3. Additional classes of post adjustment due to (1) and (2) above	1,211,000
	<u>3,613,000</u>

3. In the Progress Report of the Secretary-General on the Programme Budget for the Biennium 1974-1975<sup>1</sup> to the General Assembly, however, the proposed supplementary appropriations for UNIDO amounted to only \$5,400,000 for the biennium 1974-1975 (\$2,660,000 for the dollar devaluation and \$2,740,000 for inflation). These appropriations would still leave UNIDO with a deficit of \$1,059,000, which would have to be absorbed within the total UNIDO budget by serious economy measures, programme curtailment, and redeployment of resources.

4. A detailed breakdown of the expenses incurred by UNIDO under the regular budget of the United Nations will be found in the Financial Report and Accounts for the year ended 31 December 1974 and the Report of the Board of Auditors, both of which will be submitted to the General Assembly at its thirtieth session. A general breakdown of the 1974 expenditures under the regular budget as well as estimated expenditures for 1975 to 1977 are to be found in table 5 of the statistical annex.

5. Some guidelines for the preparation of the 1976-1979 medium-term plan and 1976-1977 programme budget were given by the General Assembly in resolution 3199 (XXVIII) of 18 December 1973 on formulation, review and approval of programmes and budgets. In this resolution, the General Assembly requested, *inter alia*, ECOSOC to indicate clearly the order of priorities in the economic, social and human rights field to be reflected by the Secretary-General in his proposed 1976-1979 medium-term plan and 1976-1977 programme budget. In the same resolution, the General Assembly requested the Secretary-General, when preparing the medium-term plan for 1976-1979 and related programme budgets, to continue to evaluate the effectiveness of programmes, redeploying resources where necessary, and to ensure that there was a meaningful element of real growth in important programmes.

6. The Industrial Development Board, at its eighth session, considered a note by the Executive Director on "Guidelines for the Preparation of the Biennial Programme and Budget 1976-1977 and Medium-Term Plan 1976-1979".<sup>2</sup> It was the general opinion of the Board that the recommendations of the Group of High-Level Experts

<sup>1</sup> A/9606.

<sup>2</sup> ID/B/C.3/22.



on a Long-Range Strategy for UNIDO and the conclusions thereon by the *Ad Hoc* Committee could provide the Secretary-General and the Executive Director with guidelines on objectives and priorities needed for the formulation of the programme budget for 1976-1977 and the medium-term plan for 1976-1979. This opinion found expression in resolution 42 (VIII) adopted by the Board on 13 May 1974. In addition, ECOSOC, in its resolution 1909 (LVII) of 2 August 1974, recommended that "necessary steps be taken to improve the delivery capacity of the United Nations Industrial Development Organization's operational activities, including the question of an increased allocation of the necessary resources to that Organization".

7. In the light of the recommendations by the Industrial Development Board and ECOSOC, UNIDO formulated its draft programme budget on the assumption of an annual real growth rate of 3 per cent and, in accordance with the guidelines of the Secretary-General, at an assumed exchange rate of AS18.50 per US dollar in 1976 and 1977 and a projected rate of inflation of 9 per cent in 1976 and 8 per cent in 1977. The draft budget so prepared called for an estimated expenditure of \$45,173,000 for the biennium 1976-1977, representing an increase of \$14,375,000 or 46.9 per cent over the initial appropriations approved for 1974-1975, an increase that can be broken down as follows:

	\$U.S.	Percentage
Maintaining 1974-1975 levels at 1976-1977 rates including increases due to realignment of currencies	12,143,000	39.7
Increases due to non-recurring and/or unavoidable expenditures	126,000	0.4
Real growth rate	2,106,000	6.8
	<u>14,375,000</u>	<u>46.9</u>

8. After review by the Secretary-General, the proposed 1976-1977 programme budget of UNIDO will be submitted to the Industrial Development Board at its ninth session for comments and endorsement and will then be incorporated in the Secretary-General's initial programme budget for the United Nations as a whole. The proposals, together with the comments of the Industrial Development Board, will be submitted to the ACABQ in June 1975. Following a detailed review by the ACABQ, the programme budget and the recommendations of the ACABQ will then be presented to the General Assembly at its thirtieth session late in 1975.

9. Similarly, UNIDO prepared a first draft of its medium-term plan for the period 1976-1979 which, at the date of publication of the present report, is still under review at United Nations Headquarters. In due course, the Secretary-General will put forward his proposals for the medium-term plan, which will be subject to the same review procedures as those for the programme budget described above.

## OVERHEAD FUNDS

10. The already critical situation of overhead funds reported in 1973 (cf. ID/B/140, paras. 784-785) has continued to deteriorate in 1974, resulting in a

deficit of approximately \$625,000 by the end of 1974.<sup>3</sup> This deficit is due not only to a lower level of delivery of technical co-operation assistance than originally envisaged but also to higher staff costs attributable to inflationary and currency factors.

11. Even if UNIDO applied the most stringent economy measures, aiming at maximizing cost benefit/ratios through increased productivity and rationalization, it would still not be in a position to make up such a large deficit by the end of 1975 unless the measures were to be accompanied by a substantial reduction in staff which would lead to an unacceptable decline in technical assistance delivery. In view of this dilemma, UNIDO approached UNDP for an extension of the repayment period from 1975 to the end of 1977 over which it could repay its 1974 deficit. As an exceptional measure, UNDP agreed to this request with the proviso that all efforts be made to keep overhead expenditures in 1975, and subsequent years, in line with the overhead income.

12. A thorough cost measurement analysis for all executing agencies was conducted, under the auspices of the Consultative Committee on Administrative Questions (CCAQ), in 1973 and continued in 1974. This analysis revealed that the programme support costs incurred by UNIDO for the execution of UNDP-financed projects in 1973 amounted to 31.2 per cent of the project budgets. It will be recalled that UNDP reimbursement of overhead costs amounts to only 13 per cent of project costs (cf. ID/B/140, para. 780). Expressed in actual figures, UNIDO receives only \$130 as overhead for every \$1,000 project delivery and has to finance the balance of \$182 from its regular budget. Consequently, any increase in UNDP projects executed by UNIDO means a greater drain on the regular budget of the Organization. In 1973, the total amount borne by the regular budget for overhead costs was \$2.9 million and is estimated to come to \$3.5 million in 1974. (The figures mentioned above do not take account of projects executed by UNIDO under Special-Purpose Trust Fund arrangements for which the overhead situation is even worse.)

13. The average of programme support costs for 1973 for all the organizations participating in the Cost Measurement System amounted to 23.2 per cent of project costs, with UNIDO having the highest percentage and FAO the lowest (i.e. 19.3 per cent). The analysis shows clearly that there is an inverse correlation between programme support costs and project costs and duration; indeed, UNIDO was at the bottom of the scale among all executing agencies with regard to the average monetary value and the average duration of its UNDP projects while FAO ranged top.

14. Although these facts were known to the Governing Council of UNDP at its eighth session in June 1974, the Council did not agree to increase the reimbursement for programme support costs (also known as overheads) over the current 13 per cent. However, at its nineteenth session, in January 1975, the Governing Council approved an increase in the rate of reimbursement of programme support costs from 13 to 14 per cent, i.e. 2 per cent for project formulation and 12 per cent for non-technical backstopping, retroactive to 1 January 1974. Furthermore, UNDP has already agreed to change the accounting procedures to the effect that programme support costs will

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<sup>3</sup>The figure of \$625,000 is based on the assumption that UNIDO will recover a claim of \$152,000 for uncollected SIS overheads from previous years. Should this claim not be recovered, the deficit will increase correspondingly.

be computed on actual costs instead of standard costs. These measures will result only in marginal increases in the income accruing to UNIDO from January 1975 onwards and will not resolve the fundamental financial difficulties facing the Organization. As a matter of fact, assuming that UNIDO can reach its respective targets for technical assistance delivery in 1975, 1976 and 1977, with overhead resources no greater than in 1974 when its total delivery amounted to \$23.9 million, UNIDO will accrue a cumulative deficit of some \$5 million by the end of 1977.

### **SPECIAL INDUSTRIAL SERVICES PROGRAMME<sup>4</sup>**

15. The programme of Special Industrial Services was established in 1966 in order to meet, through flexible procedures, urgent and special industrial needs that do not lend themselves to long-term planning. Under the IPF Programme Reserve (cf. ID/B/140, para. 788), up to \$3.5 million per annum are provided for activities under the SIS programme with the provision that at least \$1 million of this amount is utilized in the least developed countries. Projects submitted for SIS financing within the Programme Reserve are evaluated and approved jointly by UNIDO and UNDP.

16. Additionally, UNIDO administers a small residue of the Trust Fund comprised of the voluntary contributions from which the SIS programme was initially financed (cf. ID/B/140, para. 788).

17. Thus, it may be appropriate to consider activities financed under the SIS Programme Reserve and those under the Trust Fund separately, even though their intrinsic characteristics are basically the same.

#### **SIS Programme Reserve**

18. The introduction of new Guidelines and Procedures for this part of the SIS programme in the second half of 1972 produced some ambiguities in the field in 1973. In an attempt to resolve the difficulties and to ensure the forward momentum of the SIS programme, UNIDO and UNDP agreed in May 1974 to an amendment in which, *inter alia*, cognizance was taken that, in view of the nature of this programme and of past experience, the programming level in any one year should be two and a half to three times the authorized level of expenditure. The Administrator of UNDP further undertook to seek the approval of the UNDP Governing Council to carry over the unspent balance of one year to the next year in order to facilitate full utilization of available funds as well as to delegate to the Resident Representatives his responsibility in formulating, appraising and approving SIS projects.

19. UNDP has also been requested to amend certain previous instructions, under which all SIS expenditures in the least developed countries were made chargeable to their shares in UNDP's Special Measures Fund. If amended, such a measure would be helpful in arresting the decline in the number of requests received from these countries for SIS assistance in 1974.

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<sup>4</sup>For detailed financial data on the SIS programme, see tables 2 (D.I-D.III) and 3 (D) in the statistical annex.

20. The type of activities carried out in 1974 under the SIS Programme Reserve were similar to those of previous years inasmuch as they were concentrated mainly on post-feasibility stages of projects, improvement and rehabilitation of industrial plans and enterprises as well as on exploitation of local resources. In terms of expenditure, light industries accounted for the largest share in the SIS Programme Reserve during 1974, followed by engineering industries; chemical, pharmaceutical and pulp and paper industries; building materials industries; industrial construction; fertilizer, pesticide and petrochemical industries; and metallurgical industries.

### **SIS Trust Fund**

21. An uncommitted balance of a little over \$700,000 was available under this Fund at the beginning of 1974. By the end of October 1974, 94 requests for short-term expert services at a total cost of about \$297,000 were approved and most of these projects were implemented during the year under review.

### **UNIDO REGULAR PROGRAMME OF TECHNICAL ASSISTANCE**

22. In 1973, the Industrial Development Board at its seventh session approved the UNIDO regular programme of technical assistance as submitted by the Executive Director for implementation in 1974.<sup>5</sup>

23. The 1974 regular programme included country, regional and interregional projects for a total amount of \$1.5 million, out of which \$0.25 million were allotted to UNIDO in non-convertible currencies. The entire amount of \$1.5 million appropriated by the General Assembly was fully utilized by the end of 1974. Appendix H contains a comparison of the 1974 regular programme of technical assistance as approved by the Industrial Development Board and as delivered.

24. In 1974, as in the past, the greater part of the regular programme fund was devoted to the training of personnel in the industrial sector. Through individual and group training programmes, 245 fellowships were awarded in 1974 to nationals from developing countries. Out of the nine interregional and regional group training programmes and seminars, fully or partially financed from the regular programme fund, four were organized in developing countries. Moreover, these countries offered training facilities to 22 fellows in various industrial branches in 1974.

25. The allocation in non-convertible currencies was utilized to finance an in-plant group training programme in the Ukrainian Soviet Socialist Republic for 33 engineers and technicians in the iron and steel industries, and for the preparation of a feasibility study for the industrial exploitation of ilmenite sand deposits in the Gambia.

26. The second largest item of expenditure in the 1974 regular programme was the financing of 15 regional advisers' posts attached to the regional economic commissions (5 to ECLA; 5 to ECA; 4 to ESCAP; and 1 to ECWA) and of the six

<sup>5</sup>ID/B/124 and Corr.1 and 2.

interregional advisers posts attached to the various programme components of UNIDO. The expertise provided by the regional advisers in 1974 was concentrated largely in the transfer of technology, strategies, plans and policies for industrialization, small-scale industries and food processing. The work of the interregional advisers was mainly concerned with operational activities in such specialized branches as chemicals, metallurgical, engineering, fertilizers and food industries.

27. Consultations with Governments with a view to developing new and innovative programmes of activities geared to their particular needs constitute an important feature of the regular programme. In 1974, such programming missions and consultations were undertaken in 16 countries.

28. A small part of the regular programme fund was utilized to finance projects dealing with the exchange of experience and industrial co-operation among the developing countries, for which no separate provision was made in the 1974 regular programme as approved by the Board in May 1973. One such project was the interregional seminar on packaging, organized by UNIDO in co-operation with the Government of India, for the benefit of other developing countries in November 1974.

### **SPECIAL-PURPOSE TRUST FUNDS**

29. Special-Purpose Trust Funds (formerly known as Funds-in-Trust) continue to be a valuable additional source of finance for the technical assistance activities of the Organization. These funds are particularly useful for financing projects that are not eligible for inclusion in the UNDP country programmes or in the UNIDO regular programme of technical assistance (e.g. projects of countries that have become net contributors to UNDP). Furthermore, some developing and developed countries prefer to make their voluntary contributions to UNIDO under General Assembly resolution 2152 (XXI) for specific rather than general purposes. The fact that some of the contributions are made in non-convertible currencies presents certain problems for UNIDO; such contributions do not lend themselves to the most effective utilization, and consequently it is necessary to appeal to contributing countries to pay a part of their contributions in convertible currencies, at least that part required to cover the programme support costs.

30. Net approvals of projects under Special-Purpose Trust Funds in 1974 amounted to \$900,000 (originally estimated value \$1.2 million, see ID/B/140, para. 838), which represents a 28.6 per cent increase over 1973 approvals. The total expenditure in 1974 was \$500,000, while a residual value of \$900,000 was carried over into 1975 (see statistical annex, tables 2 E and 3 E).

### **INDICATIVE PLANNING FIGURE**

31. During the year under review, expenditures under the IPF of UNDP accounted for 72.6 per cent of the total technical assistance delivery of UNIDO or, expressed in

dollars, it accounted for \$17.4 million of the total \$23.9 million of UNIDO technical assistance in 1974. The value of UNIDO technical assistance delivery under IPF in 1974 showed an increase of 27 per cent as compared to the 1973 figure. A detailed report of the developments with regard to the IPF in 1974 is to be found in chapter II, section on "Country programmes".

## UNIDO GENERAL TRUST FUND

32. The UNIDO General Trust Fund derives its resources from voluntary contributions made to UNIDO by States Members of the United Nations, members of the specialized agencies and of the International Atomic Energy Agency. Contributions to the General Trust Fund have steadily increased since its inception, enabling UNIDO to launch new programmes in various areas of industry that would not have been implemented through traditional sources of finance.

33. The programming principles and procedures for the utilization of the UNIDO General Trust Fund have been described in previous reports to the Industrial Development Board.<sup>6</sup>

34. As of 31 December 1974, a cumulative total of 354 projects amounting to a programmed value of \$12,334,000 had been formulated and were at different stages of implementation, as summarized in table 1 of appendix G; classification in broad categories of the cumulative approved projects is given in table 2 of the same appendix. In 1974, 80 projects totalling \$3,240,000 were formulated or reformulated. Of the total number of formulated projects, 77.1 per cent have been completed; they constitute 65.9 per cent of the total programmed value or an increase of 3.9 per cent over 1973 figures (cf. ID/B/140, para. 797).

35. The projects programmed and implemented under the UNIDO General Trust Fund in 1974 fall into seven broad categories: co-operation among developing countries; improvement of local manufacturing capacities; identification and selection of technological processes and equipment; stimulation of national research and development; promotional activities; industrial information; and training in specific industrial branches.

36. The most important of these categories is the promotion of co-operation among developing countries, particularly the least developed countries, in specific branches of industry. A typical example of a General Trust Fund project in this category was the manufacturing development clinic on animal-drawn agricultural implements, hand-operated machines, and simple power equipment for the least developed and developing countries, which was organized jointly by UNIDO and the Government of India in New Delhi, India, in October 1974. The discussions at this meeting, which were supplemented by an exhibition and field demonstration of agricultural equipment appropriate for use and manufacture in developing countries, offered the participating countries not only practical advice on machine performance and manufacturing technology but also insight into common problems that could be overcome through co-operation. At the same time, details of a training scheme were

<sup>6</sup> ID/B/43, annex VII; ID/B/66, annex; and ID/B/93.

elaborated relating to the design, development, testing and manufacturing of agricultural tools and implements, and the Government of India agreed to provide host facilities for such a scheme.

37. Large-scale co-operation among developing countries was also the tenor of the regional consultation on the promotional and technical aspects of processing and packaging foods for export, which was financed from the UNIDO General Trust Fund and held in Casablanca, Morocco, in June 1974. UNIDO and the Government of Morocco, through its Marketing and Export Office, jointly organized this regional project. The purpose of the meeting was to identify common problems in the food processing sector and to formulate recommendations that might contribute to the accelerated development of the food processing industry of Africa. It was the general consensus of the meeting that an organization of fruit and vegetable processors in Africa should be established to serve as a focal point for collective negotiations on such subjects as the acquisition of patented technology, the purchase of raw materials, training schemes, export promotion and the compilation of unified standards. Collective action was also recommended in respect of the fish processing industry in Africa; the meeting recommended the study of the establishment of a joint African fishing fleet, to ensure that full benefit was derived from territorial waters, and the creation of a federation of African fish processors for collective action in the fields of fish canning and preservation, as well as investment promotion and export.

38. The identification of agro-industrial policies best suited to conditions in the developing countries was the keynote of the consultation in Belgrade, Yugoslavia, in May 1974, financed from the Yugoslav voluntary contribution. Discussions, which were complemented by visits to two agro-industrial combines and a tour of the International Agricultural Fair at Novi Sad, centred upon the problems associated with agro-industrial development. Of particular importance at this meeting was the impending conclusion of the agreement between UNIDO and the Government of Yugoslavia on a joint programme for international co-operation in the development of agro-industries (see chapter VIII, section on "Co-operative programmes with contributing countries"). Since the meeting, which demonstrated the economic benefits to be derived from agro-industrialization, potential projects have been identified in several developing countries including the Dominican Republic, Ecuador, Peru and Thailand.

39. The special problems and requirements of industrial development in selected countries in the Middle East were the subject of a regional meeting, which was organized jointly by UNIDO and ECWA in Beirut, Lebanon, in November 1974, and financed from UNIDO General Trust Fund resources. The meeting brought together officials from Democratic Yemen, Oman, Yemen and representatives of the other ECWA countries as well as multilateral organizations engaged in development aid. Solutions appropriate to conditions in these countries were identified and possible forms of bilateral and multilateral co-operation were discussed, as was the feasibility of a number of specific industrial projects that were brought forward at the meeting.

40. Projects directed towards the improvement of local manufacturing capacities and hence the promotion of self-reliance also enjoy the backing of the UNIDO General Trust Fund. Chinese voluntary contributions, for example, were utilized to initiate a project aimed at the establishment of a small-scale garment pilot and demonstration plant in Mauritania. In July 1974, experts from the donor country

and a UNIDO staff member went on a joint mission to undertake a feasibility study, the outcome of which was positive. Plans for the establishment of a plant with a projected annual capacity of 100,000 pieces are now being elaborated.

41. Chinese voluntary contributions and technology are also the mainstay of the project on the techno-economic evaluation of walking tractors (power tillers) and matching farm implements for use and eventual manufacture in Egypt, Sudan and United Republic of Tanzania. The equipment is to be demonstrated in the countries concerned, personnel trained in its use and the necessary design modifications identified. Should the equipment prove satisfactory in the new environment, the feasibility of local manufacture will be established in a second phase of the project.

42. Indian voluntary contributions were used in 1974 to improve India's ability to manufacture more sophisticated watches at the rate of some 500,000 watches a year. Under this scheme, Indian horological engineers received advanced training in management techniques in Switzerland and familiarized themselves with modern production planning and programming, quality control and maintenance procedures. Upon their return, the engineers will be able to transmit their recently acquired knowledge to others thereby ensuring the correct operation and maintenance of the increasingly advanced equipment used in this branch of industry.

43. The importance of regular maintenance and repair cannot be overemphasized, and in 1974 UNIDO supplied the Gambia and Turkey, among other developing countries, with four mobile repair and maintenance units. These four units were financed under the UNIDO General Trust Fund from the voluntary contributions of the Union of Soviet Socialist Republics.

44. In its endeavours to identify and select technological processes and equipment best suited to conditions in the developing countries, UNIDO attaches particular attention to what it terms "pairing" or "twinning" institutes in developed and developing countries, or solely in developing countries. The resources of the UNIDO General Trust Fund are used to promote the transfer of technology from technologically advanced institutions to technologically developing institutions through joint efforts such as the technology transfer linkage between the Caribbean Industrial Research Institute, St. Augustine, Trinidad and Tobago, and the Research and Productivity Council, New Brunswick, Canada, both of which are members of the World Association of Industrial and Technological Research Organizations (WAITRO).

45. Co-operation in the transfer of technology is also the aim of the agreement reached between the Government of India and the Commission of the Cartagena Agreement and the Andean Development Corporation relating to the exchange of experience in the field of engineering industries and the establishment of long-term co-operation objectives between India and the countries of the Andean Group. The Andean Group also benefited in 1974 from the on-going four-year project, financed from the Italian voluntary contributions, under which technical assistance is provided in subregional planning, preparation of techno-economic feasibility studies and the establishment and development of manufacturing facilities in the electronics industry sector.

46. The stimulation of national research and development is another field of activity financed from the UNIDO General Trust Fund. A consultation on this



subject was held in the Philippines in September 1974, during which local entrepreneurs and research scientists discussed ways and means by which national research and development institutes could accelerate local industrialization through providing extensive technical consultancy services, carrying out research and elaborating feasibility studies and similar surveys at the request of the business community and government agencies. The exchange of views and experience will undoubtedly contribute to the institutes' ability to carry out these functions as well as to an increase of industry's awareness of the valuable services such institutes can perform.

47. In view of the developing countries' special development requirements and the limited means at their disposal, training in specific industrial branches takes on a particular significance. UNIDO General Trust Fund resources were thus used to promote such interregional in-plant group training programmes as two four-month courses in metalworking and standardization, and a three-month course for fertilizer engineers: all three courses were financed from Soviet voluntary contributions.

48. UNIDO General Trust Fund resources were also used to finance an in-plant group training programme (three months) for Spanish-speaking personnel from national industrial information units sponsored jointly with UNESCO and hosted by VINITI in Moscow. A second programme for information officers from French-speaking African countries, financed from Belgian voluntary contributions, was held in Brussels in December 1974.

49. Two in-plant group training programmes in the management of maintenance and repair services were organized in Italy in 1974 (one in French and one in Spanish), and participants from Latin American countries took part in an in-plant group training programme in the field of industrial co-operatives which was organized by UNIDO and the Government of Poland, utilizing Polish voluntary contributions. The aim of the latter programme was to provide intensive practical training in the promotion, organization and operation of industrial co-operatives and their associations. Czechoslovak voluntary contributions were utilized to finance an in-plant training workshop on the production of refractories, held in Czechoslovakia in June 1974, during which the industrial significance of refractories was emphasized and the potential of their manufacture from locally available raw materials highlighted. (See also chapter III, section on "Building materials industries".)

50. Another first in the series of in-plant group training programmes financed from the UNIDO General Trust Fund was the course in the production and application of synthetic fibres conducted in Austria in October 1974, and financed mainly from the Austrian voluntary contribution. The course offered instruction in fibre processing technology, including fibre engineering, testing and identification, and in the application of synthetic fibres for a variety of purposes.

51. Another new feature in 1974 was a four-week training course in pharmaceutical manufacturing techniques, financed from the Belgian voluntary contribution, held at the State University in Ghent, Belgium, in August/September 1974. During that course, instruction was given in modern methods of manufacture appropriate to operations in developing countries.

52. Promotional activities constitute a not insignificant feature of the programme financed from the UNIDO General Trust Fund. On the one hand, the UNIDO

message and its endeavours to promote co-operation and contractual relationships are prominently publicized at trade fairs, and on the other hand, consultations are convened with the express aim of promoting investment and industrial co-operation in selected branches of industry.

53. In 1974, specific examples of the promotional approach, financed from the UNIDO General Trust Fund, were the efforts made by UNIDO at the eleventh International Fair of Algiers, the Bucharest International Fair (devoted to the chemical industry) and the Pacific International Trade Fair (metalworking, engineering and mining industries), as well as at AFRIFOOD 74, the first African exhibition of food processing equipment which was jointly organized by UNIDO and the Marketing and Export Office of Morocco. Some 80 companies from 11 developing countries of Africa and 23 enterprises from six industrialized countries took part in AFRIFOOD 74.

54. Examples of the more orthodox consultative approach to investment promotion were the investment promotion meeting and technological consultations for chemical industries in developing countries organized in co-operation with the Bucharest Office of the joint UNIDO/Romania Centre in December 1974. Sponsors of projects and suppliers of know-how, machinery and capital were granted ample opportunity to discuss, on a confidential basis, possible co-operation, while the consultations held in plenary meetings concentrated on publicizing the technological and economic problems currently confronting the chemical industries in the developing countries.

55. The same mixture of confidential and plenary discussion marked the meeting to promote investment and industrial co-operation in selected food processing industries; the meeting, which was jointly organized by UNIDO, FAO and the Council of the Netherlands Industrial Federations, was held in Amsterdam in October 1974. The 78 projects submitted for promotion at the meeting were restricted to six branches of food processing industries (sugar; vegetable oils and proteins; fruits and vegetables; non-alcoholic beverages and beer; food processing and packaging equipment; and food packaging materials). Several important joint ventures have developed as a result of the promotional activities before and during the meeting, such as an agreement on a sugar mill project concluded between the Government of Swaziland and a well-known company in the sugar field.

56. The importance of industrial information cannot be overestimated at a time when technologies and processes are developing and changing at an unprecedented pace. It is therefore essential that the developing countries are given every opportunity to avail themselves of the details of latest developments. Thus, General Trust Fund resources are used to strengthen the information services of UNIDO. The Japan Consulting Institute is currently providing assistance in setting up a referral service, in supplying prototype information material (such as industry profiles and manufacturing guides) and in handling inquiries through UNIDO Industrial Inquiry Service. The Government of India has provided the services of a special technical adviser to collect and systematize information available on appropriate technologies from India and other countries, thus strengthening UNIDO's Appropriate Choice of Equipment (ACE) system and enhancing UNIDO's Information Clearing-house programme which had been of particular concern to the Group of High-Level Experts on a Long-Range Strategy for UNIDO.

## Financial management

57. At the seventh annual United Nations Pledging Conference for UNIDO, held at United Nations Headquarters on 22 October 1974, 70 countries made pledges totalling \$3,356,919. Subsequently, five countries made additional pledges amounting to \$52,146, bringing the total value of pledges made for the year 1975 to \$3,409,065. The status of Governments' pledges as of 31 December 1974 is shown in table 3 of appendix G. The total amount of voluntary contributions pledged to UNIDO since the establishment of the General Trust Fund in 1968 to 31 December 1974 amounted to \$17,740,749.

58. Only \$430,047 of \$14,331,684 pledged for 1974 and prior years remained uncollected at the end of 1974. Table 4 of appendix G shows that the total cumulative resources available to the General Trust Fund as of 31 December 1974 amounted to \$14,102,780 against which the value of projects approved was \$12,333,636 or 88 per cent (see tables 1 and 2 of appendix G).

59. The extent to which approved projects have been implemented by 31 December 1974 is indicated in table 5 of appendix G, from which it will be seen that the total expenditures incurred against approved projects as at 31 December 1974 is \$6.9 million, of which \$1.9 million was spent during 1974, leaving a balance of \$4.2 million to be implemented in 1975 and future years.

## *Chapter VIII*

# **CO-OPERATION AND CO-ORDINATION**

## **INTRODUCTION**

1. The very words in General Assembly resolution 2152 (XXI) defining the second of the two major functions of UNIDO, i.e. its central role in and responsibility for reviewing and promoting the co-ordination of all activities of the United Nations system in the field of industrial development, concede that industry by definition touches upon innumerable activities which are currently carried out by other organizational units within the system.

2. The inherent complexity of modern industrial development and the absence of a clearly defined co-ordinative function within the general co-ordination authority of the General Assembly and ECOSOC have contributed to the lack of progress UNIDO has made in this field. However, in the light of the plea entered at the sixth special session of the General Assembly for decisive action aimed at "strengthening the role of the United Nations system in the field of international economic co-operation" (General Assembly resolution 3202 (S-VI), section IX), the subject of the central co-ordinating role of UNIDO takes on particular significance: it is scheduled as a major subject of discussion at the Second General Conference of UNIDO and is inexorably linked to the new principles and actions directed towards the establishment of a new international economic order. Furthermore, in keeping with the terms of resolution 32 (VI) of the Industrial Development Board, the Permanent Committee examines matters pertaining to co-ordination at its second (autumn) session each year.

3. The following paragraphs describe the manner in which UNIDO is currently fulfilling its co-ordination and co-operation functions with respect to other United Nations agencies and organizations, Governments, regional groups, intergovernmental organizations and non-governmental organizations and National Committees.

## **INTER-AGENCY CO-OPERATION AND CO-ORDINATION**

4. The main developments in the joint activities and programmes of UNIDO with other United Nations agencies and organizations in 1974 are outlined below.

## International Labour Organisation (ILO)

5. The twenty-third meeting of the ILO/UNIDO Working Party in Geneva in March 1974 was preceded by meetings of an *ad hoc* working group at which the subjects of small-scale industry development in the least developed countries and industrial management development were discussed at a technical level with a view to possible co-operation between the two organizations.

6. At the subsequent meeting of the Working Party, which discussed various on-going UNDP projects involving combined inputs from both organizations, the recommendations put forward by the *ad hoc* working group on small-scale industry development were endorsed by the Working Party and later approved by the executive heads of both organizations. These recommendations were then transmitted to all UNDP Resident Representatives through the Administrator of UNDP as well as to the field staff of ILO and UNIDO and instructions were given that the representatives of both organizations should enter into consultation at all appropriate stages of country programmes and projects, including annual reviews and project changes. These instructions also specifically required the ILO Regional Experts and UNIDO Industrial Development Field Advisers to work together closely and to keep the UNDP Resident Representatives fully informed of any co-operative developments.

7. In the light of the general consensus reached by the Working Party on the necessity and usefulness of working together in the field of small-scale enterprise development in the least developed countries, it was agreed that the following elements of assistance should be included in the programmes initiated:

- (a) Development of national plans for industrialization and a realistic assessment of possible chances for small-scale industries, including legislation and other measures to facilitate and encourage their establishment;
- (b) Provision of factory accommodation or workshop facilities, for example, in the form of industrial estates;
- (c) Identification of opportunities for new small-scale industries and assistance to potential entrepreneurs in the preparation of requests for financing;
- (d) Establishment of promotional, financing and advisory services to small-scale industries;
- (e) Identification and development of potential entrepreneurs and promotion of the spirit of entrepreneurship;
- (f) Development of manpower skills for small-scale industries through formal and non-formal learning systems;
- (g) Choice of appropriate technologies, with special reference to equipment and raw materials, and continuing technical and managerial advice for enterprises in operation including assistance in marketing and subcontracting;
- (h) Promotion of industrial co-operatives.

8. In the furtherance of their co-operative efforts, the two organizations agreed that in view of the special problems concerning small-scale industry development in

the least developed countries, priority should be given in the coming years to handicraft development, the training of personnel at all levels, especially entrepreneurs/managers and skilled labour to meet the specific needs, including market development, of small-scale industry. It was also agreed that, owing to the dearth of small-scale industries owned or managed by nationals of the least developed countries and to the shortage of local trained personnel, the nature of the assistance provided would necessarily require international personnel to carry out the various institutional functions and provide direct assistance to the small-scale industries until the national counterparts were able to take over. The two organizations felt that, in general, projects in this field should be planned for a long duration.

9. The discussions on guidelines for a programme of co-operation between the two organizations in the field of management development were not continued at the twenty-fourth meeting of the ILO/UNIDO Working Party in Vienna in October 1974, as it was agreed in July 1974 that a special task force would be appointed to identify new and more effective concepts and procedures for co-operation. The Working Party did, however, discuss the joint ILO/UNIDO report to the Second General Conference of UNIDO and, in the course of its two meetings in 1974, discussed some 40 projects of common interest and identified means of co-ordination.

10. Among the projects of interest implemented by UNIDO in co-operation with ILO in 1974 were: the Centre for Industrial Organization and Development in Yugoslavia; the Management Development and Productivity Institute in Ghana; and the Industrial Services Institute at Chiang Mai in Thailand.

11. In 1974, ILO and UNIDO undertook two mid-term review missions, one relating to the extension services division in the Medium Industry Bank in the Republic of Korea and the other to the Industrial Services Institute in Thailand. ILO and UNIDO also joined UNDP in a preparatory mission to formulate a project for the design of a local support network for small industry development in Indonesia.

12. The next meeting of the Working Group has been scheduled for February or March 1975.

### **Food and Agriculture Organization of the United Nations (FAO)**

13. During 1974, the FAO/UNIDO Inter-secretariat Committee held one session -its eleventh- at the beginning of March in Vienna. The meeting considered seven projects that had been raised at previous meetings, such as food research and industrial research centres, fruit and vegetable grading and processing in Pakistan and the Central Research and Training Institute for Hides, Skins and Leather in Turkey. The agenda also included 10 new items covering: millet milling in Africa; sawmilling in Honduras; the Food Industry Development Centre in Egypt; assistance to the milk production industry in the Niger; essential oils in Indonesia; the 1974 International Consultation on Agro-industrial Development in Belgrade; the UNIDO in-plant group training programme in the field of food processing; commodity policy studies in Pakistan; pulp and paper pre-investment studies; and the industrialization of Bahamian pinewoods.

14. UNIDO and FAO co-operated with the Council of the Netherlands Industrial Federation in the organization of a meeting to promote investment and industrial

co-operation in selected food processing industries held in Amsterdam in October 1974 (see chapter VII, section on "UNIDO General Trust Fund"). Some 67 sponsors from 33 developing countries as well as representatives of 37 financial institutions from developing and industrialized countries attended the meeting and discussed 78 project proposals that had been carefully selected and prepared prior to the meeting. The project portfolio represented a total estimated investment of the order of \$750 million and 109 potential investors from 19 industrialized countries came to the meeting to talk business. At the time of going to press, the known effective outcome was the conclusion of an agreement between the Government of Swaziland and a well-known company in the sugar field, two requests for investment studies as well as a request for an appraisal of specific offers received as a result of bilateral meetings. Furthermore, 100,000 tons of wheat were sold at the meeting where discussion often diverged from the six specific branches of the food industry that had been selected as being of greater pertinence to the countries attending.

15. UNIDO/FAO co-operation will also be intensified in the light of ECOSOC resolution 1836 (LVI) and the subsequent FAO resolution 1/63 relating to the establishment of a fertilizer supply scheme and the mobilization of financial and technical assistance in this field. The latter resolution, passed by the Council of FAO on 19 July 1974, explicitly requests "the Director-General (of FAO), in co-operation and co-ordination with the Executive Director of UNIDO, the President of the World Bank and the Administrator of UNDP, to assist developing countries on request to increase domestic production of fertilizer and improve its distribution and use". UNIDO co-operated throughout 1974 with FAO in work relating to the Commission on Fertilizers and has also contributed to elaborating an effective *modus operandi* for the International Fertilizer Supply Scheme. It is to be expected that the association thus initiated will grow even closer as maximum efforts are needed on the part of all concerned if the objectives of the scheme are to be reached.

16. FAO has also co-operated closely with UNIDO in the preparation of a joint paper on the interrelationship of industry and agriculture which will be presented to the Second General Conference of UNIDO. The twelfth session of the FAO/UNIDO Inter-secretariat Committee has been scheduled for January 1975.

### **United Nations Educational, Scientific and Cultural Organization (UNESCO)**

17. Two UNESCO/UNIDO inter-secretariat meetings were held in 1974: the seventh of the series in Vienna in May 1974 and the eighth in Paris in November 1974.

18. At the first of the two meetings, an agreement was finalized on co-operation in the fields of documentation and information and their interaction, which was subsequently approved by the executive heads of the two organizations. The new agreement replaced the provisions for scientific and technical documentation (paras. 18-19 of the Memorandum of Understanding of 4 April 1968) which no longer satisfactorily reflected the current state of activities within UNESCO and UNIDO.

19. UNESCO proposed closer co-operation with UNIDO in the field of education and training of engineers, and UNIDO contributed substantially to the revision of the UNESCO/ILO recommendations on technical and vocational education and training.

UNIDO also participated in the discussion of the Sub-Committee on Education and Training of the Advisory Committee on Co-ordination as well as in the deliberations of the newly established working group on Education-Industry Co-operation which took place in Paris in May 1974.

20. Other essential areas of co-operation between the two organizations were also discussed: firstly, co-operation and co-ordination in the field of UNISIST activities in the light of UNIDO's role as a clearing-house for industrial information; secondly (and even more significant), co-operation in the field of applied industrial research where the activities of both organizations overlap to an appreciable degree. The UNESCO proposal that paragraphs 9-12 on industrial research and application of technology to development of the Memorandum of Understanding be redrafted to reflect the new situation was discussed at both inter-secretariat meetings, and a final agreement will be forthcoming in early 1975. In the meantime, a pragmatic approach has been adopted with respect to projects of interest to both organizations, such as the Electronic Research Institute and Indian Institute of Petroleum in India, the establishment of a National Welding Research Institute in the same country and the Centre for Technological Consulting Services at the Polytechnic Institute at Timisoara, Romania.

21. It is also anticipated that there is scope for co-operation in projects related to the establishment and improvement of printing industries in order to support book production in the developing countries, and preliminary discussions on this subject will be held between the two organizations in early 1975.

#### **United Nations Conference on Trade and Development (UNCTAD)**

22. Following an exchange of correspondence in December 1969, and January and March 1970, the executive heads of the two organizations agreed that rather than proceed with the drafting of a formal document relating to the UNCTAD/UNIDO agreement on co-operation in fields of mutual interest, a small working group should be established, composed of representatives of the two organizations. The guiding principle of the working group was to concentrate on the discussion of projects of joint interest on an *ad hoc* basis. It was expected that general policy guidelines on respective competences would emerge as the group accumulated experience through its activities. In July 1970, the two executive heads agreed on the need for joint action in the field of preferences, and in November of that year they concluded an agreement on a joint programme of action on the Generalized System of Preferences. This joint programme reflected the importance attached to this field by the Trade and Development Board and the Industrial Development Board, and was in keeping with General Assembly resolution 2639 (XXV) of 19 November 1970, in which the Executive Director of UNIDO was requested to enter into appropriate arrangements with the Secretary General of UNCTAD in order to enable the developing countries to derive increasing benefits from the generalized system of non-reciprocal, non-discriminatory preferences. The working group was thus instructed to proceed immediately with the elaboration of a plan of action.

23. The working group has held 10 meetings in Geneva and Vienna, at which it has discussed some 60 projects of mutual interest. Through discussions in the working group and at a technical level, considerable progress has been achieved in the formulation of joint projects. In Ethiopia, for example, both UNIDO and



UNCTAD/GATT/International Trade Centre (ITC) continued to offer assistance to the Export Promotion and Investment Centre, which was established in 1973 to promote export-oriented industries. At the same time, major projects are being formulated in the field of product adaptation in which UNCTAD/GATT/ITC will be responsible for indicating overseas market requirements, while UNIDO will offer advice at the factory level to upgrade products so that they meet these requirements. (See also chapter V, section on "Promotion of export-oriented industries".)

24. The working group has also been concerned with the development of a joint programme relating to the establishment of industrial free zones. In this area, UNIDO is concerned with the industrial aspects and UNCTAD with the trade policy aspects. Where advice is required in both areas, for example in Cyprus and Tonga, joint projects have been formulated. UNIDO has also been closely involved in the introduction of the Generalized System of Preferences and has offered advice on industrial development aspects of the System through an on-going project entitled "Training and advisory services on the Generalized System of Preferences", which was initiated in 1972 by UNCTAD.

25. In co-ordinating the activities of the two organizations, certain problems arise owing to the similarity of their responsibilities in such fields as quality control, design, packaging and product development. In order to avoid duplication of effort, it is necessary to strengthen further the co-ordination between the two organizations, for this would facilitate a balanced approach to technical assistance in the export development field, an area which is of increasing importance to the developing countries. In this context, UNIDO would provide advice on such aspects as industrial programming, technology, management and investment promotion, while UNCTAD and UNCTAD/GATT/ITC would provide assistance on trade policy, export marketing and export promotion techniques. It is felt that this co-operative assistance is essential to the promotion of successful export development efforts for manufactured goods from developing countries.

26. UNCTAD is also actively engaged in the preparations for the Second General Conference of UNIDO, having contributed a joint UNIDO/UNCTAD paper on industrialization and trade and submitted a position paper describing the role of UNCTAD in expanding developing countries' exports of manufactures and semi-manufactures.

### **International Bank for Reconstruction and Development (IBRD)—World Bank**

27. The UNIDO/IBRD Co-operative Programme agreement did not become formally effective until 1 January 1974, although programme activities had begun some six months earlier. It is anticipated that the Programme will have filled all its authorized professional posts by 1 April 1975, and the services of other regular UNIDO staff, Industrial Development Field Advisers and consultants will be further drawn upon to supplement missions carried out by the UNIDO/IBRD Co-operative Programme.

28. In following up activities initiated in 1973, the UNIDO/IBRD Co-operative Programme participated in the preparation of a number of projects for World Bank financing. A World Bank loan of \$18.5 million was provided for the expansion of the

IMT tractor factory in Yugoslavia and the project, which represents a total investment equivalent to about \$80 million, is scheduled for completion in December 1975. Detailed engineering works have started on the industrial estate project (investment value \$3.35 million) in Yemen following the approval of an International Development Association (IDA) credit of \$2.3 million: the scheduled completion date is late 1979. This latter project is noteworthy on two accounts: it is the first industrial project of the World Bank in any of the 25 least developed countries, with the exception of enclave and Development Finance Company (DFC) projects, and it is also a pilot project explicitly designed to serve as an industrial development model in a country where the industrialization process has just commenced.

29. The IBRD loan of \$5.5 million for the *Compania Financiera Popular* in Colombia, which is to be utilized primarily to finance a number of small- and medium-scale industry projects, is being processed by the World Bank Group. This particular project also includes a technical assistance component valued at \$0.5 million, in which UNIDO will probably participate through the provision of experts.

30. Following industrial sector missions to Ghana, the Ivory Coast and Senegal in 1973, reports were duly prepared and discussed with the respective Governments. In Ghana, for example, the UNIDO/IBRD Co-operative Programme identified a number of potential investment and technical assistance projects, which will be the object either of identification and pre-appraisal missions by the Programme itself or other substantive programmes of UNIDO.

31. In the course of 1974, staff of the UNIDO/IBRD Co-operative Programme participated in five appraisal missions related to the following projects: Algeria - Saida Cement Factory (possible IBRD loan of \$35 million); Egypt - expansion of Tourah Cement Factory (IDA credit of \$30 million approved in January 1975) and industrial imports (IBRD loan of \$35 million plus IDA credit of \$35 million, both approved in December 1974); Morocco - Oudja Cement Factory (\$35 million IBRD loan); and Nigeria - integrated small industry development (IBRD loan \$20 million with a \$7 million technical assistance component).

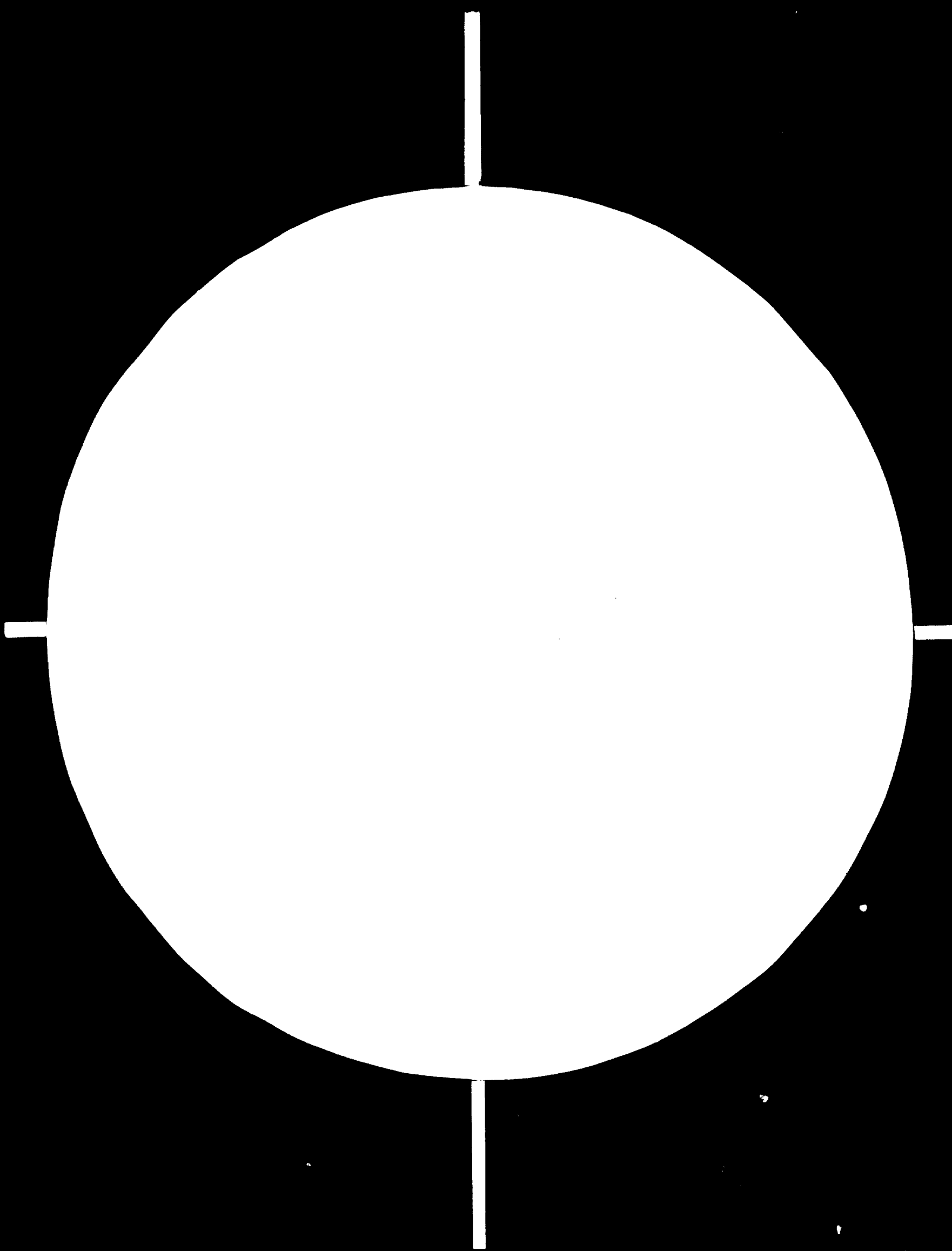
32. The UNIDO/IBRD Co-operative Programme also made a major contribution to the World Bank sector study mission to the United Republic of Tanzania in August 1974 in the form of an industrial background study based on the extensive experience UNIDO had accumulated in that country.

33. In September 1974, the first UNIDO/IBRD Co-operative Programme mission, initiated by UNIDO, evaluated the fertilizer industry in Algeria. An observer from OPEC and an FAO staff member also accompanied the mission, the objective of which was to obtain a comprehensive picture of the fertilizer industry in that country, in preparation for the World Food Conference and in keeping with the recommendations of the Third Conference of Industrial Development for Arab States, held in Tripoli in April 1974, which attached particular importance to the development of the chemical fertilizer industry in view of the organic interdependence between industry and agriculture. It is anticipated that this series of missions will generate an appreciable number of investment and technical assistance projects in the fertilizer sector. The missions are expected to mark a new phase of co-operation between UNIDO and the World Bank and point to the growing interest and desire to link assistance and investment in as effective a manner as possible.

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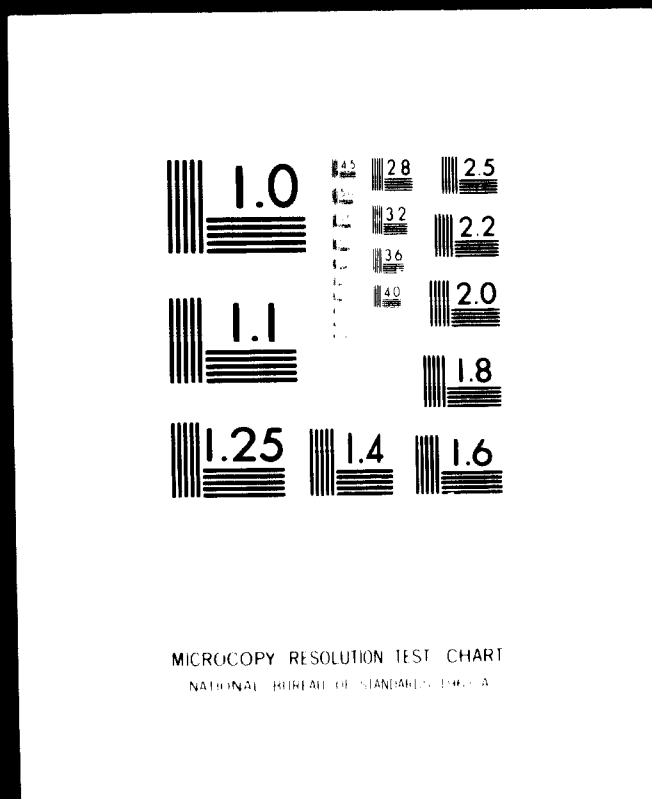


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34. In 1974, further contacts were established with the International Finance Corporation (IFC) which supplements the activities of IBRD. It is anticipated that projects will develop as the activities of UNIDO extend to areas that are of particular interest to IFC, the purpose of which is to further economic development in member countries, particularly in the more privately managed sector of industry.

35. Throughout 1974, the UNIDO/IBRD Co-operative Programme continued to screen potential investment projects derived from the technical assistance activities of UNIDO, and a number of these projects have since been brought to the attention of the World Bank. The Programme also assisted in establishing co-operation between UNIDO and the Economic Development Institute, and it provides similar services to other members of the World Bank Group. In Thailand, an industrial estate expansion project with a loan requirement of \$7 to \$8 million is being planned on the basis, at least in part, of a feasibility study prepared by UNIDO experts. In the United Republic of Tanzania, UNIDO assistance constituted the groundwork for two projects now under consideration by the World Bank: the Morogoro small-scale industrial project and an investment project in the textile industry sector requiring a \$25 million loan.

36. Other activities under the UNIDO/IBRD Co-operative Programme which were executed late in 1974 extending into early 1975, include: an appraisal mission in the agro-industrial sector in Turkey; a study of the engineering industry sector in the Republic of Korea; and industry sector mission to Thailand. The Programme also contributed to the meeting on the promotion and development of machine-tool industries in developing countries of Asia and the Far East, held in Tbilisi, Union of Soviet Socialist Republics, in October 1974 (see chapter III, section on "Engineering industries").

## REGIONAL ECONOMIC COMMISSIONS

37. Throughout 1974, UNIDO directed its efforts towards harmonizing its specific studies, meetings and promotional activities with those of the regional economic commissions in the industrial sector, with particular reference to the joint industry divisions and the allocation of regional industrial development advisers.

38. The co-operation of UNIDO with the regional economic commissions in the industrial sector takes the form of discussions of issues of joint concern, the development of joint regional and subregional programmes, and the completion of studies as required for the fulfilment of the goals of the International Development Strategy for the Second United Nations Development Decade.

39. Such activities are based on resolution 5 (II) of the Industrial Development Board pertaining to the activities of the regional advisers of UNIDO in the field of industrial development attached to regional economic commissions, and on consensus resolution ID/SCU Res. 1, passed at the Special International Conference of UNIDO, operative paragraph II of which invites the Executive Director of UNIDO to establish closer contacts and co-ordination of activities between UNIDO

and the regional economic commissions. The contacts are maintained through the regional industrial development advisers and UNIDO staff members working in the joint industry divisions. The regional industrial development advisers are financed through the regular programme of technical assistance, while the UNIDO staff members are financed through the regular budget.

### **Economic Commission for Africa (ECA)**

40. The Joint ECA/UNIDO Industry Division, which had been established through an agreement signed by the Executive Director of UNIDO and the Executive Secretary of ECA on 25 June 1973, became operational on 1 January 1974. Its establishment has greatly strengthened co-operation between ECA and UNIDO in specific issues of industrialization in Africa.

41. In September 1974 ECA, the Organization of African Unity and UNIDO jointly organized the first meeting of the Follow-up Committee on Industrialization in Africa, at which a careful review was made of the progress achieved in implementing the programme of action outlined in the "Declaration on industrialization in Africa: principles and guidelines for co-operation and development" which had been adopted in February 1973 at the Second Conference of African Ministers of Industry (cf. ID/B/140, para. 887). The conclusions of the Follow-up Committee constituted an important input into the preparation of the declaration and plan of action of the Second General Conference of UNIDO.

42. The Follow-up Committee also recommended the creation of an advisory team for review and appraisal with a view to promoting more effective planning and policies at all levels. UNIDO and ECA consequently formulated a joint programme of action for submission to UNDP to enable the advisory team to be set up as soon as possible.

43. UNIDO also sent representatives to six meetings organized by ECA.

### **Economic Commission for Europe (ECE)**

44. The emphasis of co-operation between UNIDO and ECE in 1974 was placed in the main on the exchange of information, participation in meetings and assistance in the placement of UNIDO fellows in industrial enterprises in Europe.

45. The Executive Secretary of ECE visited UNIDO Headquarters and the opportunity was taken to review relations between ECE and UNIDO. ECE was also informed of the preparations that had been made for the Second General Conference of UNIDO, and in view of the direct interest of ECE in the Conference, it offered to assist UNIDO in an appropriate manner.

46. In the course of the year, UNIDO contributed to the data collected by ECE on the activities of various international bodies. It submitted information on its current operational activities in the iron and steel industry sector as well as a description of the Organization's technical assistance activities in the basic chemical and petrochemical industries.

47. UNIDO was represented at two meetings organized by ECE in Geneva.

### **Economic Commission for Latin America (ECLA)**

48. Co-operation between ECLA and UNIDO was complemented in 1974 by the joint preparations for the Second General Conference of UNIDO. A preparatory meeting of high-level experts was held at Buenos Aires from 30 September to 2 October 1974. In keeping with a decision by the ECLA Committee of the Whole, ECLA and UNIDO organized a ministerial meeting at Mexico City from 25 to 29 November 1974, at which a declaration of industrialization in Latin America--principles and plan of action-- was adopted.

49. During 1974, consultation continued between ECLA and UNIDO for the establishment of a joint industry division. It is envisaged that an agreement will be finalized after the Second General Conference of UNIDO in March 1975 and the sixteenth session of ECLA in May 1975.

50. As in the other regions, the regional advisers attached to ECLA prepared studies and surveys in their various fields and undertook a number of field missions to discuss potential UNIDO projects with the respective Governments and to present papers on behalf of UNIDO at various meetings and symposia held in the region.

### **Economic Commission for Western Asia (ECWA)**

51. At the invitation of the Executive Secretary of ECWA, the Executive Director of UNIDO attended the inaugural session of ECWA, which was held from 3 to 8 June 1974, and on 27 June 1974, the Executive Secretary of ECWA and the Executive Director of UNIDO signed an agreement establishing the Joint UNIDO/ECWA Industry Division.

52. In the course of the year, extensive inter-secretariat discussions took place at various levels in order to elaborate a programme best suited to the needs of the region.

53. UNIDO's presence at ECWA during 1974 comprised two outposted professional officers, a regional industrial development adviser on industrial planning and programming and a junior professional officer.

54. Other aspects of co-operation between ECWA and UNIDO included the organization of a meeting on special problems and requirements of industrial development in the least developed countries of the Middle East. The meeting was held in Beirut from 25 to 29 November 1974, and the problems impeding the industrialization of those countries were identified and proposals made for overcoming them.

55. Preparations also continued in connexion with a meeting on the development of selected branches of the food processing industry in the Middle East to be held in March 1975 (see chapter III, section on "Light industries").

56. An issue paper on an over-all strategy for industrial development also constituted part of the United Nations contribution to the Third Conference of Industrial Development for Arab States, which was organized by the Industrial Development Centre for Arab States at Tripoli, Libyan Arab Republic, in April 1974.



## **Economic and Social Commission for Asia and the Pacific (ESCAP)**

57. The Executive Director of UNIDO and the Executive Secretary of ESCAP (formerly ECAFE) signed an agreement on 12 July 1974 to establish a Joint ESCAP/UNIDO Industry Division at ESCAP headquarters.

58. Co-operation between UNIDO and ESCAP was further strengthened in the course of joint meetings organized at Bangkok in preparation for the Second General Conference of UNIDO. The first of these meetings was an expert group meeting held in the second half of September 1974 to carry out the groundwork for the regional declaration on industrialization, which would constitute an important input in the Declaration and Plan of Action to be adopted at the Second General Conference of UNIDO.

59. This preliminary meeting was followed by a meeting of the developing countries of the ESCAP region from 28 to 30 October 1974, in the course of which a draft declaration on the principles and programme of action for industrialization in the region was prepared. At the subsequent special Preparatory Meeting for the Second General Conference of UNIDO, held from 31 October to 4 November 1974, the declaration and programme of action were discussed at length and duly adopted.

60. UNIDO and ESCAP also co-operated closely in the area of agricultural machinery and its manufacture. At its thirtieth session, ESCAP adopted a resolution on the establishment of an Asian centre for agricultural machinery and invited the co-operation of UNDP, FAO and UNIDO in the realization of the project. UNDP designated UNIDO executing agency for the preparatory mission which was carried out in the final quarter of 1974 to identify the technical assistance requirements for the development of agricultural machinery suitable for use and production in Asian countries.

61. UNIDO participated in 10 meetings organized by ESCAP, all but one of which were held at Bangkok.

### **Regional industrial development advisers**

62. In the 1974 UNIDO regular programme of technical assistance provision was made for 16 posts for regional industrial development advisers attached to the regional economic commissions. Further to providing technical advice to Governments, upon request, and developing joint programmes for the countries of the respective regions, the regional industrial development advisers carried out a number of exploratory and advisory missions thereby promoting complementarity of action with the other technical assistance services provided by UNIDO.

63. In the course of the year, 15 of the established posts were filled in the following areas:

#### *ECA*

Strategies, plans and policies for industrialization

Industrial surveys, studies, monitoring and appraisal of industrial development

Small-scale industries

Industrial project preparation and evaluation

Investment promotion

### **ECLA**

Technology for industrial development  
Industrial development  
Industrial economics  
Strategies, plans and policies for industrialization

### **ECWA**

Industrial planning and programming

### **ESCAP**

Agro-industries and light industries  
Transfer of technology  
Industrial economics  
Industrial plans and policies

## **CO-OPERATIVE PROGRAMMES WITH CONTRIBUTING COUNTRIES**

### **People's Republic of China**

64. Chinese voluntary contributions were used in 1974 to initiate two projects which were directed towards increasing the self-reliance of four developing countries in two specific branches of industry (see also chapter VII, section on "UNIDO General Trust Fund"). In the first instance, a joint mission of Chinese and UNIDO experts visited Mauritania in July 1974 where they conducted a feasibility study on the establishment of a small-scale garment pilot and demonstration plant. In the second instance, Chinese experts demonstrated power tillers in three African countries (Egypt, the Sudan and the United Republic of Tanzania) and trained local personnel in their use. In the course of a two-month techno-economic evaluation, the suitability of the power tillers will be assessed and steps taken to establish the feasibility of manufacturing these essential agricultural aids on the basis of local material and human resources.

### **Hungarian People's Republic**

65. Within the framework of the joint UNIDO/Hungarian programme<sup>1</sup> (for international co-operation in the instrument, electronics and telecommunication industries for the benefit of the developing countries) signed in 1973, UNIDO and the Hungarian Government discussed at length the most appropriate means through which the experience Hungary had acquired in this highly essential field could be made available to the developing countries.

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<sup>1</sup> The primary objectives of the programme were described in ID/B/140, para. 911.

66. Steps were taken to organize in early 1975 an in-plant group training programme in the maintenance of bio-medical equipment for technical personnel from developing countries. At the same time, the Hungarian authorities proposed that two studies be carried out under the joint UNIDO/Hungarian programme: one on the establishment of the instrumentation industry in developing countries and the other on the establishment of the telecommunication industries in developing countries. This proposal, together with other suggestions made in the course of the discussions, is currently under review by UNIDO.

### **Republic of India**

67. The co-operative programme in industrial technology of UNIDO and the Government of India (cf. ID/B/140, para. 914) has passed from the initial stage of discussion and policy identification to the successful implementation of an appreciable number of projects.

68. The main emphasis of the activities initiated under the co-operative programme has been placed on what have been termed exchange missions. Under this scheme, teams of specialists from selected developing countries visit India to acquaint themselves with the experience India has acquired in a variety of fields ranging from electrical and mechanical engineering, electronics, metallurgy, fertilizers, pesticides, and agricultural equipment to the chemical and light industries. At present, 12 such exchanges have been envisaged, though in view of the reciprocity of the scheme, it may well transpire that there will be corresponding return missions by Indian experts to the countries India initially invited. The effect of this two-way traffic is to be seen in the subsequent impact of the first visits by officials from Fiji, the Gambia, Indonesia, the Philippines and the Republic of Korea, not forgetting the extensive programme that has been arranged between the Andean Group of countries and India (see chapter VII, section on "UNIDO General Trust Fund") as well as the visit paid by Indian officials to Sri Lanka in 1974.

69. The co-operative programme, which is directed primarily towards familiarizing one developing country with the technological and industrial capabilities of another, is being supplemented by a series of meetings, two of which were held in 1974: one was a manufacturing development clinic on animal-drawn agricultural implements, hand-operated machines and simple power equipment for the least developed and developing countries, held in New Delhi in October 1974 (see chapter VII, section on "UNIDO General Trust Fund"); the other was a study tour organized by the Institute of Indian Foundrymen in December 1974 (see chapter II, section on "Special programmes"). Both events contributed effectively to a strengthening of the self-help approach now being adopted by the developing countries.

### **Socialist Republic of Romania**

70. The major feature of the joint UNIDO/Romania Centre's programme of work was the organization of the investment promotion meeting and technological consultations held in Bucharest in December 1974. The meeting was directed towards the chemical industries in developing countries and was based on specific project proposals that had been prepared in depth in the preceding months and distributed to participants in advance. The ultimate objective of the meeting was to

promote the establishment of chemical industries in the developing countries through appropriate co-operation between the developing and industrialized countries.

71. The UNIDO/Romania Centre also launched another programme, designed to promote contractual relationships with regard to chemical industries between industrialized and developing countries, at the Bucharest International Fair in October 1974. Under the auspices of the Centre, the in-plant group training programme in the petrochemical industry, initiated in 1973, was held again in 1974. On the basis of the evaluation of the previous training programme, it was agreed for the 1974 programme to shift the emphasis from synthetic rubber to nitrogen fertilizers as the latter, together with plastics and synthetic fibres, were felt to be of greater relevance to the developing countries.

72. In 1974, the UNIDO/Romania Centre also started work on a tentative reference manual on the manufacture of catalysts for the fertilizers and petrochemical industries (which is described in detail in chapter III, section on "Fertilizer, pesticide and petrochemical industries).

73. UNIDO Headquarters maintained close contacts with the Centre throughout the year so as to achieve an identity of interests and to continue the high degree of co-operation that has marked the first two years of joint activity.

74. Through the UNIDO/Romania Centre, the Romanian Government has offered to field a mobile demonstration unit for the processing and use of plastics in agriculture to Mali and Upper Volta, in connexion with the programme of assistance to the drought-stricken countries of the Sudano-Sahelian region. Plastic components such as pipes and sheeting could be put to good effect in irrigation schemes, and the project is currently scheduled for implementation in 1975.

### **Socialist Federal Republic of Yugoslavia**

75. The negotiations between UNIDO and the Yugoslav Government with regard to the establishment of a joint programme for the development of agro-industries in the developing countries (cf. ID/B/140, para. 919) were formally concluded on 20 May 1974. The joint programme provides for the holding of consultations with developing countries to encourage them to co-operate with one another in the field of integrated agro-industry, and for the provision of technical assistance in the selection of appropriate production processes and equipment.

76. The main components of the joint programme are: the preparation of recommendations on the establishment of agro-industries in the developing countries; the adoption of educational measures for the training of personnel; the creation of information services; the organization of research; the development of consulting services; and the provision of assistance with measures for financial co-operation.

77. A joint committee, consisting of three members designated by the Yugoslav Government and three staff members of UNIDO, will be responsible for the execution of the joint programme. The initial programme of work is currently under discussion with the Yugoslav representatives.

## **SPECIAL PROGRAMMES OF CO-OPERATION WITH INDUSTRIALIZED COUNTRIES**

78. In addition to the customary scope of its co-operation with the developed countries, UNIDO has also developed special programmes of co-operation with a number of industrialized countries. A selection of the activities carried out in 1974 under these special programmes is cited below; other examples are given in chapter VII, section on "UNIDO General Trust Fund".

### **Austria**

79. The fifth in a series of in-plant group training programmes in plastics technology was held as scheduled in 1974. It followed the well-established pattern that has ensured the success of the previous programmes in the series. Austrian voluntary contributions were also used to launch a new in-plant group training programme, which was held in Vienna in October 1974, in the production and application of synthetic fibres. The three-week course more than fulfilled the expectations of its organizers and, similar to the plastics programme, this new programme will become a regular feature of the Austrian programme of co-operation.

### **Belgium**

80. The Belgian Government continued its support of the UNIDO General Trust Fund and in 1974 agreed to a portion of its voluntary contribution being used to finance the preparation of a manual on glass technology.

81. Agreement was also reached in 1974 on Belgian voluntary contributions being used in 1975 to finance a six-week training course for production managers in the development of industrial exports. This course, which is oriented towards medium-scale industries, will be held in Latin America.

82. Latin America, more specifically Bolivia, will be the recipient of Belgian-funded expertise in the establishment and operation of a vegetable-oil processing plant, and a further portion of the Belgian voluntary contribution will be used to provide equipment for a small aluminium factory in Mali.

83. In December 1974, Belgian voluntary contributions were used to finance a two-week training course on the organization, processing and utilization of industrial information which was designed for the needs of the French-speaking African countries south of the Sahara. The course was directed towards the requirements of the least developed countries and was attended by 20 participants. A training course in pharmaceutical manufacturing techniques was also financed from Belgian voluntary contributions.

84. Belgium has continued the financing of five Junior Professional Officers (JPOs), posted in different developing countries; recruitment of two further JPOs, also to be financed by Belgium, is currently under consideration.

## **Czechoslovakia**

85. Further to the in-plant training workshop on the production of refractories held in Czechoslovakia in June 1974 (see chapter VII, section on "UNIDO General Trust Fund"), Czechoslovak voluntary contributions were used to finance a three-month in-plant group training programme in the field of diesel engines. This programme, the fourth of the series, has become a regular feature of the Czechoslovak programme of co-operation and provides the participants with a complete theoretical and practical introduction to the manufacture and use of diesel engines.

86. The Government of Czechoslovakia has voiced an interest in assisting the Sudanese Government in elaborating an investment programme for the development of the wood processing industry. As a first stage, a contract was concluded with a Czechoslovak firm of consultant engineers who will visit the Sudan in early 1975 to prepare an investment-oriented techno-economic feasibility study for the establishment of a plywood mill.

## **Finland**

87. The fourth seminar on the furniture industry was held in Lahti, Finland. The seminar was financed by the Finnish Government and Funds-in-Trust were used to cover the participants' travel and local expenses with supplementary funding from UNDP. As in previous years, the seminar comprised a balanced synthesis of theory and practice, supplemented by case study exercises based on everyday problems of design, production, quality control and plant management.

88. The Finnish Government also hosted an expert group meeting, in August 1974, financed under Funds-in-Trust on the subject of minimizing pollution from fertilizer plants.

## **France**

89. As in previous years, French voluntary contributions were released to pay for the services of the Association nationale de la recherche technique. These services have become an indispensable feature of the UNIDO Network of Correspondents which assists the Organization in retrieving pertinent data and information in answer to the ever increasing number of inquiries from the developing countries.

90. French voluntary contributions also helped to finance a meeting of high-level experts representing different socio-economic systems, from both developing and developed countries, which was held in Paris in June 1974. Organized by the Government of France and the Maison de sciences de l'homme, the meeting focused on the concept of a new international division of labour related to industry and, in this context, on a new international economic structure and the problems arising therefrom. The findings of the meeting were presented in a report which was included in the documentation to be submitted to the Second General Conference of UNIDO; the report bears the title "International Industrial Co-operation".

91. French voluntary contributions were also used to finance a regional workshop in industrial project evaluation for four UDEAC countries (Central African Republic,

Congo, Gabon and United Republic of Cameroon). Twenty participants attended the workshop which was held in Yaoundé, United Republic of Cameroon, in September 1974, where they discussed the practical aspects of economic evaluations with respect to industrial projects in the light of the methods used by the French Technical Co-operation Services and UNIDO.

### **Germany, Federal Republic of**

92. Part of the contribution of the Government of the Federal Republic of Germany under the Funds-in-Trust was used to finance the UNIDO scheme for the exchange of information on industrial projects in developing countries among industrial development financing institutions. The scheme, which became fully operational in 1973, is designed to facilitate the confidential transfer of information about specific industrial projects from one development finance company to another, with UNIDO adopting the role of a clearing house which receives, processes and disseminates the data collected (cf. ID/B/140, para. 620). Membership increased in 1974 to almost 100 institutions which have submitted to UNIDO more than 2,000 industrial project information sheets on projects they have financed; these information sheets were duly transmitted to the other members of the scheme. Plans are being discussed to expand and establish the scheme on a more permanent basis, possibly as a self-financing institution, as it becomes more widely accepted as an effective means of co-operation.

93. Discussions are also being held with the Government of the Federal Republic of Germany as to its possible participation as a donor in the Junior Professional Officer scheme.

### **Italy**

94. Italian voluntary contributions were used in 1974 to finance two in-plant group training programmes, one in French and the other in Spanish, in the management of maintenance and repair services. The three-month courses introduced the participants to the concept of preventive maintenance, maintenance costing, planning and management of maintenance operations and stock control; thereafter, the participants were attached to industrial plants to consolidate theory with practical experience.

95. The Italian Government also financed a 15-week in-plant group training programme on integrated industrial management techniques and systems in the following sectors: steel, cement, mechanical and electrical engineering, shipbuilding, food processing, telecommunications and transportation. As mentioned elsewhere, the Italian electronic industry sector is also involved in providing technical assistance to the Andean Development Corporation; the funds are being provided from the Italian voluntary contribution.

96. Part of the Italian voluntary contribution was also used to finance the services of a UNIDO consultant on a joint UNDP/UNIDO/FAO/ECAFE mission to assist in the preparation of a draft plan for the establishment of an Asian agricultural machinery institute.

### **Japan**

97. Japanese voluntary contributions were used in part in 1974 to strengthen the information services of UNIDO (see chapter VII, section on "UNIDO General Trust Fund"). They were also used to finance an eight-week training course in the development of industrial exports, organized in early 1974 by UNIDO in co-operation with the Japanese Association for Overseas Training Scholarships and oriented towards export production in the electronics, metalworking and automobile assembly industries. The course introduced the participants from the ECAFE region to such aspects as the application of international standards, quality control techniques and design improvements which can contribute significantly to the market acceptance and competitiveness of manufactured and semi-manufactured products from the developing countries.

### **Netherlands**

98. The Netherlands Government co-sponsored and contributed in kind, through the Council of the Netherlands Industrial Federation, to the joint UNIDO/FAO meeting to promote investment and industrial co-operation in selected food processing industries. The meeting was held in Amsterdam in October 1974 (see above on co-operation with FAO).

99. Discussions were also held with the Government of the Netherlands relating to the provision of Junior Professional Officers to assist the Industrial Development Field Advisers; the recruitment of the first candidate is under active consideration.

### **Poland**

100. The Polish voluntary contributions were used to provide intensive practical training in the promotion, organization and operation of industrial co-operatives. Fifteen participants from nine Latin American countries took part in a 15-week group training programme, which was held from July to October 1974.

### **Sweden**

101. The Swedish Government increased its contribution to the Junior Professional Officer scheme and, as the major donor, financed no less than 10 JPOs, 9 of whom were attached to duty stations in the field to assist the Industrial Development Field Advisers and 1 to a regional economic commission where UNIDO has established a joint industry division.

102. Through its Funds-in-Trust contributions, the Swedish Government bore the cost of two training programmes—one in the pulp and paper industry and the other in quality control—which were similar to the programmes held in previous years.

### **Switzerland**

103. The Swiss Government also expressed its interest in financing the appointment of a Junior Professional Officer in the field, and the recruitment of a suitable



candidate is under active consideration. Furthermore, the Swiss Government (through its voluntary contribution and contributions in kind) and Swiss industry (through the provision of facilities and training staff) co-operated in the organization of an in-plant group training programme in the application of dyes and chemicals to textiles. The programme was comparable to a similar one held in Switzerland in 1972, which had evoked a positive response; the major difference was the broader scope of the 1974 programme.

### **Ukrainian Soviet Socialist Republic**

104. In 1974, the third in-plant group training programme in electric welding was held in the Ukrainian Soviet Socialist Republic, financed from its voluntary contributions and, in part, from the UNIDO regular programme of technical assistance. Some 20 participants from developing countries attended the course.

### **Union of Soviet Socialist Republics**

105. Further to the three group in-plant training programmes, in metalworking, fertilizers and standardization, a training course for industrial information officers was also financed from voluntary contributions by the Government of the Union of Soviet Socialist Republics. The Government also continued its financial support for the services provided by the All-Union Institute for Scientific and Technical Information (VINITI) in supplementing the industrial inquiry service within the UNIDO network of correspondents.

106. The Government contributed to the publication of the *UNIDO Newsletter* in Russian, as it had done in previous years. It also hosted and financed a meeting in October 1974 on the promotion and development of machine-tool industries in developing countries in Asia and the Far East. The meeting was directed specifically towards experts and decision-makers in the machine-tool sector and provided a comprehensive review and analysis of the technical and economic problems involved in the establishment and development of a machine-tool industry in the developing countries of the region.

107. Once again voluntary contributions from the Union of Soviet Socialist Republics were used to finance the provision of four mobile units for the maintenance and repair of industrial equipment, two of which were delivered to Turkey and the other two to the Gambia in the course of 1974.

### **CO-OPERATION WITH REGIONAL GROUPS**

108. Throughout 1974, UNIDO continued its co-operation endeavours with the various regional groups in an attempt to contribute to their effectiveness and, in turn, to the effectiveness of the industrialization of the member countries. At the same time, the links established with the various groups and organizations provide a channel of valuable information on the problems the regions are encountering and on the adequacy of UNIDO's efforts to overcome them.

109. Selected examples of UNIDO co-operation with a number of regional groups are quoted below; they are intended to represent a cross-section of the varied form this co-operation frequently takes.

### **Common Organization of African and Malagasy States**

110. Despite a regular exchange of ideas and suggestions as to possible projects in the region, technical co-operation between UNIDO and the Common Organization of African and Malagasy States (OCAM) was restricted solely to the provision of assistance in the organization and administration of the Regional Industrial Property Office (cf. ID/B/140, para. 951). A replacement for the expert originally selected, who had to decline on account of illness, was duly approved and the project was scheduled for implementation in early 1975.

111. UNIDO was represented at the Conference of Heads of State and Governments of OCAM, held in Bangui in August 1974. In its recommendations, the Conference stressed the importance of industrialization on a regional basis, and it is hoped that this might well mark the starting point of a new phase of co-operation between UNIDO and OCAM.

### **East African Community**

112. Owing to the nature of the current situation within the East African Community (EAC), co-operation between UNIDO and EAC in 1974 remained comparatively modest. A UNIDO expert continued to assist the Industrial Unit of the Community in industrial economic and statistical analysis, while an industrial engineer and industrial economist recruited by UNIDO assisted the East African Development Bank in the identification and evaluation of industrial investment opportunities with a view to establishing balanced industrial development in the three member countries. The latter project was later revised to include a larger training component more in line with the long-term objectives of the project.

### **Maghreb Permanent Consultative Committee**

113. UNIDO continued to co-operate with the Maghreb Committee throughout 1974, primarily within the framework of the Centre of Industrial Research for the Maghreb, set up in 1968.

114. A market survey was carried out on semi-finished and finished goods from lead, zinc and copper in the Maghreb countries, as were two techno-economic feasibility studies directed towards the manufacture of components for domestic appliances and the possible production of tin plate in the Maghreb countries.

115. A meeting of government officials from the Maghreb countries was held in December 1974 to discuss industry as a factor in regional development. This meeting, which was organized by UNIDO as part of the Centre's activities, discussed the problems of co-ordinating national industrial development plans at a regional level and devoted particular attention to the methodological and institutional aspects of programming at this level. The present and medium-term prospects of subcontracting

and co-operation at enterprise level were also subjects of investigation in a UNIDO study, which commenced in 1974, directed towards the metalworking industries in the region.

### **Mano River Union**

116. The Mano River Union, jointly set up by Sierra Leone and Liberia in October 1973 as a new regional economic grouping in West Africa, began in 1974 with the planning and implementation of co-ordinated programmes of development in the two countries. The Secretary-General of the Union visited UNIDO Headquarters in October 1974 to discuss possible technical assistance that UNIDO might be able to render to the Union in order to help meet both the short-term and long-term technical requirements of the Union. As a result of these and previous discussions, it is likely that UNIDO assistance will be channelled into the following areas: pre-investment studies on selected potential joint industries; assistance in the field of standardization, quality control and metrology; and assistance in the drafting of legislation for the establishment of the new joint industries. In view of the importance which UNIDO attaches to this new co-operation, the Industrial Development Field Adviser in West Africa now covers the Mano River as well.

### **Central African Economic and Customs Union**

117. On 8 December 1964, the Governments of the People's Republic of the Congo, Cameroon, the Central African Republic, Chad and Gabon set up the Central African Economic and Customs Union (UDEAC). Chad and the Central African Republic left the Union in April 1969 to set up the Union of Central African States with Zaire (then known as the Democratic Republic of the Congo); the Central African Republic, however, returned to UDEAC in the same year and is host country to the Union.

118. Relations between UNIDO and UDEAC date from early 1968, when a joint UNIDO/ECA mission visited the Union's headquarters in Bangui, Central African Republic, to assist UDEAC in setting up an industrial promotion centre, as requested by the Conference of Heads of State of UDEAC in December 1967. However, owing to the subsequent uncertain status of the Union, the project failed to materialize.

119. In December 1972, a second UNIDO mission went to Bangui to discuss possibilities of technical assistance with UDEAC. In the following year, four member Governments submitted a request for UNIDO assistance in investigating industrial problems in a variety of fields (fertilizers, pharmaceuticals, petrochemicals); the implementation of the project is contingent upon the elaboration of national development plans by the member countries.

120. In September 1974, a regional training workshop in industrial project evaluation was held in Yaoundé, United Republic of Cameroon. Attended by 20 participants, the workshop emphasized the practical aspects of economic evaluation of industrial projects, with particular reference to the needs of the UDEAC countries.

## **Andean Group**

121. In 1974, UNIDO continued to provide technical assistance to the Andean Group, mostly through the SIS programme. Projects were completed in a variety of fields ranging from the manufacture of electro-medical equipment to shipbuilding and repair operations. Missions also directed their attention to the possibility of establishing plants in the region for the manufacture of printing equipment for the local graphic industries, to standardization and metrology in the metalworking sector, as well as to the local manufacture of textile machinery and pharmaceuticals.

122. At the time of writing, UNIDO is assisting the Andean Group in the metalworking sector with two programmes. The first project is concerned with industrial programming in the automotive, shipbuilding and allied metalworking sectors and the evaluation of specific projects submitted by the member countries. The second project is directed towards the rationalization of industrial processes currently practised in the region, the primary target area being foundries with forging and heat treatment, and the standardization of manufactured components, tools and dies. There is every indication that UNIDO technical assistance in the future will concentrate upon project evaluation and rationalization exercises such as those above.

123. The Andean Development Corporation (CAF), the body within the Group responsible for subregional integration, was also a major recipient of UNIDO technical assistance. UNIDO experts were assigned to the Corporation to assist in the preparation of investment-oriented techno-economic feasibility studies, in the analysis of industrial opportunities and in the elaboration of industrial and financial development plans for different branches of industry such as the automotive, petrochemical, iron and steel, and shipbuilding industries (cf. ID/B/140, para. 964).

124. UNIDO has also signed a tripartite agreement with the Commission of the Cartagena Agreement and CAF pertaining to the implementation of a comprehensive development study for the electronics industry in the Andean Group. Funds in the order of \$400,000 were provided from the Italian voluntary contribution and the project has been designed as a two-phase operation. The first phase, initiated in July 1974, comprised the provision of expert assistance to the secretariat of the Commission in the programming of the establishment and integration of the electronics industries in the member countries. The second phase, which is scheduled for early 1975, entails the attachment of a consulting company to the Commission to assist the secretariat of the Commission in the preparation of feasibility studies, investment plans and other studies required in connexion with the establishment of electronics industries in the countries of the Group.

## **Caribbean Community**

125. The Caribbean Community (CARICOM) secretariat has been successful in its endeavours to promote co-operation among its members; more comprehensive air links have been established, and there has been an appreciable interchange of trade and technical missions among the individual members. The objective of CARICOM is to explore the possibilities of closer economic and cultural relations and to further the mutual exchange of technical experience. In April 1974, a meeting was held at St. Lucia to facilitate the entry of the smaller CARIFTA territories into the Community.

126. The services of the Industrial Development Field Adviser assisting the CARICOM secretariat were extended a further six months, and a second UNIDO expert was given a six-month extension to complete the long-term regional perspective plan for the industrial sector of the Caribbean Community and Common Market. A Junior Professional Officer (JPO) has also been attached to CARICOM to ensure continuity during the absence of the UNIDO Industrial Development Field Adviser who has multi-country responsibilities and is thus on station in the CARICOM secretariat for only a limited number of days each month.

127. UNIDO also assisted the Eastern Caribbean Common Market secretariat (ECCM) in a project on industrial promotion and management consultancy. Two experts are currently in Antigua working on the project which has since been revised to include a short-term consultancy component, a number of fellowships and the supply of equipment.

### **Permanent Secretariat for the General Treaty on Central American Economic Integration**

128. During 1974, the current programme of technical assistance directed towards the Permanent Secretariat for the General Treaty on Central American Economic Integration (SIECA) and the Central American Research Institute for Industry (ICAITI) was completed when the industrial programming expert attached to SIECA in Guatemala submitted his report. In May 1974, a UNIDO consultant assisted the National Planning Council and the Agro-Industries Division of the General Directorate of Agricultural Development (DIGESA) in Guatemala in the holding of a food processing seminar. The consultant put forward some suggestions relating to co-operation with ICAITI in the agro-industrial sector. It is thus expected that a number of projects will emerge as a result of this report and the current endeavours of SIECA to restructure the Central American Common Market. In this respect, co-operation is envisaged not only with the secretariat of SIECA and ICAITI, but also with the Central American Bank for Economic Integration.

### **Asian Coconut Community**

129. The assignment of the UNIDO expert, who was attached to the Asian Coconut Community (ACC) in 1973 to carry out research into the economic problems confronting the coconut industry (cf. ID/B/140, para. 970), has been extended until 1976. In the course of 1974, the expert visited India, Indonesia, the Philippines and Sri Lanka at the request of the respective Governments to assess the local industries, identify their problems and offer guidance on appropriate economic policies. The expert's proposals were subsequently endorsed by the Community at its tenth session, held in July 1974 at Apia, Western Samoa, which transmitted them officially to UNDP and UNIDO in the following month. Both organizations are engaged in studying these proposals with a view to further action.

### **Asian Productivity Organization**

130. UNIDO assistance to the Asian Productivity Organization (APO) in 1974 comprised two two-month fellowship posts in management consultancy and foundry

technology. The holders of both fellowships were duly placed in the second half of the year. UNIDO has also been actively assisting APO in its preparation for a seminar on export processing zones which is to be held in 1975. UNIDO has transmitted a wealth of background information on the development of such zones, though it will not be able to participate in the actual meeting owing to budgetary limitations within APO.

### **Mekong Committee**

131. At the 60th Plenary Session of the Mekong Committee, UNIDO expressed its continued interest in possible follow-up assistance based on the findings of the feasibility study for the establishment of iron and steel industry and the ferro-alloy study, both of which were completed in 1971 (cf. ID/B/140, para. 976).

132. Following the expert group meeting organized by the International Rice Research Institute in the Philippines in 1973 (cf. ID/B/140, para. 214), the Mekong Committee expressed interest in the local manufacture of rice harvesting and threshing machinery. UNIDO subsequently designed for consideration by the Committee a pilot project for the manufacture of agricultural machinery for the sowing, harvesting and threshing of rice, suited to conditions in one of the member countries.

133. A UNIDO sponsored feasibility study on the furnace phosphoric acid industry was completed in the first quarter of 1974 and the report sent to the Governments concerned; projects proposed in the report are currently being discussed by the Governments and UNIDO with a view to further development.

134. UNIDO is also studying the possibility of organizing a survey mission to the four riparian States in order to identify research needs and problems with regard to the existing agro-industrial enterprises, and to recommend ways and means resolving them. The survey mission was proposed in connexion with the Mekong Committee's suggestion that the facilities of the Applied Scientific and Research Corporation of Thailand (ASRCT) be utilized as a starting point for regional co-operation in industrial research. The Committee was also closely associated with the preparation of the project document for the agro-industrial complex planned in Can Tho, Republic of Viet-Nam. As an initial phase of the operation, a consulting company went into the field in September 1974 to complete a series of pre-feasibility studies that will constitute the basis for the final master plan.

### **Regional Co-operation for Development**

135. Following a UNIDO exploratory mission in April 1973 to study the possibility of the Regional Co-operation for Development (RCD) secretariat publishing a quarterly magazine, a project to assist RCD in this field was approved. Starting in October 1973, a UNIDO expert in public information worked on this project for eight months and most of his suggestions were accepted by the RCD secretariat. Through close co-operation it proved possible to establish the pattern the RCD magazine has since adopted, which has received wide acclaim within and without the region. Industrial subjects are given a prominent place in the publication, which includes articles on national development efforts of the three member countries as well as articles on general developmental issues.

### **Arab Organization for Standardization and Metrology**

136. The Arab Organization for Standardization and Metrology (ASMO) was established in 1965, by virtue of an agreement approved by the Arab Economic Council, as a specialized agency within the League of Arab States for the promotion and co-ordination of the efforts of the member States in this field. A Memorandum of Understanding was signed by the Secretary-General of ASMO and the Executive Director of UNIDO in December 1969 and later modified in 1973 into a frame agreement.

137. Under this agreement, ASMO undertakes to translate into Arabic and disseminate International Organization for Standardization, International Electrotechnical Commission and International Organization of Legal Metrology documents, recommendations and standards. Further to preparing and publishing in Arabic studies and information relevant to these fields, ASMO is broadening its documentation and information unit in co-operation with UNIDO, through the purchase of appropriate microfilm reading equipment. ASMO also organized a regional joint consultation for national standards bodies, trade unions, chambers of commerce and industry on the implementation of standardization and quality control techniques for the promotion of exports; the consultation was held in December 1974. A five-week training course was organized by ASMO for persons engaged in food control, and tentative plans are being made to hold two training workshops in 1975 for textile quality control engineers from the African region, using, if possible, the facilities and expertise of the Quality Control Centre for Textiles in Alexandria, a project for which UNIDO is the executing agency.

### **Industrial Development Centre for Arab States**

138. The on-going large-scale UNDP project entitled "Central Advisory Services to IDCAS" (cf. ID/B/140, para. 982) underwent a certain revision in 1974 and the expert component was increased. Administrative steps were also taken to embark upon a series of feasibility studies directed towards the petrochemical, plastics and fertilizer industries in the region.

139. As in 1973, UNIDO and IDCAS co-operated in the organization of two training workshops on project preparation and evaluation, the first of which was held in the Democratic Yemen in January-February 1974 and the second in the Sudan in September 1974. Work has also progressed on the UNIDO/IDCAS manual on industrial project evaluation in Arab countries; the first draft is scheduled for April-May 1975.

140. In the course of 1974, an analysis, financed from the UNIDO General Trust Fund, of available information on the manufacture of special steel and ferro-alloys in the Arab countries was completed, and work continued on the joint UNIDO/IDCAS integrated techno-economic analysis of the manufacture of tractors, buses, cars and ancillary industries in selected Arab countries. As in previous years, IDCAS translated certain UNIDO documents into Arabic and organized their distribution throughout the member countries.

141. The Government of the Libyan Arab Republic, IDCAS and UNIDO also co-operated in the organization of the Third Conference on Industrial Development

for Arab States, held in Tripoli in April 1974. At this meeting, it was decided to form a permanent committee for the development of chemical fertilizer industries in the Arab States. The committee, comprising representatives of UNIDO, FAO, IDCAS and the Arab Agricultural Development Organization, will review the current situation and requirements of the fertilizer industry in the region and draw upon the information acquired by UNIDO in its previous co-operation with IDCAS, FAO and IBRD, whereafter an appropriate plan of action will be formulated.

### **Council for Mutual Economic Assistance**

142. The Council for Mutual Economic Assistance (CMEA) was established in April 1949 and according to its charter, which was adopted at its twelfth session in December 1959, the purpose of the Council is to promote, by combining and co-ordinating the efforts of its member States, the planned development of the economies of Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Mongolia, Poland, Romania and the Union of Soviet Socialist Republics. The CMEA secretariat applied in February 1971 for consultative status with UNIDO and the Industrial Development Board at its fifth session unanimously agreed to designate CMEA to participate in the deliberations of the Board and its subsidiary organs, pursuant to rule 75 of the rules of procedure of the Industrial Development Board.

143. In the ensuing years, close contact has been maintained and there have been reciprocal invitations of representatives of the secretariat of the Council and UNIDO to events organized by the two organizations. Information about relevant activities has been exchanged and consultative meetings held between senior executives of both secretariats. In 1974, UNIDO invited the secretariat of CMEA to support UNIDO's activities with respect to the Second General Conference of UNIDO. The CMEA agreed to present a consolidated paper prepared by its secretariat on the basis of submissions of the member States, the subject being the experience in co-operation by CMEA member countries in the field of industrial development and the influence of this development on the expansion of economic relations with other countries.

### **European Community**

144. In the course of 1974, relations with the European Community (EC) were appreciably strengthened. In addition to the regular exchange of information on the respective organizations' activities, the EC Commissioner concerned with development aid and co-operation visited UNIDO in May 1974, and the Executive Director of UNIDO paid a return visit to Brussels in December 1974.

145. Both organizations recognized the interdependence of industrialized and developing countries, and in its recent negotiations with 44 developing countries in the African, Caribbean and Pacific regions, the EC had observed an increased emphasis upon industrial projects. Upon conclusion of agreements with the above countries, the Community would discuss with UNIDO the industrial aspects and the technology transfer implications arising therefrom. Furthermore, the Community would be represented at the Second General Conference of UNIDO in Lima in order to ensure as effective a follow-up as possible of the discussions and resolutions.



## **INTERGOVERNMENTAL ORGANIZATIONS AND INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS**

146. During 1974 UNIDO continued its co-operation with intergovernmental organizations and international non-governmental organizations. The co-operation extended to nearly every geographic region and covered a variety of subjects. The mutual benefit that is derived from this co-operation was described in ID/B/140, paragraphs 904-905.

147. As many of the intergovernmental organizations have assumed the functions of regional groups, examples of UNIDO co-operation with such organizations have been described in the section above entitled, "Co-operation with regional groups". With regard to co-operation by UNIDO with international non-governmental organizations during 1974, the following paragraphs present selective illustrations of the scope of such activities.

### **International Co-operative Alliance**

148. UNIDO participated in the meeting of the Workers' Productive and Artisanal Committee of the International Co-operative Alliance (ICA) held at Budapest in September 1974. Discussions were held with members of the Committee and with staff of ICA during this meeting as well as on the occasion of the meeting of the Executive Committee of the ICA, which was held at Vienna in October 1974. Among the positive actions resulting from co-operation between UNIDO and ICA in 1974 were: completion of the first in-plant group training programme in the field of industrial co-operatives, organized by UNIDO in co-operation with the Polish Central Union of Workers' Productive Co-operatives; formulation of measures for co-operation in the work of the International Centre for the Promotion of Industrial Co-operatives, which was founded partly as a result of UNIDO co-operation with ICA; and co-operation with ICA in the preparation of selected case studies on organization and development of industrial co-operatives.

149. In co-operation with the Housing Committee of ICA, UNIDO is undertaking a survey to assess the practicability of setting up industrial co-operatives that could produce building materials for low-cost or co-operative housing in developing countries.

### **International Chamber of Commerce**

150. In April 1974, a meeting was held at UNIDO Headquarters of representatives of the International Chamber of Commerce (ICC) and UNIDO staff during which areas of possible future co-operation between the two organizations were identified. Among the areas singled out for such co-operation were: the organization of regional and national consultations with chambers of industry of the developing countries; the undertaking of an international survey of industrial development activities of chambers; the convening of a special meeting of representatives from chambers in developed and developing countries, which is to be organized on the occasion of the ICC Congress to be held in Madrid in 1975; and the joint organization of training programmes for government and chamber officials from developing countries.

151. A representative of ICC participated in the regional seminar for managers of chambers of industry in Arab countries, organized by UNIDO in Beirut in January 1974.

### **World Association of Industrial and Technological Research Organizations**

152. As a follow-up to the study that the World Association of Industrial and Technological Research Organizations (WAITRO) carried out in 1973, in co-operation with UNIDO, on the experiences of pairing by WAITRO members and on the implementation of the recommendations of the 1972 WAITRO General Assembly Biennial Meeting on the linkage of WAITRO members, a pilot programme was started in 1974 between the Caribbean Industrial Research Institute (CARIRI) in Trinidad and Tobago, and the New Brunswick Research and Productivity Council (RPC) in Canada. This three-year programme is funded by UNIDO, the Canadian International Development Agency (CIDA), and CARIRI, each of which is contributing \$20,000 a year. The CARIRI contribution is mainly in kind and covers the cost of staff time, services and facilities directly involved with the programme. A "Memorandum of Understanding" has been agreed upon by WAITRO and UNIDO on the use of these funds, essentially those contributed by UNIDO.

153. Following an invitation by WAITRO, UNIDO participated at WAITRO's fourth Executive Committee and Second General Assembly Biennial meetings held in Beirut, Lebanon, from 19 to 25 October 1974. The UNIDO participant assisted the Executive Committee and the General Assembly in their deliberations which led, in particular, to the development of a practical WAITRO work programme for 1975/1976. Possible areas of co-operation between UNIDO and WAITRO in the implementation of the work programme were identified, and these include: co-operation in WAITRO's training programme; development of regional and subregional activities for WAITRO members; continuation and intensification of linkage programmes and programmes of co-operation and exchange of experience among WAITRO members in the developing countries. UNIDO will also be providing WAITRO with information to assist it in finding a seat for its permanent headquarters.

### **International Savings Bank Institute**

154. UNIDO is carrying on a dialogue with the International Savings Bank Institute (ISBI) and its member savings institutions in Austria (Österreichischer Hauptverband der Sparkassen) and Germany (Deutscher Sparkassenverband), in pursuance of its programme on the mobilization of domestic resources for industrial projects. In addition, UNIDO participated in a meeting for international co-ordination on financial markets development, which was organized jointly by ISBI and the International Finance Corporation; the meeting was held in Geneva from 25 to 26 April 1974. A paper dealing with the role of UNIDO in the development of capital markets was submitted to the meeting by UNIDO.

155. With the aim of strengthening the programme on the mobilization of domestic resources for industrial development, UNIDO invited the Institute to contribute to a UNIDO expert group meeting held in Vienna from 14 to 15 October 1974. At this

meeting the head of the International Relations Department of ISBI presented a paper on the ways and means of improving the mobilization of domestic financial resources.

### **NATIONAL COMMITTEES**

156. At the end of 1974 the number of National Committees for UNIDO had reached 45. As in previous years, co-operation between UNIDO and the National Committees was manifold and extended from consultations to participation in meetings, seminars and carrying out promotional activities.

157. UNIDO is trying to intensify and strengthen its co-operation with National Committees, but unless the National Committees succeed in obtaining an independent budget and a permanent secretariat to carry out their functions efficiently, it will be difficult to develop, on a permanent basis, any programme of activities with these Committees. Nevertheless, UNIDO is seeking, within its limited resources, to stimulate this co-operation.

## *Chapter IX*

# PROSPECTS FOR THE FUTURE

## IMPLEMENTATION OF FIELD ACTIVITIES

1. The volume of assistance delivered in 1975 will, as in the past, depend to a large extent on the amount of expenditure of IPF projects, particularly as the levels of assistance under most other sources of finance are fixed by legislative decisions. In 1970, UNDP, under the IPF (or its equivalent), accounted for 54.3 per cent of the total UNIDO expenditures for technical assistance; in 1971 the figure was 56.5 per cent, in 1972 it was 62.7 per cent, in 1973 68.5 per cent and in 1974 it reached the figure of 72.6 per cent.
2. The total value of requests for assistance from UNIDO under the first country programme cycle (1972-1976) is now expected to be a little over \$132.5 million. This figure has been calculated on the basis of projects included in the approved country programmes and confirmed recently by the UNDP Resident Representatives in response to a specific enquiry from UNIDO. Financial authorization under the first IPF cycle for projects of the value of \$87.7 million had been received as of 30 September and it is expected that additional projects of the value of \$44.8 million will be approved in the remaining part of the first country programme cycle.
3. As stated elsewhere, UNDP adopted in the early part of 1974 new procedures for approval of country projects simplifying the process as well as delegating a part of the Administrator's authority to the Resident Representatives' Offices in the field. This is expected to accelerate approval of pending proposals.
4. Against the above-estimated value of requests of \$132.5 million under IPF for 1972-1976, the expenditure in the first three years is expected to amount to \$44.9 million, leaving a balance of \$87.6 million for implementation in 1975 and 1976.
5. The timely delivery in response to this accumulating backlog of requests of the developing countries will depend essentially on the resources available to support their implementation. Such additional resources are not presently forthcoming and it seems that UNIDO will have to operate in 1975 under the same constraints as in 1974. In other words, no substantial expansion of the field activities in 1975 seems likely except for whatever might be achieved through increased productivity of staff. Therefore, the targets of delivery of assistance set earlier for the remaining years of the first country programme cycle have had to be revised downwards. It is now estimated that the value of field activities under the IPF in 1975 will be of the order of \$19.0 million, which will nonetheless be an increase of about 9.2 per cent over the 1974 expenditure.

6. As regards the SIS programme, the agreement reached between UNDP and UNIDO in 1974 to establish an adequate programming level in order to ensure full utilization of available funds as well as to simplify the procedures for appraisal and approval of requests for assistance is now beginning to show positive effects. However, it will be some time before the momentum in this programme can be restored to the level existing before 1972. The number of requests submitted and approved in 1974 has been inadequate to permit an optimistic estimate on expenditure in 1975 which may well be limited to \$2.0 million.

7. The expenditure on activities financed under the regular programme of technical assistance will increase to \$2.0 million in 1975 in accordance with decision I (VII) adopted by the Industrial Development Board at its seventh session and subsequently endorsed by the General Assembly in resolution 3C.86 (XXVIII) of 6 December 1973. An amount of \$0.5 million from the regular programme will be utilized for activities in the least developed among the developing countries.

8. In view of the above, and in keeping with normal growth in activities financed with other funds, it is estimated that the total UNIDO expenditure on operational activities in 1975 will come to approximately \$26.0 million.

9. Looking a little ahead, the second country programme period is scheduled to begin in 1977. The programming process for this second cycle is already under way and it will occupy a great deal of UNIDO attention in 1975, particularly as the magnitude of the IPF proposed by UNDP for the second cycle represents a substantial increase over that of the ongoing period. The following table gives an indication of the increase.

*Comparative IPFs in the first and second country programme cycles,  
by region  
(In millions of US dollars)*

<i>Regions</i>	<i>1st cycle 1972-1976</i>	<i>2nd cycle 1977-1981</i>
<b>Africa</b>		
Country	380.0	743.5
Regional	66.9	98.7
<b>America</b>		
Country	279.5	292.5
Regional	61.5	63.1
<b>Asia and the Far East</b>		
Country	338.5	653.5
Regional	40.7	92.8
<b>Europe and the Middle East</b>		
Country	294.5	199.5
Regional	19.7	45.4
<b>"Undistributed"</b>	7.5	6.0
<b>Interregional</b>	19.2	<sup>a</sup>
<b>Global</b>	15.5	<sup>a</sup>
	<u>1,523.5</u>	<u>2,195.0</u>

*Source:* Document DP/26.

<sup>a</sup>Not yet determined.

10. In view of the recent world-wide economic and social developments as well as of an increasing demand for assistance in industrial development, it seems possible to assume that 12 to 15 per cent of the total of country IPFs will be devoted to activities within the field of industry. This, together with an estimated share of 5 per cent in the inter-country IPFs, may bring the total amount of UNDP resources available for UNIDO field operations in the period 1977-1981 to a level of approximately \$250 million or more. Additionally, the unimplemented portion of the first cycle, estimated to amount to \$47 million, will be carried forward to the second cycle period.

11. Thus, a situation seems to be developing where the only alternative appears to be for UNIDO to give the means to greatly enhance its capability to implement field projects. It would be unthinkable for an organization that was created to assist in the industrialization of the developing countries to be defeated in its purposes simply because the task assigned to it was too big.

12. A thorough debate on the above situation will undoubtedly take place at the Second General Conference of UNIDO. Such a debate would be timely and will provide guidance for future programming efforts.

## CONCLUSIONS

13. In international economic and trade relations, the tides of change continued to run their course in 1974, exerting a powerful impact on the developed as well as on the developing countries. While a part of the world finds itself being confronted mainly by the problems which its own growth has created, the rest of the world is faced with the frustration of its efforts being continuously overwhelmed and overtaken by events beyond its control.

14. The problems of energy, raw materials, food and protection of environment have assumed new urgency. Mankind seems suddenly to be at a cross-roads.

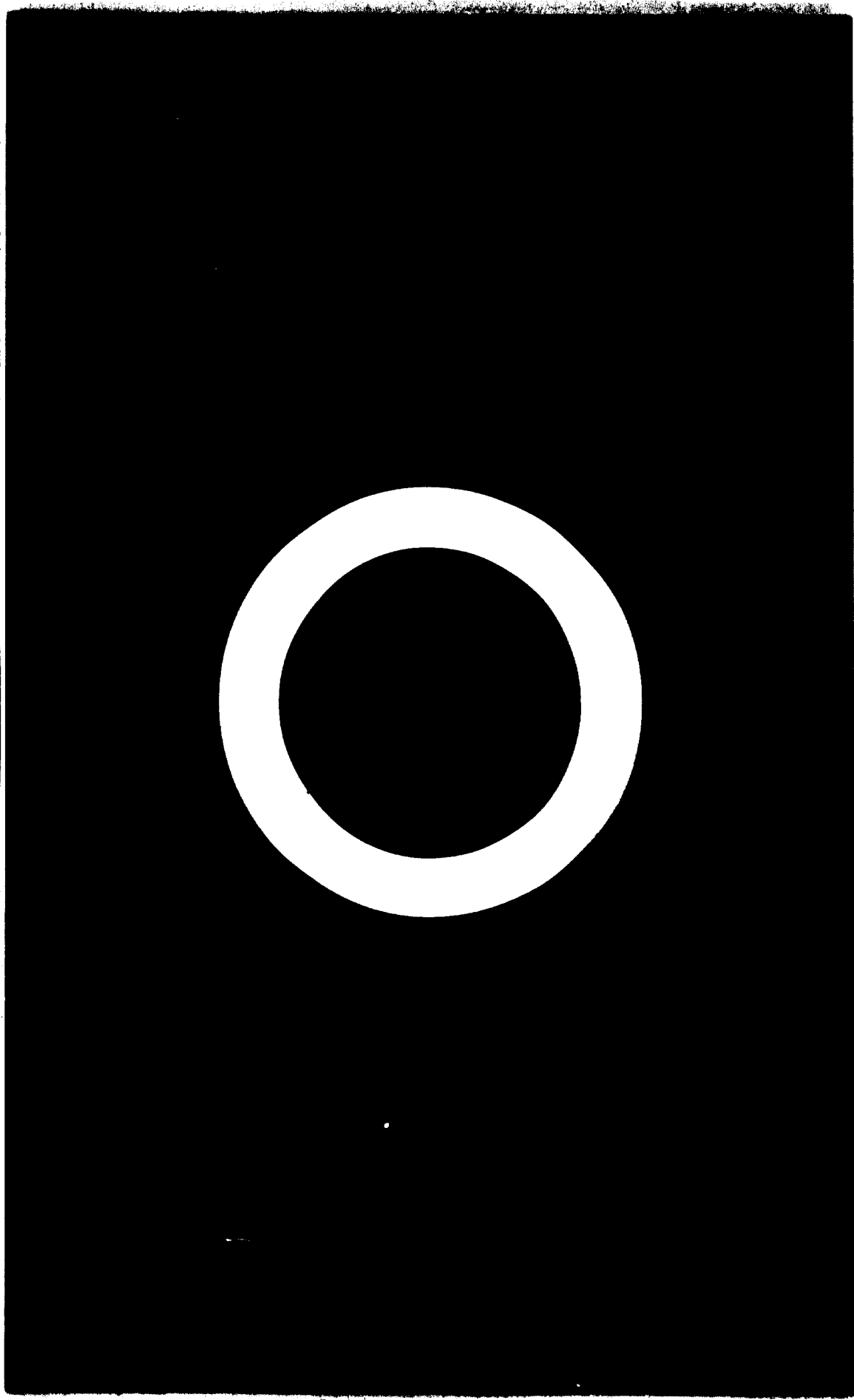
15. On the positive side, the year was marked by a greater awareness of the basic interdependency among the community of nations and the need to foster maximum co-operation among all countries for their own long-term interest. This was the central theme of a number of important international gatherings in 1974.

16. It becomes more and more evident that mankind can overcome the scarcities looming ahead only through a well-conceived and internationally balanced industrial system. Basic human needs can, to a great extent, now be satisfied through massive industrial means on a scale that was unthinkable in the not-too-distant past.

17. The task involved is challenging, both in scope and in complexity. The Programme of Action adopted by the General Assembly at its sixth special session calls for the establishment, as a matter of priority, of new industries in the developing countries "with a view to bringing about a new international economic structure which should increase the share of the developing countries in the world industrial production". The industrial output of the developing countries presently constitutes only 7 per cent of world-wide production, representing a very modest increase of 0.5 per cent in the last five years. Demands are being made for appropriate measures to increase the share of the developing countries in world industrial production.

18. UNIDO has to be equipped to be in the mainstream of these future developments if it is to be able to discharge effectively the functions expected of it by the world community.

19. The Organization has passed through its years of adolescence. In the beginning, it might have been viewed by some, perhaps, as an unwanted child; to others, it represented a hope born of the conviction that collective international action within the framework of the United Nations was necessary to cope jointly with the complex problem of industrialization. Although industrialization is still defined in many different ways, there is now general agreement that it must become an essential part of our modern way of life. The Second General Conference of UNIDO on industrialization is bound to bring the international community closer together in finding ways and means to achieve accelerated industrial development of the presently less developed countries with a view to establishing a new economic order based on mutual benefit and harmonization of long-range interests of all States of the world.





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**INTRODUCTION**

This annex provides an over-all view in financial terms of the headquarters and field activities of UNIDO, both past and forecast for the future. Data for the years 1967 to 1973 are based on audited accounts and those for 1974 on available information for the whole year which, however, is subject to correction and audit. If the final figures for 1974 are significantly different a corrigendum will be issued.

**Table 1**

This table summarizes the actual expenditures of the Organization in 1973 and 1974 and the estimated expenditures during the period 1975 to 1977. It covers expenditures of every kind on services and goods, whether under technical co-operation programmes or financed by the regular budget, overhead funds or other extra-budgetary resources. The estimates conform with those submitted to the Secretary-General in the draft Programme Budget for 1976-1977 and also, as regards the regular budget, with the original and additional appropriations for 1974-1975 voted by the General Assembly.

**Table 2**

Table 2A (all sources of funds) depicts the evolution of UNIDO's technical co-operation programmes in financial terms from 1967 to 1974 and their anticipated development up to 1977. This table shows:

- In line 1 The residual value of approved projects brought forward from the previous year, a figure that represents the total value of projects less the amounts previously expended;
- In line 2 the value of new projects approved or expected to be approved in each year;
- In line 3 the sum of lines 1 and 2, representing the stock of projects under implementation in the given year;
- In line 4 the value of expenditures or estimated expenditures in each year;
- In line 5 the residual value of approved projects carried forward to the following year.

Tables 2B to 2F present the breakdown, by source of funds, of the global figures in table 2A.

**Table 3**

Table 3A (all sources of funds) contains essentially the same elements as table 2A but shows also the cumulative value of projects approved (column 2) and the cumulative expenditures on projects (column 4).

Tables 3B to 3F present the breakdown, by source of funds, of the global figures in table 3A.

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**Table 4**

This table shows the number, total value and average value of projects under implementation, according to source of funds. The position at the end of 1973 is compared with the estimated position at the end of 1974.

**Table 5**

This table analyses the actual expenditures in 1973 and in 1974, and the estimated expenditures in the years 1975 to 1977, by source of funds and four types of expenditure, namely, technical co-operation activities; substantive support activities; managerial and administrative support to technical co-operation activities; and policy-making organs, general management and administrative expenses. Managerial and administrative support to technical co-operation activities comprises headquarters activities that are directly related to the implementation of the field programmes. Policy-making organs, general management and administrative expenses comprise all other expenditures related to the administration and management of the Secretariat and not directly connected with field programmes.

**Table 6**

This table analyses according to programmes and programme components the total expenditures (actual or estimated) on technical co-operation activities and substantive support activities as shown in table 5.

**Table 7**

This table analyses actual expenditures on technical co-operation activities by source of funds and programme component.

**Table 8**

This table analyses actual and estimated expenditures on technical co-operation activities by source of funds and geographical region.

**Table 9**

This table analyses actual expenditures on technical co-operation activities by source of funds and object of expenditure (project personnel, fellowships and training, other items).

**Table 10**

This table analyses according to object of expenditure the total expenditures (actual or estimated) on substantive support activities as shown for each programme component in table 6. It also shows the related man-months for staff and consultants.

\*

\*

\*

Throughout the tables, two dots ( . . ) indicate that data are not available and a dash ( - ) indicates that the amount is nil or negligible.

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### SUBSTANTIVE PROGRAMMES AND PROGRAMME COMPONENTS

	<i>Code number</i>
<i>Industrial Technology Programme</i> . . . . .	30.0
Engineering industries . . . . .	30.1
Metallurgical industries . . . . .	30.2
Building materials industries . . . . .	30.3
Chemical, pharmaceutical and pulp and paper industries . . . . .	30.4
Fertilizer, pesticide and petrochemical industries . . . . .	30.5
Light industries . . . . .	30.6
General industrial techniques . . . . .	30.7
Industrial construction . . . . .	30.8
 <i>Industrial Services and Institutions Programme</i> . . . . .	 31.0
Industrial institutions . . . . .	31.1
Industrial information . . . . .	31.2
Industrial management and consulting services . . . . .	31.3
Small-scale industries . . . . .	31.4
Industrial training . . . . .	31.5
 <i>Industrial Policies and Programming Programme</i> . . . . .	 32.0
Industrial programming . . . . .	32.1
Industrial financing and investment promotion . . . . .	32.2
Promotion of export-oriented industries . . . . .	32.3
Industrial surveys and studies . . . . .	32.4
 <i>Field Co-operation Programme</i> . . . . .	 62.0
Field co-operation with the regional economic commissions . . . . .	62.1
Industrial development field advisers . . . . .	62.2
Field support . . . . .	62.3
 <i>UNIDO/IBRD Co-operative Programme</i> . . . . .	 63.0

TABLE 1. EXPENDITURES—1973 TO 1977  
(In millions of US dollars)

	Actual				Estimated	
	1973	1974	1975	1976	1977	
Technical co-operation programmes	20.0	23.9	26.0	29.2	32.3	
Regular programme	1.5	1.5	2.0	2.0	2.0	2.0
UNDP/IPF	13.7	17.4	19.0	20.5	23.1	23.1
SIS	2.7	2.6	2.1	3.5	3.5	3.5
Funds-in-Trust	0.7	0.5	0.9	1.0	1.2	1.2
UNIDO General Trust Fund	1.4	1.9	2.0	2.2	2.5	2.5
Overhead funds	2.9	3.2	3.7	4.7	5.0	
Other extra-budgetary resources	—	0.2	0.3	0.3	0.4	
Regular budget (net of staff assessment)	14.5	16.8	19.7 <sup>a</sup>	21.5 <sup>b</sup>	23.7 <sup>b</sup>	
Total expenditures	37.4	44.1	49.7	55.7	61.4	
Technical co-operation programmes as percentage of total expenditures	53.4	54.2	52.3	52.4	52.6	

<sup>a</sup>Consisting of \$15.7 million appropriated under General Assembly resolution 3195A (XXVIII) and balance of \$6.0 million additional appropriations voted for 1974-1975 under General Assembly resolution 3359A (XXIX).

<sup>b</sup>As submitted to Secretary-General in draft Programme Budget 1976-1977.

TABLE 2. TECHNICAL CO-OPERATION PROGRAMMES—PROJECT APPROVALS AND EXPENDITURES  
(In millions of US dollars)

	Actual										Estimated			
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977			
<b>A. All sources of funds</b>														
1. Residual value of approved projects brought forward	15.7 <sup>a</sup>	17.0	18.9	27.9	34.4	38.5	44.3	51.6	71.9	91.1	96.6			
2. Value of new projects approved in the year	6.6	9.6	18.0	19.2	20.9	27.0 <sup>b</sup>	27.3	44.2	45.2	34.7	45.0			
3. Total of approved projects under implementation	22.3	26.6	36.9	47.1	55.3	65.5	71.6	95.8	117.1	125.8	141.6			
4. Expenditures in the year	5.3	7.7	9.0	12.7	16.8	21.2	20.0	23.9	26.0	29.2	32.3			
5. Residual value of approved projects carried forward	17.0	18.9	27.9	34.4	38.5	44.3	51.6	71.9	91.1	96.6	109.3			
<b>B. Regular programme</b>														
1. Residual value of approved projects brought forward	-	-	-	-	-	-	-	-	-	-	-			
2. Value of new projects approved in the year	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0			
3. Total of approved projects under implementation	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0			
4. Expenditures in the year	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0			
5. Residual value of approved projects carried forward	-	-	-	-	-	-	-	-	-	-	-			

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TABLE 2 (continued)  
(In millions of US dollars)

	Actual										Estimated			
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977			
<b>C. UNDP/IPF</b>														
1. Residual value of approved projects brought forward	15.4 <sup>a</sup>	14.6	15.6	22.6	26.6	29.6	37.0	43.9	61.9	78.2	82.7			
2. Value of new projects approved in the year	2.8	6.4	11.8	10.9	12.5	20.7 <sup>c</sup>	20.6	35.4	35.3	25.0	35.0			
3. Total of approved projects under implementation	18.2	21.0	27.4	33.5	39.1	50.3	57.6	79.3	97.2	103.2	117.7			
4. Expenditures in the year	3.6	5.4	4.8	6.9	9.5	13.3	13.7	17.4	19.0	20.5	23.1			
5. Residual value of approved projects carried forward	14.6	15.6	22.6	26.6	29.6	37.0	43.9	61.9	78.2	82.7	94.6			
<b>D. Special Industrial Services (total)<sup>d</sup></b>														
1. Residual value of approved projects brought forward	0.3 <sup>a</sup>	2.4	3.3	4.1	6.0	6.5	4.8	4.0	5.0	6.1	5.8			
2. Value of new projects approved in the year	2.5	1.8	2.8	4.9	5.0	2.6 <sup>c</sup>	1.9	3.6	3.2	3.2	3.5			
3. Total of approved projects under implementation	2.8	4.2	6.1	9.0	11.0	9.1	6.7	7.6	8.2	9.3	9.3			
4. Expenditures in the year	0.4	0.9	2.0	3.0	4.5	4.3	2.7	2.6	2.1	3.5	3.5			
5. Residual value of approved projects carried forward	2.4	3.3	4.1	6.0	6.5	4.8	4.0	5.0	6.1	5.8	5.8			



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	Actual		Estimated		
	1973	1974	1975	1976	1977
<i>D.I. Special Industrial Services (programme reserve)</i>					
1. Residual value of approved projects brought forward	3.3	2.5	2.8	3.5	3.5
2. Value of new projects approved in the year	1.1	2.2	2.1	2.2	2.5
3. Total of approved projects under implementation	4.4	4.7	4.9	5.7	6.0
4. Expenditures in the year	1.9	1.9	1.4	2.2	2.4
5. Residual value of approved projects carried forward	2.5	2.8	3.5	3.5	3.6
<i>D.II. Special Industrial Services (special measures for LDC)</i>					
1. Residual value of approved projects brought forward	0.9	0.8	1.6	1.9	1.8
2. Value of new projects approved in the year	0.4	1.1	0.6	0.8	1.0
3. Total of approved projects under implementation	1.3	1.9	2.2	2.7	2.8
4. Expenditures in the year	0.5	0.3	0.3	0.9	0.9
5. Residual value of approved projects carried forward	0.8	1.6	1.9	1.8	1.9

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TABLE 2 (continued)  
(In millions of US dollars)

	Actual		Estimated								
	1973	1974	1975	1976	1977						
<i>D.III. Special Industrial Services (SIS Trust Fund)</i>											
1. Residual value of approved projects brought forward	0.6	0.7	0.6	0.7	0.5						
2. Value of new projects approved in the year	0.4	0.3	0.5	0.2	-						
3. Total of approved projects under implementation	1.0	1.0	1.1	0.9	0.5						
4. Expenditures in the year	0.3	0.4	0.4	0.4	0.2						
5. Residual value of approved projects carried forward	0.7	0.6	0.7	0.5	0.3						
<i>E. Funds-in-Trust</i>											
	Actual					Estimated					
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
1. Residual value of approved projects brought forward	-	-	-	-	-	-	0.5	0.5	0.9	1.3	1.8
2. Value of new projects approved in the year	0.3	0.4	0.3	0.3	0.5	1.2	0.7	0.9	1.3	1.5	1.5
3. Total of approved projects under implementation	0.3	0.4	0.3	0.3	0.5	1.2	1.2	1.4	2.2	2.8	3.3
4. Expenditures in the year	0.3	0.4	0.3	0.3	0.5	0.7	0.7	0.5	0.9	1.0	1.2
5. Residual value of approved projects carried forward	-	-	-	-	-	0.5	0.5	0.9	1.3	1.8	2.1

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	Actual										Estimated			
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977			
<b>F. UNIDO General Trust Fund</b>														
1. Residual value of approved projects brought forward	-	-	-	1.2	1.8	2.4	2.0	3.2	4.1	5.5	6.3			
2. Value of new projects approved in the year	-	-	1.6	1.6	1.4	1.0 <sup>f</sup>	2.6	2.8	3.4	3.0	3.0			
3. Total of approved projects under implementation	-	-	1.6	2.8	3.2	3.4	4.6	6.0	7.5	8.5	9.3			
4. Expenditures in the year	-	-	0.4	1.0	0.8	1.4	1.4	1.9	2.0	2.2	2.5			
5. Residual value of approved projects carried forward	-	-	1.2	1.8	2.4	2.0	3.2	4.1	5.5	6.3	6.8			

<sup>e</sup> Transferred from United Nations Office of Technical Co-operation.

<sup>b</sup> Including \$7.1 million resulting from revaluation of projects to conform with new standard costs and other adjustments.

<sup>c</sup> Including \$6.0 million resulting from revaluation of projects to conform with new standard costs and other adjustments.

<sup>d</sup> For 1973 and subsequent years an analysis of the total according to the three sources of finance, viz, UNDP Programme Reserve, UNDP Fund for Special Measures for Least Developed Countries, and SIS Trust Fund, is given in the following three tables D.I, D.II and D.III.

<sup>e</sup> Including \$1.1 million resulting from revaluation of projects to conform with new standard costs and other adjustments.

<sup>f</sup> Net after deducting \$0.6 million in respect of unexpended balances of completed projects.

STATISTICAL ANNEX

TABLE 3. TECHNICAL CO-OPERATION PROGRAMMES—CUMULATIVE PROJECT APPROVALS AND EXPENDITURES  
(In millions of US dollars)

	Net approvals in the year (1)	Cumulative value at year end of projects approved (2)	Expenditures in the year (3)	Cumulative expenditures at year end (4)	Residual value of approved projects at year end (5)
<b>A. All sources of funds</b>					
Situation at 31 December 1966		17.8 <sup>d</sup>		2.1 <sup>b</sup>	15.7
1967	6.6	24.4	5.3	7.4	17.0
1968	9.6	34.0	7.7	15.1	18.9
1969	18.0	52.0	9.0	24.1	27.9
1970	19.2	71.2	12.7	36.8	34.4
1971	20.9	92.1	16.8	53.6	38.5
1972	27.0 <sup>c</sup>	119.1	21.2	74.8	44.3
1973	27.3	146.4	20.0	94.8	51.6
1974	44.2	190.6	23.9	118.7	71.9
1975	45.2	235.8	26.0	144.7	91.1
1976	34.7	270.5	29.2	173.9	96.6
1977	45.0	315.5	32.3	206.2	109.3
<b>B. Regular programme</b>					
1967	1.0	1.0	1.0	1.0	—
1968	1.0	2.0	1.0	2.0	—
1969	1.5	3.5	1.5	3.5	—
1970	1.5	5.0	1.5	5.0	—
1971	1.5	6.5	1.5	6.5	—
1972	1.5	8.0	1.5	8.0	—
1973	1.5	9.5	1.5	9.5	—
1974	1.5	11.0	1.5	11.0	—
1975	2.0	13.0	2.0	13.0	—
1976	2.0	15.0	2.0	15.0	—
1977	2.0	17.0	2.0	17.0	—

STATISTICAL ANNEX

C. UNDP/IFP

	Situation at 31 December 1966	17.4 <sup>a</sup>	2.0 <sup>b</sup>	15.4
1967	2.8	20.2	5.6	14.6
1968	6.4	26.6	11.0	15.6
1969	11.8	38.4	15.8	22.6
1970	10.9	49.3	22.7	26.6
1971	12.5	61.8	32.2	29.6
1972	20.7 <sup>d</sup>	82.5	45.5	37.0
1973	20.6	103.1	59.2	43.9
1974	35.4	138.5	76.6	61.9
1975	35.3	173.8	95.6	78.2
1976	25.0	198.8	116.1	82.7
1977	35.0	233.8	139.2	94.6
Actual				
Esti- mated				

D. Special Industrial Services

	Situation at 31 December 1966	0.4 <sup>a</sup>	0.1 <sup>b</sup>	0.3
1967	2.5	2.9	0.4	2.4
1968	1.8	4.7	0.9	3.3
1969	2.8	7.5	2.0	4.1
1970	4.9	12.4	3.0	6.0
1971	5.0	17.4	4.5	6.5
1972	2.6 <sup>e</sup>	20.0	4.3	4.8
1973	1.9	21.9	2.7	4.0
1974	3.6	25.5	2.6	5.0
1975	3.2	28.7	2.1	6.1
1976	3.2	31.9	3.5	5.8
1977	3.5	35.4	3.5	5.8
Actual				
Esti- mated				

E. Funds-in-Trust

	1967	0.3	0.3	0.3	0.3
1968	0.4	0.7	0.4	0.7	0.7
1969	0.3	1.0	0.3	1.0	1.0
1970	0.3	1.3	0.3	1.3	1.3
1971	0.5	1.8	0.5	1.8	1.8
1972	1.2	3.0	0.7	2.5	0.5
1973	0.7	3.7	0.7	3.2	0.5
1974	0.9	4.6	0.5	3.7	0.9
1975	1.3	5.9	0.9	4.6	1.3
1976	1.5	7.4	1.0	5.6	1.8
1977	1.5	8.9	1.2	6.8	2.1
Actual					
Esti- mated					

STATISTICAL ANNEX

TABLE 3 (continued)  
(In millions of US dollars)

	Net approvals in the year (1)	Cumulative value at year end of projects approved (2)	Expenditures in the year (3)	Cumulative expenditures at year end (4)	Residual value of approved projects at year end (5)
<b>F. UNIDO General Trust Fund</b>					
1967					
1968	1.6	1.6	0.4	0.4	1.2
1969	1.6	3.2	1.0	1.4	1.8
1970	1.4	4.6	0.8	2.2	2.4
1971	1.0 <sup>f</sup>	5.6	1.4	3.6	2.0
1972	2.6	8.2	1.4	5.0	3.2
1973	2.8	11.0	1.9	6.9	4.1
1974					
1975	3.4	14.4	2.0	8.9	5.5
1976	3.0	17.4	2.2	11.1	6.3
1977	3.0	20.4	2.5	13.6	6.8
Actual					
Estimated					

<sup>e</sup>Transferred from United Nations Office of Technical Co-operation on 1 January 1967.

<sup>b</sup>Implemented by United Nations Office of Technical Co-operation before 1 January 1967.

<sup>c</sup>Including \$7.1 million resulting from revaluation of projects to conform with new standard costs and other adjustments.

<sup>d</sup>Including \$6.0 million resulting from revaluation of projects to conform with new standard costs and other adjustments.

<sup>e</sup>Including \$1.1 million resulting from revaluation of projects to conform with new standard costs and other adjustments.

<sup>f</sup>Net after deducting \$0.6 million in respect of unexpended balances of completed projects.

TABLE 4. APPROVED PROJECTS UNDER IMPLEMENTATION AT 31 DECEMBER 1973 AND AT 31 DECEMBER 1974

	Number of projects		Value <sup>b</sup> (in millions of US\$)		Average value of project (\$)	
	1973	1974 <sup>d</sup>	1973	1974	1973	1974 <sup>c</sup>
Regular programme	168	244	1.5	1.5	8,900	6,100
UNDP/IPF	589	750	57.6	79.3	97,800	105,700
SIS-Programme reserve and Special Measures for LDC	372	357	5.7	6.6	15,300	18,500
SIS-Trust Fund	210	290	1.0	1.0	4,800	3,400
Funds-in-Trust	62	73	1.2	1.4	19,400	19,200
UNIDO General Trust Fund	173	243	4.6	6.0	26,600	24,700
TOTAL - all sources of funds	1,574	1,957	71.6	95.8	45,500	48,000

<sup>d</sup>Number of projects at 31 October 1974.

<sup>b</sup>Residual value of projects brought forward on 1 January plus total value of projects approved during calendar year.

<sup>c</sup>Based on number of projects at 31 October 1974.

TABLE 5. EXPENDITURE BY SOURCE OF FUNDS AND TYPE OF EXPENDITURE, 1973 TO 1977

	Regular budget <sup>a</sup>	Regular programme	UNDP/ IPF <sup>c</sup>	SIS <sup>c</sup>	Funds-in-Trust <sup>d</sup>	UNIDO General Trust Fund <sup>e</sup>	Total expenditures	
							\$ 000	Per cent
<i>Thousands of US dollars</i>								
<b>1973 - Actual</b>								
Technical co-operation activities	-	1,472	13,680	2,731	737	1,376	19,996	53.5
Substantive support activities	5,344	-	687	7	13	-	6,051	16.2
Managerial and administrative support to technical co-operation activities	2,163	-	2,061	19	39	-	4,282	11.5
Policy-making organs, general management and administrative expenses	7,005	-	-	-	-	-	7,005	18.8
	<u>14,512</u>	<u>1,472</u>	<u>16,428</u>	<u>2,757</u>	<u>789</u>	<u>1,376</u>	<u>37,334</u>	<u>100.0</u>
<b>1974 - Actual</b>								
Technical co-operation activities	-	1,497	17,381	2,630	546	1,878	23,932	54.2
Substantive support activities	6,434	-	610	116	268 <sup>b</sup>	-	7,428	16.8
Managerial and administrative support to technical co-operation activities	2,745	-	1,990	378	71	29	5,213	11.8
Policy-making organs, general management and administrative expenses	7,581	-	-	-	-	-	7,581	17.2
	<u>16,760</u>	<u>1,497</u>	<u>19,981</u>	<u>3,124</u>	<u>885</u>	<u>1,007</u>	<u>44,154</u>	<u>100.0</u>



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<i>1975 - Estimated</i>									
Technical co-operation activities	2,000	19,000	2,100	900	2,000	26,000	52.3		
Substantive support activities	8,051	536	60	264 <sup>b</sup>	20	8,931	18.0		
Managerial and administrative support to technical co-operation activities	2,836	2,541	286	93	95	5,851	11.8		
Policy-making organs, general management and administrative expenses	8,867	-	-	-	-	8,867	17.9		
	19,754	22,077	2,446	1,257	2,115	49,649	100.0		
<i>1976 - Estimated</i>									
Technical co-operation activities	2,000	20,550	3,500	1,000	2,150	29,200	52.4		
Substantive support activities	9,185	560	96	348 <sup>b</sup>	21	10,210	18.4		
Managerial and administrative support to technical co-operation activities	2,358	3,196	545	119	119	6,337	11.4		
Policy-making organs, general management and administrative expenses	9,916	-	-	-	-	9,916	17.8		
	21,459	24,306	4,141	1,467	2,290	55,663	100.0		
<i>1977 - Estimated</i>									
Technical co-operation activities	2,000	23,100	3,500	1,200	2,500	32,300	52.6		
Substantive support activities	10,201	615	94	377 <sup>b</sup>	24	11,311	18.4		
Managerial and administrative support to technical co-operation activities	2,708	3,513	533	140	135	7,029	11.4		
Policy-making organs, general management and administrative expenses	10,805	-	-	-	-	10,805	17.6		
	23,714	27,228	4,127	1,717	2,659	61,445	100.0		

<sup>a</sup> Regular budget expenditures and estimated expenditures are net of staff assessment. The basis for the regular budget estimates is explained in the foot-notes to table 1.

<sup>b</sup> Including UNIDO/IBRD Co-operative Programme.

<sup>c</sup> Support expenditures shown here are financed from overhead funds.

STATISTICAL ANNEX

TABLE 6. EXPENDITURES ON TECHNICAL CO-OPERATION AND SUBSTANTIVE SUPPORT ACTIVITIES BY PROGRAMME AND PROGRAMME COMPONENT, 1973 TO 1977

Programme/ Programme component	Actual expenditures 1973				Actual expenditures 1974			
	Technical co-operation activities		Substantive support activities*		Technical co-operation activities		Substantive support activities	
	\$ 000	Per cent	\$ 000	Per cent	\$ 000	Per cent	\$ 000	Per cent
ITD (30)								
30.1	2,751	13.8	524	8.6	2,987	12.5	504	7.3
30.2	1,347	6.7	229	3.8	1,831	7.7	241	3.5
30.3	833	4.2	104	1.7	730	3.0	250	3.6
30.4	563	2.8	300	5.0	686	2.9	203	3.0
30.5	811	4.1	392	6.5	985	4.1	508	7.4
30.6	2,118	10.6	369	6.1	3,256	13.5	456	6.6
30.7	331	1.7	220	3.6	613	2.6	272	4.0
30.8	-	-	-	-	24	0.1	76	1.1
Subtotal ITD	8,754	43.9	2,138	35.3	11,112	46.4	2,510	36.5
ISID (31)								
31.1	2,142	10.7	373	6.2	2,386	10.0	438	6.4
31.2	260	1.3	649	10.7	296	1.3	742	10.8
31.3	781	3.9	325	5.4	1,270	5.3	369	5.4
31.4	2,201	11.9	373	6.2	2,492	10.4	395	5.8
31.5	1,770	8.8	275	4.5	1,468	6.1	342	5.0
Subtotal ISID	7,154	35.7	1,995	33.0	7,912	33.1	2,286	33.4
IPPD (32)								
32.1	2,691	13.4	598	9.9	3,160	13.2	653	9.5
32.2	569	2.8	585	9.7	481	2.0	614	8.9
32.3	333	1.7	312	5.1	427	1.8	366	5.3
32.4	362	1.8	423	7.0	524	2.2	437	6.4
Subtotal IPPD	3,955	19.7	1,918	31.7	4,592	19.2	2,070	30.1
Unspecified	133	0.7	-	-	316	1.3	-	-
Total - Substantive Divisions	19,996	100.0	6,051	100.0	23,932	100.0	6,866	100.0
Field Co-operation (62)	-	-	-	-	-	-	236	-
UNIDO/IBRD Co-operative Programme (63)	-	-	-	-	-	-	326	-
GRAND TOTAL	19,996		6,051		23,932		7,428	

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Programme/ Programme component	Estimates - technical co-operation activities				Estimates - substantive support activities							
	1975		1976		1977		1975		1976		1977	
	\$000	Percent	\$000	Percent	\$000	Percent	\$000	Percent	\$000	Percent	\$000	Percent
ITD (30)												
30.1	3,100	11.9	3,350	11.5	3,450	10.7	527	6.4	582	6.3	670	6.5
30.2	1,900	7.3	2,100	7.2	2,400	7.4	328	4.0	406	4.3	438	4.2
30.3	1,050	4.0	1,150	3.9	1,400	4.3	238	2.9	316	3.3	338	3.3
30.4	700	2.7	750	2.6	900	2.8	204	2.5	252	2.7	305	2.9
30.5	1,100	4.2	1,200	4.1	1,350	4.2	511	6.2	641	6.8	707	6.8
30.6	3,000	11.6	3,450	11.8	3,850	11.9	526	6.4	575	6.2	652	6.3
30.7	1,200	4.6	1,250	4.3	1,300	4.0	283	3.5	301	3.2	331	3.2
30.8	350	1.4	350	1.2	350	1.1	147	1.8	192	2.1	211	2.1
Subtotal ITD	12,400	47.7	13,600	46.6	15,000	46.4	2,764	33.7	3,265	34.9	3,652	35.3
ISID (31)												
31.1	2,500	9.6	2,800	9.6	3,000	9.3	544	6.6	605	6.5	689	6.7
31.2	400	1.5	400	1.4	400	1.2	1,033	12.6	978	10.5	1,054	10.2
31.3	1,400	5.4	1,800	6.2	2,000	6.2	317	3.9	422	4.5	454	4.4
31.4	2,800	10.8	3,400	11.6	3,900	12.1	479	5.8	583	6.2	655	6.3
31.5	2,000	7.7	2,200	7.5	2,500	7.8	384	4.7	460	4.9	500	4.8
Subtotal ISID	9,100	35.0	10,600	36.3	11,800	36.6	2,757	33.6	3,048	32.6	3,352	32.4
IPPD (32)												
32.1	3,200	12.3	3,500	12.0	3,900	12.1	870	10.6	972	10.4	1,079	10.4
32.2	600	2.3	650	2.2	700	2.1	612	7.6	745	8.0	802	7.8
32.3	300	1.2	400	1.4	450	1.4	512	6.2	567	6.1	616	6.0
32.4	400	1.5	450	1.5	450	1.4	683	8.3	752	8.0	841	8.1
Subtotal IPPD	4,500	17.3	5,000	17.1	5,500	17.0	2,677	32.7	3,036	32.5	3,338	32.3
Total - Substantive Divisions Field Co-operation (62)	26,000	100.0	29,200	100.0	32,300	100.0	8,198	100.0	9,349	100.0	10,342	100.0
UNIDO/IBRD Co-operative Programme (63)	-	-	-	-	-	-	317	-	388	-	459	-
GRAND TOTAL	26,000		29,200		32,300		8,931		10,210		11,311	
							416		473		510	

a) Financed from regular budget and extra-budgetary sources.

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TABLE 7. EXPENDITURES ON TECHNICAL CO-OPERATION ACTIVITIES OF UNIDO, BY SOURCE OF FUNDS AND PROGRAMME COMPONENT, 1973 AND 1974  
(In thousands of US dollars)

Programme/Programme component	Regular programme	UNDP/IPF	SIS	Funds-in-Trust	UNIDO General Trust Fund	Total
<i>1973 - Actual expenditures</i>						
<b>Industrial technology (30)</b>						
30.1	116	1,967	564	22	82	2,751
30.2	82	987	152	11	115	1,347
30.3	40	424	314	55	-	833
30.4	56	311	187	-	9	563
30.5	31	443	235	-	102	811
30.6	194	1,470	450	-	4	2,118
30.7	12	282	36	-	1	331
<b>Subtotal</b>	<b>531</b>	<b>5,884</b>	<b>1,938</b>	<b>88</b>	<b>313</b>	<b>8,754</b>
<b>Industrial services and institutions (31)</b>						
31.1	41	1,832	95	84	90	2,142
31.2	55	1	21	3	180	260
31.3	35	558	179	9	-	781
31.4	57	2,020	126	(2)	-	2,201
31.5	291	311	64	407	697	1,770
<b>Subtotal</b>	<b>479</b>	<b>4,722</b>	<b>485</b>	<b>501</b>	<b>967</b>	<b>7,154</b>
<b>Industrial policies and programming (32)</b>						
32.1	199	2,238	115	98	41	2,691
32.2	91	338	57	44	39	569
32.3	38	232	46	6	11	333
32.4	50	241	66	-	5	362
<b>Subtotal</b>	<b>378</b>	<b>3,049</b>	<b>284</b>	<b>148</b>	<b>96</b>	<b>3,955</b>
<b>Unspecified</b>	<b>84</b>	<b>25</b>	<b>24</b>	<b>-</b>	<b>-</b>	<b>133</b>
<b>TOTAL</b>	<b>1,472</b>	<b>13,680</b>	<b>2,731</b>	<b>737</b>	<b>1,376</b>	<b>19,996</b>

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1974 - Actual expenditures

<b>Industrial technology (30)</b>										
30.1	134	2,233	438	43	139	2,987				
30.2	139	1,465	149	-	78	1,831				
30.3	27	431	164	17	91	730				
30.4	47	326	294	-	19	686				
30.5	39	586	253	14	93	985				
30.6	145	2,481	540	-	90	3,256				
30.7	22	544	38	1	8	613				
30.8	-	10	3	-	11	24				
<b>Subtotal</b>	<b>553</b>	<b>8,076</b>	<b>1,879</b>	<b>75</b>	<b>529</b>	<b>11,112</b>				
<b>Industrial Services and Institutions (31)</b>										
31.1	46	1,983	110	98	149	2,386				
31.2	11	63	9	4	209	296				
31.3	38	987	236	9	-	1,270				
31.4	74	2,219	155	44	-	2,492				
31.5	183	306	53	150	776	1,468				
<b>Subtotal</b>	<b>352</b>	<b>5,558</b>	<b>563</b>	<b>305</b>	<b>1,134</b>	<b>7,912</b>				
<b>Industrial Policies and Programming (32)</b>										
32.1	300	2,706	19	82	53	3,160				
32.2	53	262	23	69	74	481				
32.3	17	258	116	6	30	427				
32.4	120	386	7	-	11	524				
<b>Subtotal</b>	<b>490</b>	<b>3,612</b>	<b>165</b>	<b>157</b>	<b>168</b>	<b>4,592</b>				
<b>Unspecified</b>	<b>102</b>	<b>135</b>	<b>23</b>	<b>9</b>	<b>47</b>	<b>316</b>				
<b>TOTAL</b>	<b>1,497</b>	<b>17,381</b>	<b>2,630</b>	<b>546</b>	<b>1,878</b>	<b>23,932</b>				

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TABLE 8. EXPENDITURE ON TECHNICAL CO-OPERATION ACTIVITIES BY SOURCE OF FUNDS AND GEOGRAPHICAL REGION, 1973 TO 1977  
(In thousands of US dollars)

	Africa		The Americas		Asia and Pacific		Europe/Middle East		Inter-regional projects	TOTAL BY FUNDS	
	Country projects	Regional projects	Country projects	Regional projects	Country projects	Regional projects	Country projects	Regional projects			
	Total	Total	Total	Total	Total	Total	Total	Total			
1973 - Actual expenditures											
Regular programme	162	137	299	172	210	124	98	49	147	520	1,472
UNDP/IPF	4,750	63	4,813	2,713	3,363	14	2,171	213	2,384	393	13,680
SIS	899	89	988	585	554	26	579	-	579	(1)	2,731
Funds-in-Trust	112	9	121	47	34	-	60	3	63	472	737
UNIDO General Trust Fund	205	72	277	28	34	25	13	-	13	999	1,376
TOTAL BY REGION	6,128	370	6,498	3,545	4,195	189	2,921	265	3,186	2,383	19,996
1974 - Actual expenditures											
Regular programme	171	188	359	247	191	114	76	40	116	470	1,497
UNDP/IPF	5,142	79	5,221	3,447	5,082	161	2,722	251	2,973	497	17,381
SIS	754	17	771	485	454	59	865	-	865	(4)	2,630
Funds-in-Trust	88	16	104	66	58	-	110	16	126	192	546
UNIDO General Trust Fund	171	102	273	139	18	94	28	1	29	1,325	1,878
TOTAL BY REGION	6,326	402	6,728	4,384	5,803	428	3,801	308	4,109	2,480	23,932

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	Africa	The Americas	Asia and Pacific	Europe and Middle East	Interregional projects	TOTAL BY FUNDS
<i>1975 - Estimated expenditures</i>						
Regular programme	510	318	346	483	343	2,000
UNDP/IPF	6,145	3,724	6,033	2,693	405	19,000
SIS	588	336	441	720	15	2,100
Funds-in-Trust	162	189	63	290	196	900
UNIDO General Trust Fund	365	97	110	60	1,368	2,000
<b>TOTAL BY REGION</b>	<b>7,770</b>	<b>4,664</b>	<b>6,993</b>	<b>4,246</b>	<b>2,327</b>	<b>26,000</b>
<i>1976 - Estimated expenditures</i>						
Regular programme	505	315	342	495	343	2,000
UNDP/IPF	6,638	4,022	6,490	2,938	462	20,550
SIS	1,036	605	859	983	17	3,500
Funds-in-Trust	180	210	70	322	218	1,000
UNIDO General Trust Fund	391	105	118	65	1,471	2,150
<b>TOTAL BY REGION</b>	<b>8,750</b>	<b>5,257</b>	<b>7,879</b>	<b>4,803</b>	<b>2,511</b>	<b>29,200</b>
<i>1977 - Estimated expenditures</i>						
Regular programme	505	315	342	495	343	2,000
UNDP/IPF	8,688	3,655	7,709	2,528	520	23,100
SIS	1,117	542	907	918	16	3,500
Funds-in-Trust	216	252	84	387	261	1,200
UNIDO General Trust Fund	455	122	137	76	1,710	2,500
<b>TOTAL BY REGION</b>	<b>10,981</b>	<b>4,886</b>	<b>9,179</b>	<b>4,404</b>	<b>2,850</b>	<b>32,300</b>

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TABLE 9. EXPENDITURE ON TECHNICAL CO-OPERATION ACTIVITIES IN 1973 AND 1974  
BY SOURCE OF FUNDS AND OBJECT OF EXPENDITURE

Sources of financing	Experts		Fellowships and training		Subcontracts, equipment and other expenses		Total \$000
	Number	\$000	Number <sup>a</sup>	\$000	\$000	\$000	
<i>1973 - Actual</i>							
Regular programme	32	571	146	867	34		1,472
UNDP/IPF	608	9,895	368	1,304	2,481		13,680
SIS	281	2,248	18	35	448		2,731
Funds-in-Trust	21	301	-	359	77		737
UNIDO General Trust Fund	5	21	-	963	392		1,376
	947	13,036	532	3,528	3,432		19,996
<i>1974 - Actual</i>							
Regular programme	36	734	120	674	89		1,497
UNDP/IPF	811	11,023	350	2,399	3,959		17,381
SIS	332	2,076	10	65	489		2,630
UNIDO General Trust Fund	13	116	-	1,288	474		1,878
Funds-in-Trust	26	327	-	149	70		546
	1,218	14,276	480	4,575	5,081		23,932

<sup>a</sup> Includes individual fellowship only.



STATISTICAL ANNEX

TABLE 10. EXPENDITURE ON SUBSTANTIVE SUPPORT ACTIVITIES BY PROGRAMME COMPONENT AND OBJECT OF EXPENDITURE, WITH RELATED MAN-MONTHS-1973 TO 1977

Programme/ Programme component	Staff time		Consultants		Meetings		Printing		Other		Total \$000
	m/m	\$000	m/m	\$000	\$000	\$000	\$000	\$000	\$000		
1973 - Actual <sup>a</sup>											
<b>ITD (30)</b>											
30.1	291	469	12	27	15	4	9	524			
30.2	142	186	11	25	7	2	9	229			
30.3	29	63	3	7	23	11	-	104			
30.4	216	295	1	2	-	2	1	300			
30.5	221	339	11	25	18	8	2	392			
30.6	224	341	7	15	2	7	4	369			
30.7	137	168	15	35	5	5	7	220			
30.8	-	-	-	-	-	-	-	-			
Subtotal ITD	1,260	1,861	60	136	70	39	32	2,138			
<b>ISID (31)</b>											
31.1	249	352	8	17	-	1	3	373			
31.2	465	574	12	29	-	15	31	649			
31.3	208	275	17	39	7	2	2	325			
31.4	201	333	8	18	16	-	6	373			
31.5	204	256	8	17	-	-	2	275			
Subtotal ISID	1,327	1,790	53	120	23	18	44	1,995			
<b>IPPD (32)</b>											
32.1	313	521	22	48	16	11	2	598			
32.2	357	560	6	14	6	2	3	585			
32.3	225	285	9	20	-	4	3	312			
32.4	268	372	15	34	4	13	-	423			
Subtotal IPPD	1,163	1,738	52	116	26	30	8	1,918			
Total Substantive Divisions	3,750	5,389	165	372	119	87	84	6,051			
Field Co-operation (62)	-	-	-	-	-	-	-	-			
UNIDO/IBRD Co-operative Programme (63)	-	-	-	-	-	-	-	-			
<b>GRAND TOTAL</b>	<b>3,750</b>	<b>5,389</b>	<b>165</b>	<b>372</b>	<b>119</b>	<b>87</b>	<b>84</b>	<b>6,051</b>			

STATISTICAL ANNEX

TABLE 10 (continued)

Programme/ Programme component	Staff time		Consultants		Meetings		Printing		Other		Total	
	m/m	\$000	m/m	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
1974 - Actual <sup>a</sup>												
ITD (30)												
30.1	260	460	8	20	11	8	5	504				
30.2	154	213	4	11	8	7	2	241				
30.3	129	241	3	7	1	-	1	250				
30.4	103	190	3	8	-	-	5	203				
30.5	218	441	14	33	5	23	6	508				
30.6	257	409	10	25	5	14	3	456				
30.7	123	237	4	11	10	11	3	272				
30.8	32	65	1	3	7	-	1	76				
Subtotal ITD	1,276	2,256	47	118	47	63	26	2,510				
ISID (31)												
31.1	244	387	10	25	6	16	4	438				
31.2	454	608	11	27	-	54	53	742				
31.3	158	329	8	21	14	4	1	369				
31.4	210	362	2	4	-	28	1	395				
31.5	184	312	5	13	14	-	3	342				
Subtotal ISID	1,250	1,998	36	90	34	102	62	2,286				
IPPD (32)												
32.1	359	553	12	31	11	54	4	653				
32.2	299	582	8	20	4	6	2	614				
32.3	247	336	5	12	13	-	5	366				
32.4	326	392	5	13	-	29	3	437				
Subtotal IPPD	1,231	1,863	30	76	28	89	14	2,070				
Total Substantive Divisions	3,757	6,117	113	284	109	254	102	6,866				
Field Co-operation (62)	84	113	-	-	-	-	123	236				
UNIDO/IBRD Co-operative Programme (63)	144	287	10	24	-	-	15	326				
GRAND TOTAL	3,985	6,517	123	308	109	254	240	7,428				

STATISTICAL ANNEX

1975 - Estimates<sup>a</sup>

ITD (30)	252	476	5	12	26	7	6	527
30.1	156	295	5	12	12	6	3	328
30.2	120	227	4	9	-	-	2	238
30.3	96	181	2	8	9	-	6	204
30.4	216	431	13	39	13	21	7	511
30.5	252	476	7	18	15	13	4	526
30.6	120	227	9	24	18	10	4	283
30.7	60	114	5	12	19	-	2	147
30.8								
Subtotal ITD	1,272	2,427	50	134	112	57	34	2,764
ISID (31)	252	481	14	39	6	13	5	544
31.1	444	847	27	76	4	47	59	1,033
31.2	144	275	12	31	6	4	1	317
31.3	216	412	12	33	9	24	1	479
31.4	180	344	11	27	4	5	4	384
31.5								
Subtotal ISID	1,236	2,359	76	206	29	93	70	2,757
IPPD (32)	360	703	26	75	33	46	13	870
32.1	300	567	11	28	6	5	6	612
32.2	240	454	10	25	13	4	16	512
32.3	312	613	9	22	12	26	10	683
32.4								
Subtotal IPPD	1,212	2,337	56	150	64	81	45	2,677
Total Substantive Divisions	3,720	7,123	182	490	205	231	149	8,198
Field Co-operation (62)	84	147	-	-	-	-	170	317
UNIDO/IBRD Co-operative Programme (63)	144	370	10	30	-	-	16	416
GRAND TOTAL	3,948	7,640	192	520	205	231	335	8,931

STATISTICAL ANNEX

TABLE 10 (continued)

Programme/ Programme component	Staff time		Consultants		Meetings		Printing		Other		Total	
	m/m	\$000	m/m	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
1976 - Estimates <sup>a</sup>												
ITD (30)												
30.1	264	523	5	15	24	12	8	582				
30.2	180	370	5	15	11	2	8	406				
30.3	132	296	4	11	-	3	6	316				
30.4	96	220	3	8	8	11	5	252				
30.5	228	562	14	42	12	12	13	641				
30.6	288	518	7	21	13	14	9	575				
30.7	120	246	9	26	15	4	10	301				
30.8	60	140	5	16	17	11	8	192				
Subtotal ITD	1,368	2,875	52	154	100	69	67	3,265				
ISID (31)												
31.1	252	546	13	40	8	4	7	605				
31.2	468	777	25	76	5	65	55	978				
31.3	156	361	11	34	9	6	12	422				
31.4	228	510	12	36	12	12	13	583				
31.5	192	418	11	31	6	-	5	460				
Subtotal ISID	1,296	2,612	72	217	40	87	92	3,048				
IPPD (32)												
32.1	372	796	26	79	31	45	21	972				
32.2	300	692	10	31	5	-	17	745				
32.3	252	505	9	27	12	10	13	567				
32.4	324	670	8	23	11	34	14	752				
Subtotal IPPD	1,248	2,663	53	160	59	89	65	3,036				
Total Substantive Divisions	3,912	8,150	177	531	199	245	224	9,349				
Field Co-operation (62)	108	198	-	-	-	-	190	388				
UNIDO/IBRD Co-operative Programme (63)	144	387	25	74	-	1	11	473				
GRAND TOTAL	4,164	8,735	202	605	199	246	425	10,210				

STATISTICAL ANNEX

1977 - Estimates<sup>a</sup>

ITD (30)										
30.1	276	606	5	15	26	14	9	670		
30.2	180	398	5	17	12	2	9	438		
30.3	132	316	4	12	-	3	7	338		
30.4	120	269	3	9	9	12	6	305		
30.5	240	617	15	48	14	15	13	707		
30.6	288	586	8	25	14	17	10	652		
30.7	132	268	9	29	16	6	12	331		
30.8	60	151	5	17	20	14	9	211		
	1,428	3,211	54	172	111	83	75	3,652		
Subtotal ITD										
ISID (31)										
31.1	264	623	14	46	8	4	8	689		
31.2	468	837	27	87	6	64	60	1,054		
31.3	156	389	11	36	9	6	14	454		
31.4	240	577	12	40	13	12	13	655		
31.5	192	452	11	32	8	-	8	500		
	1,320	2,878	75	241	44	86	103	3,352		
Subtotal ISID										
IPPD (32)										
32.1	384	892	26	84	34	46	23	1,079		
32.2	300	742	11	35	6	-	19	802		
32.3	252	547	10	31	14	10	14	616		
32.4	336	751	8	27	11	35	17	841		
	1,272	2,932	55	177	65	91	73	3,338		
Subtotal IPPD										
Total Substantive Divisions										
	4,020	9,021	184	590	220	260	251	10,342		
Field Co-operation (62)										
	132	247	-	-	-	-	212	459		
UNIDO/IBRD Co-operative Programme (63)										
	144	417	27	81	-	1	11	510		
GRAND TOTAL										
	4,296	9,685	211	671	220	261	474	11,311		

<sup>a</sup> Actual and estimated expenditures are net of staff assessment. For basis of estimates, see foot-notes to table 1.

**APPENDIX A**

*Appendix A*  
**Expert group meetings held in 1974**

<i>Date</i>		<i>Place</i>
<i>Fertilizer, Pesticide and Petrochemical Industries</i>		
26-31 August	Expert group meeting on minimizing pollution from fertilizer plants	Helsinki Finland
16-20 September	Expert group meeting on synthetic vs. natural products	Vienna Austria
<i>Light Industries</i>		
25-28 November	Expert group meeting on the selection of equipment for the vegetable oil, meat and sugar processing industry Part one: sugar processing industry	Vienna Austria
<i>General Industrial Techniques</i>		
27-30 May	Consultation meeting on problems arising in packaging research centres	Vienna Austria
11-14 November	Preparatory consultation of packaging experts	Vienna Austria
<i>Industrial Construction</i>		
20-26 November	<i>Ad Hoc</i> expert group meeting on industrial construction in developing countries	Vienna Austria
<i>Industrial Institutions</i>		
23-27 September	Expert group meeting on buildings and facilities design and lay-out for industrial research and development centres	Innsbruck Austria
<i>Industrial Management and Consulting Services</i>		
2-7 December	Expert group meeting on marketing management and strategy for the developing world	Vienna Austria
<i>Industrial Training</i>		
2-6 September	Expert group meeting of in-plant group training directors	Vienna Austria
<i>Industrial Programming</i>		
23-27 September	Meeting on industrial development, strategies and policies in small countries	Vienna Austria
<i>Industrial Financing and Investment Promotion</i>		
14-15 October	Expert group meeting on the mobilization of domestic resources for industrial development	Vienna Austria

*Appendix B*

## Symposia, seminars, workshops, courses and other meetings held during 1974

<i>Date</i>		<i>Place</i>
<i>Office of the Executive Director</i>		
4-11 March	<i>Ad Hoc Committee on Long-range Strategy for UNIDO – third session</i>	Vienna Austria
17-26 April	<i>Permanent Committee of the Industrial Development Board – fourth session and Intergovernmental Preparatory Committee for the Second General Conference of UNIDO – third session</i>	Vienna Austria
2-14 May	<i>Industrial Development Board – eighth session and Intergovernmental Preparatory Committee for the Second General Conference of UNIDO – fourth session</i>	Vienna Austria
2-7 December	<i>Information week for field advisers</i>	Brussels Belgium
2-13 December	<i>Permanent Committee of the Industrial Development Board – fifth session (first sitting) and Intergovernmental Preparatory Committee for the Second General Conference of UNIDO – fifth session (first sitting)</i>	Vienna Austria
<i>Engineering Industries</i>		
5-15 October	<i>Regional seminar on machine tool industries in developing countries of Asia and Far East</i>	Tbilisi Union of Soviet Socialist Republics
21-30 October	<i>Manufacturing development clinic on animal-drawn implements, hand operated machines and simple power equipment for least developed countries and selected developing countries</i>	New Delhi India
<i>Metallurgical Industries</i>		
8-15 December	<i>Workshop on exchange of experience in the foundry industry between selected developing countries in Asia and the Far East</i>	Calcutta, Jamshedpur Ranchi, India
<i>Building Materials Industries</i>		
11-28 June	<i>In-plant training workshop on the production of refractories</i>	Pilsen Czechoslovakia
29 July-17 August	<i>Interregional seminar on furniture and joinery industry</i>	Lahti Finland

## APPENDIX B

<i>Date</i>		<i>Place</i>
<i>Chemical, Pharmaceutical and Pulp and Paper Industries</i>		
22 August-22 September	International training programme in the field of pharmaceuticals	Ghent Belgium
<i>Fertilizer, Pesticide and Petrochemical Industries</i>		
1-5 April	Preparatory meeting for the expert group meeting on the study of synthetic vs. natural products	Vienna Austria
8-15 September	Symposium on the development of the plastics industry in Latin America (including investment promotion programme)	Buenos Aires Argentina
23 September-15 November	Training programme in plastics technology for Latin American countries	Buenos Aires Argentina
7-30 October	Training programme on the production and application of synthetic fibres	Vienna Austria
<i>Light Industries</i>		
4-13 February	Seminar on the development of footwear manufacturing and leather goods manufacturing industries in developing countries	Madras India
9-19 March	Promotion of co-operation among developing countries in development of the food processing sector	São Paulo Brazil
13-18 May	International consultation on agro-industrial development	Belgrade Yugoslavia
23-28 June	AFRIFOODS - Regional consultation on promotional and technical aspects of processing and packaging foods for export	Casablanca Morocco
19-23 August	Preparatory study group meeting on environmental considerations in the leather producing industry	Vienna Austria
21-25 October	UNIDO/FAO joint meeting to promote investment and industrial co-operation in selected food processing industries	Amsterdam Netherlands
<i>Industrial Construction</i>		
4-15 November	Training seminar on the implementation and construction of investment and industrial projects	Ankara Turkey
4-7 December	Symposium on modern office management and electronic data processing (application for developing countries)	Cairo Egypt
<i>General Industrial Techniques</i>		
1-27 November	Interregional seminar on packaging in developing countries	Bombay India



**APPENDIX B**

<i>Date</i>		<i>Place</i>
<i>Industrial Institutions</i>		
14-18 January	Regional seminar for managers of chambers of industry of Arab countries	Beirut Lebanon
20-24 May	Study tour workshop on quality control and certification marking for industrial products	Singapore
30 May-6 June	Regional seminar on know-how about licensing arrangements	Manila Philippines
29 June-6 July	Joint consultancy meeting on the application of industrial research findings and services	Kinshasa Zaire
19-27 September	Joint consultations on stimulation of industrial research	Manila Philippines
11-15 November	Interregional consultation on exchange of experience between developing countries: formulation and application of the Mexican law on licensing and patents and comparable experience in other developing countries	Mexico City
18-21 December	Joint national consultations with chambers of commerce and industry and associations of industrialists	Caracas Venezuela
<i>Industrial Information</i>		
2-30 October	Seminar on industrial information for countries, members and associate members of ECAFE	Singapore and Bandung, Indonesia
9-20 December	Training course on the organization, processing and utilization of industrial information for French-speaking African countries south of the Sahara, essentially for the least developed of the developing countries	Brussels Belgium
<i>Small-scale Industries</i>		
1-12 April	Training workshop on small-scale industry in the least developed countries of Asia, the Far East and the Middle East	Kathmandu Nepal
<i>Industrial Programming</i>		
24 January- 13 February	National training workshop on project preparation and evaluation	Aden Democratic Yemen
29 January- 14 February	UNIDO/ECA regional workshop on industrial project preparation and evaluation	Addis Ababa Ethiopia
26 August- 16 September	National training workshop on project preparation and evaluation	Khartoum Sudan
18 September- 1 October	Regional training workshop on industrial project evaluation for the UDEAC countries	Yaoundé United Republic of Cameroon
2-7 December	Meeting on industrial programming at the regional level	Tangiers Morocco

## APPENDIX C

<i>Date</i>		<i>Place</i>
<i>Industrial Financing and Investment Promotion</i>		
27- April-18 May	Training course in project evaluation and investment promotion	Cairo Egypt
24-28 June	Fifth meeting on co-operation among industrial development financing institutions	Tunis Tunisia
21-25 October	Meeting to promote investment and co-operation in selected food processing industries	Amsterdam Netherlands
4-30 November	Regional workshop on financial analysis and planning for industrial projects	Palembang Indonesia
2-6 December	Investment promotion meeting and technological consultations on chemical industries in developing countries	Bucharest Romania
<i>Promotion of Export-oriented Industries</i>		
28 January-23 March	Third training course in the development of industrial exports	Tokyo Japan
5-11 October	Regional expert working group meeting on industrial free zones	Barranquilla Colombia
20-29 November	Third consultation meeting on product adaptation and development for export industries	Tokyo Japan

### *Appendix C*

## Printed publications, 1974

<i>Symbol</i>		<i>Language</i>
<i>Engineering Industries</i>		
ID/112	Machine tools in Latin America. Report of a seminar on machine tools for Latin American countries held at Buenos Aires, Argentina, 16-25 October 1972, and São Paulo, Brazil, 26-27 October 1972, Part I	E S
<i>Building Materials Industries</i>		
ID/108	Furniture and joinery industries for developing countries Part I: Raw material inputs Part II: Processing technology Part III: Management considerations	S S S
ID/114	The construction industry in developing countries. Report of an expert group meeting, Vienna, 29 October-2 November 1973	E
ID/133	Selection of woodworking machinery. Report of a technical meeting, Vienna, 19-23 November 1973	E F S

## APPENDIX C

<i>Symbol</i>		<i>Language</i>
<i>Fertilizer, Pesticide and Petrochemical Industries</i>		
ID/75	Industrial production and formulation of pesticides in developing countries. Vol. II: Chemistry and production of pesticides	E
ID/128	The manufacture of proteins from hydrocarbons. Report of an expert group meeting, Vienna, 8-12 October 1973	E
ID/SER.F/7	Reducing fertilizer costs - Fertilizer industry series, Monograph No. 7	E
<i>Light Industries</i>		
ID/91	Quality control in the textile industry	F
ID/99	The interrelationship between parameters of the leather industry	F
ID/122	Pre-investment considerations and appropriate industrial planning in the vegetable oil industry	E S
ID/123	Technical and economic aspects of the oil palm fruit processing industry	E
ID/124	The hydrogenation of vegetable oils and the production of vegetable ghee	E S
ID/125	Castor oil production and processing	E S
ID/126	Review and comparative analysis of oilseed raw materials and processes suitable for the production of protein products for human consumption	E S
<i>General Industrial Techniques</i>		
ID/106	Perspectives for industrial development in the Second United Nations Development Decade: The petrochemical industry The machine tool industry	F S E F
<i>Industrial Information</i>		
ID/104	Information units in small plants	F
UNIDO/LIB/ SER.B/16-20	Industrial Development Abstracts, Nos. 16-20	E (introduction F S R)
UNIDO/LIB/ SER.D/8-13	Guides to information sources, Nos. 8-13	E (introduction F S R)
	UNIDO Newsletter, Nos. 69-80	E F S R
<i>Industrial Management and Consulting Services</i>		
ID/115	Improving industrial administration	E S
ID/118	Industry/university linkage, with special reference to management. Report of an expert group meeting, Vienna, 3-7 September 1973	E

## APPENDIX D

<i>Symbol</i>		<i>Language</i>
<i>Small-scale Industries</i>		
ID/129	Subcontracting for modernizing economies	E
<i>Industrial Programming</i>		
ID/84	Industrial reorganization and mergers. Report of an expert group meeting, Vienna, 7-10 November 1972	E
ID/117	Contract planning and organization	E
ID/132	International industrial co-operation. Report of an expert group meeting organized by UNIDO in co-operation with the Maison des sciences de l'homme, Paris, 21-22 June 1974	E F S
ID/SER.A/21	Industrialization and Productivity Bulletin No. 21	E F S
ID/SER.H/2	Guidelines for project evaluation (Project formulation and evaluation series, No. 2)	F
ID/SER.E/8	Profiles of manufacturing establishments, Vol. IV: Three-country study on export-oriented industries (Industrial planning and programming series, No. 8)	E
<i>Industrial Financing and Investment Promotion</i>		
ID/68	Manual on the establishment of industrial joint-venture agreements in developing countries	S
<i>Industrial Surveys and Studies</i>		
ID/134	Industrial development survey. Special issue for the Second General Conference of UNIDO, Lima, Peru, 12-26 March 1975	E F S

### *Appendix D*

## Studies under preparation or completed in 1974

### *Engineering Industries*

Creation of national maintenance societies in developing countries  
Technical consultations on promotion of low-cost small tractors and power tillers  
Study on the use of shipbuilding and repair facilities

### *Metallurgical Industries*

Iron and steel industry  
Selected metal-transforming technologies

Environmental considerations in the iron and steel industry in developing countries<sup>a</sup>  
Environmental considerations in the iron and steel industry<sup>a</sup>  
Promotion of technical co-operation among developing countries—iron and steel industry

*Fertilizer, Pesticide and Petrochemical Industries*

Reducing fertilizer costs  
Pilot demonstration plant for liquid fertilizers  
Directory of fertilizer production facilities, Part II, Asia  
Directory of fertilizer production facilities, Part III, ECE countries  
Models for establishing nitrogen fertilizer industry in developing countries  
Fertilizer bulk blending and bagging plant  
Prospects for increasing utilization of plastics in the building industry in developing countries

*Building Materials Industries*

Guide on lime industry  
Industrial performance evaluation profiles:  
Standard questionnaire for the cement industry  
Standard questionnaire for the glass industry

*Light Industries*

The actual situation and future prospects of the leather industry in Costa Rica  
Assistance to the leather goods industry and in the improvement of hides and skins in Upper Volta  
Development of leather and leather footwear industries in the United Republic of Tanzania  
The Sudanese footwear industry  
Market and pre-feasibility study for the establishment of leather products manufacturing plants in Ethiopia  
Study on footwear manufacture in Lesotho  
Footwear industry in the Philippines  
Technical and economic evaluation of the shoe industry in Guatemala  
Leather goods in Colombia  
Techno-economic feasibility studies for the development of the agro-industrial sector in Madagascar  
Feasibility study for the construction in Dahomey of a modern citrus processing plant  
Study for the industrialization of grape processing in the Dominican Republic  
Assistance to the Debre Berhan wool factory in Ethiopia  
Textile industry study in Ethiopia  
Feasibility study for the manufacture of blankets in Lesotho  
Pre-feasibility study in view of the treatment of kapok in Niger  
Feasibility study of a textile factory in the Khmer Republic

<sup>a</sup>Joint UNIDO/UNEP project.

## APPENDIX D

- Techno-economic feasibility study for the establishment of a multi-purpose oilseed processing plant in Zambia
- Pre-feasibility study for the establishment of a feedstuff production plant in Mali
- Elaboration of a technical project for the establishment of a combined modern vegetable oil and vegetable ghee factory in Nepal
- Assistance to various branches of the food/feed processing industry and pre-feasibility study for the production and utilization of liquid feed supplements in Bulgaria
- Techno-economic pre-feasibility study for the development of the vegetable oil industry
- Master plan for an agro-industrial complex in Can Tho (pre-feasibility study) in the Republic of Viet-Nam
- Preliminary survey of printing industry in Afghanistan

### *General Industrial Techniques*

- Study in integrated industrial complexes with minimized pollution
- Case studies of four industrial development projects

### *Industrial Institutions*

- Compulsory licensing - a suitable instrument to developing indigenous technology
- Effective organization and utilization of industrial research
- Survey of industrial co-operatives in the Andean Group
- Study to explore possibilities of linking industrial co-operatives producing building materials with housing co-operatives in developing countries

### *Industrial Information*

- Manual on the selection and use of computers for industrial information in developing countries
- Manual on the use of audio-visuals in industry
- Manufacturing guide: Furfural
- Manufacturing guide: Lime
- Manufacturing guide: Clothing industry

### *Industrial Management and Consulting Services*

- Management information systems in industry

### *Small-scale Industries*

- Comparative analysis of financial assistance schemes for small industries in Latin America and the Caribbean
- Etude sur le rôle des compagnies d'ingénieurs conseils ou conseillers en management dans la promotion des petites industries dans les pays en voie de développement
- Industrial co-operatives in developing countries
- Merger and self-help among small-scale industries - glimpses of Indian experience

**Mergers in small industries in India**

- Methodology for an evaluation study of industrial estates
- National and international action for small industry development
- Planning and programming for the development of small-scale enterprises
- Report on Latin American meeting on financing of small industries
- Some observations on the promotion of small-scale industry
- Stimulation of entrepreneurship in less developed areas—some Indian experience
- Strategy of small industry development in countries at different levels of industrialization

*Industrial Training*

- Evaluation of in-plant group training programmes
- Evaluation of individual fellowship programmes

*Industrial Programming*

- Manual for industrial project evaluation in Arab countries
- Simplified guide for project evaluation
- Identification and evaluation of multinational projects
- Industrialization policy in selected Asian countries
- Industrial performance evaluation profiles (glass industry)
- Industrial performance evaluation profiles (vegetable oil industry)
- Manual on project preparation
- Selection of industrial priorities
- Internal regional disproportions in growing economies
- Multi-level planning model
- Guidelines for contracting for industrial projects in developing countries
- Strategic industrial planning (in Africa)
- Summaries of industrial development plans, Vol. IV,
- Comparative analysis of industrial development plans of six countries

*Industrial Financing and Investment Promotion*

- Manual on the commercial aspects of industrial joint venture agreements in developing countries
- Guidelines on financial analysis and planning for industrial projects

*Promotion of Export-oriented Industries*

- Development of exports of manufactures from developing countries through international co-operation
- Proven resources of heavy mineral sands in the Gambia
- Manual on guidelines of international subcontracting arrangements
- Handbook on Industrial Free Zones

## APPENDIX E

### Appendix E

#### 1974 in-plant group training programmes<sup>a</sup>

<i>Field of industry</i>	<i>Host country</i>	<i>Number of participants</i>
Iron and steel	Ukrainian SSR	33
Textile industry	Poland	14
Diesel engines	Czechoslovakia	18
Mechanical industry	Japan	10
Pulp and paper industry	Sweden	14
Food processing	United Kingdom	14
Metalworking industry	USSR	16
Plastic technology	Austria	19
Industrial information	USSR	24
Maintenance and repair (two programmes)	Italy	51
Standardization	USSR	19
Maintenance - railway	Germany, Federal Republic of	20
Application of dyes and chemicals	Switzerland	12
Fertilizer industry	USSR	12
Electric welding	Ukrainian SSR	20
Integrated industrial management	Italy	23
Petrochemical industry	Romania	14
Quality control	Sweden	18
Industrial co-operatives	Poland	15
	<b>Total number of participants</b>	<b>366</b>
	<b>Total number of programmes</b>	<b>20</b>

<sup>a</sup>A complete list of in-plant group training programmes, 1965-1973, can be found in ID/B/140, appendix E, pp. 263-264.

### Appendix F

#### UNIDO involvement in country programming

<i>Table</i>	<i>Page</i>
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2. Analysis of projects within the first cycle of UNDP country programmes assigned since 1972 or expected to be assigned to UNIDO, by size and by programme component	254



TABLE 1. EXPECTED UNIDO SHARE OF UNDP COUNTRY PROGRAMMES—FIRST CYCLE  
(By geographical region and by UNIDO programme component)

(In thousands of US dollars)

	UNIDO share		Projects <sup>a</sup> approved up to 30.9.74	Pipeline	Cumulative project expenditure	Balance for future implementation
	Value	Percentage of UNIDO total				
<i>By geographical region</i>						
Africa	43,468	32.8	28,511	14,957	13,191	30,277
Americas	26,015	19.6	18,616	7,399	7,224	18,791
Asia/Far East	43,847	33.1	25,455	18,392	9,661	34,186
Europe/Middle East	19,223	14.5	15,129	4,094	5,793	13,430
<b>TOTAL</b>	<b>132,553</b>	<b>100.0</b>	<b>87,711</b>	<b>44,842</b>	<b>35,869</b>	<b>96,684</b>
<i>By programme/ programme component</i>						
30.1	18,152	13.7	12,211	5,941	5,201	12,951
30.2	12,851	9.7	8,713	4,138	2,260	10,591
30.3 <sup>b</sup>	4,581	3.5	2,322	2,259	1,218	3,363
30.4	2,427	1.8	1,981	446	707	1,720
30.5	7,561	5.7	3,956	3,605	1,368	6,193
30.6	14,625	11.0	11,009	3,616	3,627	10,998
30.7	4,166	3.1	2,456	1,710	881	3,285
31.1	15,032	11.4	10,313	4,719	5,025	10,007
31.2	676	0.5	145	531	40	636
31.3	8,138	6.1	4,557	3,581	1,913	6,225
31.4	19,306	14.6	11,856	7,450	5,794	13,512
31.5	2,009	1.5	1,737	272	356	1,653
32.1	16,802	12.7	12,218	4,584	5,456	11,346
32.2	2,839	2.1	2,312	527	876	1,963
32.3	2,517	1.9	1,054	1,463	450	2,067
32.4	871	0.7	871	-	697	174
<b>TOTAL</b>	<b>132,553</b>	<b>100.0</b>	<b>87,711</b>	<b>44,842</b>	<b>35,869</b>	<b>96,684</b>

<sup>a</sup>Includes carry-over of unimplemented portions of projects approved prior to 1972.

<sup>b</sup>Also includes projects now assigned to the newly established programme component 30.8.00.

TABLE 2. ANALYSIS OF PROJECTS WITHIN THE FIRST CYCLE OF UNDP COUNTRY PROGRAMMES ASSIGNED SINCE 1972 OR EXPECTED TO BE ASSIGNED TO UNIDO, BY SIZE AND BY PROGRAMME COMPONENT<sup>a</sup>

(In thousands of US dollars)

Programme component	Up to \$100,000		From \$100,001 to \$500,000		From \$500,001 to \$1,000,000		Over \$1,000,000	
	No. of projects	Value	No. of projects	Value	No. of projects	Value	No. of projects	Value
30.1	64	1,567	19	5,637	4	2,937	5	6,479
30.2	30	807	13	3,533	5	4,068	4	5,977
30.3 <sup>b</sup>	35	1,181	7	1,440	3	1,784	-	-
30.4	27	866	5	1,003	-	-	-	-
30.5	25	828	11	2,853	5	3,737	-	-
30.6	54	1,350	16	3,821	6	4,436	1	1,336
30.7	19	355	6	2,478	3	1,644	-	-
31.1	20	497	11	2,781	8	5,437	1	2,188
31.2	4	162	1	500	-	-	-	-
31.3	31	1,163	10	2,741	2	1,138	2	2,388
31.4	25	1,058	26	6,887	8	5,545	1	1,263
31.5	8	288	2	365	-	-	-	-
32.1	43	2,298	20	5,587	9	7,121	-	-
32.2	9	526	4	536	1	968	-	-
32.3	18	651	6	1,385	1	523	-	-
32.4	2	28	-	-	-	-	-	-
<b>TOTAL</b>	<b>414</b>	<b>13,625</b>	<b>157</b>	<b>41,547</b>	<b>55</b>	<b>39,358</b>	<b>14</b>	<b>19,631</b>

<sup>a</sup> Financial provisions for the full duration of projects, i.e. beyond 1976 as applicable, are included.

<sup>b</sup> Also includes projects assigned to the newly established industrial construction component 30.8.

## Appendix G

## UNIDO General Trust Fund

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4. Cumulative statement of pledges and other available GTF resources as of 31 December 1974	258
5. Implementation of financially authorized GTF projects as of 31 December 1974	259

TABLE 1. IMPLEMENTATION OF APPROVED GTF PROJECTS AS OF 31 DECEMBER 1974  
(In thousands of US dollars)

<i>Status of project implementation</i>	<i>No. of projects</i>	<i>Programmed value (\$US)</i>	<i>Percentage of total programmed value</i>
Completed	273	8,129	65.9
Under active implementation	53	3,395	27.5
Delayed in implementation	11	245	2.0
No action taken towards implementation	1	150	1.2
Cancelled	16	415	3.4
<b>TOTAL</b>	<b>354</b>	<b>12,334</b>	<b>100.0</b>

TABLE 2. CATEGORIES, NUMBER AND VALUE OF APPROVED GTF PROJECTS AS OF 31 DECEMBER 1974  
(In thousands of US dollars)

<i>Categories</i>	<i>No. of projects</i>		<i>Value (\$U.S.)</i>	
	<i>1974</i>	<i>Cumulative</i>	<i>1974</i>	<i>Cumulative</i>
Industrial equipment and other physical units	11	40	743	2,586
Training projects	30	94	1,461	5,042
Collection and dissemination of industrial information and promotional activities	23	89	478	1,508
Workshops and other technical meetings	8	53	111	970
Industrial surveys and research	3	42	177	400
Expert assistance	3	21	196	1,065
Plant design and laboratory investigations	2	15	65	664
Headquarters staff			9	99
<b>TOTAL</b>	<b>80</b>	<b>354</b>	<b>3,240</b>	<b>12,334</b>

## APPENDIX G

TABLE 3. STATUS OF GOVERNMENTS' PLEDGES AS OF 31 DECEMBER 1974  
(In US dollars)

Country	Cumulative pledges			Pledges collected	Balance due
	1st-6th Pledging Conferences	7th Pledging Conference	Total		
Afghanistan	5,000	-	5,000	5,000	-
Algeria	50,000	15,000	65,000	40,000	25,000
Argentina	184,500	39,675	224,175	184,500	39,675
Austria	117,000	63,352	180,352	117,000	63,352
Bahrain	12,000	4,000	16,000	12,000	4,000
Bangladesh	2,000	1,000	3,000	-	3,000
Barbados	4,750	-	4,750	4,750	-
Belgium	157,045	- <sup>a</sup>	157,045	157,045	-
Bhutan	2,000	1,000	3,000	2,000	1,000
Bolivia	1,800	-	1,800	-	1,800
Brazil	75,000	15,000	90,000	30,000	60,000
Bulgaria	82,226	25,000	107,226	82,226	25,000
Burma	8,000	1,000	9,000	8,000	1,000
Burundi	1,000	-	1,000	-	1,000
Central African Republic	472	900	1,372	-	1,372
Chad	1,800	-	1,800	1,800	-
Chile	21,000	5,000	26,000	21,000	5,000
China	455,000	263,158	718,158	455,000	263,158
Colombia	12,000	-	12,000	8,000	4,000
Congo	7,000	-	7,000	-	7,000
Costa Rica	10,000	2,000	12,000	8,388	3,612
Cuba	132,414	30,675	163,089	132,414	30,675
Cyprus	8,785	-	8,785	8,785	-
Czechoslovakia	1,036,425	210,793	1,247,218	1,036,425	210,793
Dahomey	1,000	-	1,000	-	1,000
Democratic Yemen	3,280	800	4,080	2,680	1,400
Egypt	667,617	121,390	789,007	667,617	121,390
Ethiopia	1,120	-	1,120	1,120	-
Fiji	4,100	1,100	5,200	4,100	1,100
France	173,244	59,785	233,029	173,244	59,785
Gabon	35,404	5,948	41,352	32,301	9,051
Gambia	1,917	-	1,917	-	1,917
German Democratic Republic	111,111	130,612	241,723	111,111	130,612
Ghana	61,491	17,391	78,882	61,491	17,391
Greece	35,176	6,000	41,176	34,842	6,334
Guyana	6,738	-	6,738	6,738	-
Hungary	215,912	48,193	264,105	215,912	48,193
India	306,518	55,000	361,518	251,518	110,000
Indonesia	125,000	25,000	150,000	125,000	25,000
Iran	360,000	65,000	425,000	360,000	65,000
Iraq	67,500	-	67,500	55,000	12,500
Israel	60,000	10,000	70,000	20,000	50,000
Italy	1,800,000	281,109	2,081,109	1,800,000	281,109
Ivory Coast	31,124	-	31,124	31,124	-
Jamaica	24,000	-	24,000	24,000	-
Japan	100,000	-	100,000	100,000	-

## APPENDIX G

Country	Cumulative pledges			Pledges collected	Balance due
	1st-6th Pledging Conferences	7th Pledging Conference	Total		
Kenya	21,769	4,023	25,792	17,746	8,046
Korea	35,000	—	35,000	24,000	11,000
Kuwait	160,000	40,000	200,000	130,000	70,000
Laos	4,700	1,500	6,200	2,700	3,500
Lebanon	27,668	7,296	34,964	21,230	13,734
Lesotho	5,500	1,000	6,500	5,500	1,000
Liberia	12,000	—	12,000	9,000	3,000
Libyan Arab Republic	195,375	60,000	255,375	195,375	60,000
Madagascar	8,163	—	8,163	8,163	—
Malawi	—	1,000	1,000	—	1,000
Malaysia	8,000	2,000	10,000	8,000	2,000
Mali	6,000	—	6,000	6,000	—
Malta	2,332	552	2,884	2,332	552
Mauritania	8,000	—	8,000	8,000	—
Mauritius	1,231	491	1,722	1,231	491
Mexico	50,000	—	50,000	50,000	—
Mongolia	7,730	1,700	9,430	7,730	1,700
Morocco	54,322	11,774	66,096	54,322	11,774
Nauru	500	—	500	—	500
Niger	1,073	—	1,073	—	1,073
Nigeria	41,000	8,000	49,000	33,000	16,000
Oman	20,000	12,000	32,000	20,000	12,000
Pakistan	183,384	19,192	202,576	164,192	38,384
Peru	71,000	15,000	86,000	71,000	15,000
Philippines	100,000	20,000	120,000	60,000	60,000
Poland	324,830	60,241	385,071	324,830	60,241
Qatar	45,000	15,000 <sup>b</sup>	60,000	60,000	—
Republic of Viet-Nam	5,000	1,000	6,000	4,000	2,000
Romania	219,800	60,362	280,162	219,800	60,362
Rwanda	7,667	1,500	9,167	7,667	1,500
Saudi Arabia	50,000	20,000	70,000	50,000	20,000
Senegal	—	6,000	6,000	—	6,000
Sierra Leone	2,000	1,000	3,000	1,000	2,000
Singapore	6,000	1,000	7,000	6,000	1,000
Somalia	3,000	—	3,000	3,000	—
Sri Lanka	18,000	3,000	21,000	15,000	6,000
Sudan	60,000	10,000	70,000	40,000	30,000
Swaziland	5,814	—	5,814	—	5,814
Switzerland	333,160	547,445	880,605	333,160	547,445
Syrian Arab Republic	11,500	3,000	14,500	11,500	3,000
Thailand	50,000	11,500	61,500	50,000	11,500
Togo	7,430	2,682	10,112	4,748	5,364
Trinidad and Tobago	30,000	5,000	35,000	30,000	5,000
Tunisia	30,000	5,000	35,000	30,000	5,000
Turkey	32,460	10,000	42,460	32,460	10,000
Uganda	500	700	1,200	500	700
Union of Soviet Socialist Republics	3,519,274	660,502	4,179,776	3,519,274	660,502
United Arab Emirates	—	25,000	25,000	—	25,000
United Republic of Cameroon	7,226	2,146	9,372	5,080	4,292
United Republic of Tanzania	18,056	2,011	20,067	18,056	2,011

## APPENDIX G

TABLE 3 (continued)  
(In US dollars)

Country	Cumulative pledges			Pledges collected	Balance due
	1st-6th Pledging Conferences	7th Pledging Conference	Total		
Upper Volta	19,512	5,966	25,478	19,512	5,966
Uruguay	20,000	-	20,000	-	20,000
Venezuela	121,028	20,000	141,028	80,187	60,841
Yemen	2,000	1,000	3,000	1,000	2,000
Yugoslavia	575,000	200,000	775,000	575,000	200,000
Zaire	40,000	12,000	52,000	20,000	32,000
Zambia	17,641	5,601	23,242	17,641	5,601
	13,186,114	3,409,065	16,595,179	12,771,067	3,824,112
Contributions pledged prior to 1st Pledging Conference	1,116,289		1,116,289	1,116,289	-
Non-governmental	29,281		29,281	29,281	-
<b>TOTALS</b>	<b>14,331,684</b>	<b>3,409,065</b>	<b>17,740,749</b>	<b>13,916,637</b>	<b>3,824,112</b>
Special purpose contribution, Federal Republic of Germany		377,358	377,358	-	377,358

<sup>a</sup>Belgium announced a contribution of \$133,333, subject to parliamentary approval.  
<sup>b</sup>\$U.S.15,000 paid in advance for 1975.

TABLE 4. CUMULATIVE STATEMENT OF PLEDGES AND OTHER AVAILABLE GTF RESOURCES AS OF 31 DECEMBER 1974  
(In thousands of US dollars)

1.	Total pledges made as of 31 December 1974	17,741 <sup>a</sup>
2.	Pledges made in respect of 1975	(3,409)
3.	Pledges made prior to the Seventh Pledging Conference - unpaid pledges not included in item 2	(430)
4.	Cumulative pledges collected	13,902
5.	Investment income as of 31 December 1974	872
6.	Exchange losses and bank charges <sup>b</sup>	(671)
7.	Total available resources as of 31 December 1974	14,103
8.	Value of approved projects	12,334
9.	Available resources for new projects not considering items 2 and 3 (item 7 less item 8) plus value of cancelled projects	2,184

<sup>a</sup>Excluding special purpose contribution (\$377,358) of the Federal Republic of Germany.

<sup>b</sup>Due to difference in exchange rates.

## APPENDIX H

**TABLE 5. IMPLEMENTATION OF FINANCIALLY AUTHORIZED GTF PROJECTS AS OF  
31 DECEMBER 1974**  
(In thousands of US dollars)

	Cumulative up to 31 December 1973	1974	Cumulative up to 31 December 1974
1. Unimplemented balance of projects financially authorized brought forward to 1 January 1974	-	3,259	-
2. Value of ongoing projects financially authorized	8,237	2,823 <sup>a</sup>	11,060
3. Total of financially authorized projects under implementation (items 1 plus 2)	8,237	6,082	11,060
4. Expenditures	4,978	1,878 <sup>b</sup>	6,856
5. Unimplemented balance of projects financially authorized	3,259	4,204	4,204

<sup>a</sup>Revised target for 1974 (original target \$2.5 million, cf. ID/B/140, statistical appendix, table 2 F).

<sup>b</sup>Revised target for 1974 (original target \$2.0 million, cf. ID/B/140, statistical appendix, table 2 F).

### Appendix H

## Comparison of 1974 regular programme as approved by the Industrial Development Board and as delivered as of 31 December 1974

Components	1974 regular programme as approved by the IDB \$U.S.	1974 regular programme as delivered \$U.S.
<i>Country projects</i>		
Fellowships	683,200	330,898
Expert services	-	65,545
Other activities <sup>a</sup>	-	65,723
<i>Intercountry projects</i>		
Fellowships	16,800	11,100
Regional advisers	480,000	473,864
Interregional advisers	180,000	205,916
Group training programmes	-	242,711
<i>Co-operation among developing countries</i>		25,884
<i>Consultations with Governments and advisory missions</i>	40,000	31,648
<i>Development of new projects and activities</i>	100,000	46,711
<b>TOTAL</b>	<b>1,500,000</b>	<b>1,500,000</b>

<sup>a</sup>Feasibility study on industrial exploitation of ilmenitic sand deposits in Gambia.

APPENDIX I

Appendix I

Geographical distribution of the Professional staff  
of UNIDO as of 31 December 1974

<i>Number</i>		<i>Number</i>	
<i>Africa</i>		<i>Europe (Western)</i>	
Burundi (1 P-3)	1	Austria (3 P-4, 4 P-3, 1 P-2, 1 P-1)	9
Dahomey (1 P-4)	1	Belgium (1 P-4, 1 P-3)	2
Egypt (1 USG, 1 D-2, 1 D-1, 2 P-5)	5	Denmark (1 P-4, 2 P-3, 3 P-2)	6
Gambia (1 P-3)	1	Finland (1 P-5, 1 P-2)	2
Ghana (1 P-4)	1	France (1 D-2, 2 D-1, 2 P-5, 2 P-4, 2 P-3, 2 P-2, 1 P-1)	12
Guinea (1 P-2)	1	Germany, Federal Republic of (1 D-2, 2 D-1, 7 P-4, 6 P-3)	16
Kenya (1 P-3)	1	Greece (1 P-5, 1 P-2)	2
Libyan Arab Republic (1 P-4, 1 P-3)	2	Ireland (1 D-1, 1 P-4)	2
Mali (1 D-1, 1 P-4)	2	Italy (1 P-5, 3 P-4, 2 P-3, 2 P-2)	8
Mauritania (1 P-4)	1	Luxembourg (1 P-5)	1
Mauritius (1 P-4)	1	Netherlands (1 D-1, 1 P-5, 1 P-4)	3
Morocco (1 P-4)	1	Norway (2 P-5, 1 P-2, 1 P-1)	4
Nigeria (1 P-4)	1	Portugal (2 P-3)	2
Senegal (1 P-5)	1	Spain (1 P-5, 1 P-4, 2 P-2, 1 P-1)	5
Somalia (1 P-2)	1	Sweden (1 D-1, 2 P-5, 1 P-4, 3 P-3, 2 P-2)	9
Sudan (2 P-4)	2	United Kingdom (1 D-1, 4 P-5, 2 P-4, 5 P-3)	12
Tunisia (2 P-4)	2		
Uganda (1 P-4)	1		
United Republic of Cameroon (1 P-3, 1 P-2)	2		
<b>TOTAL</b>	<b>28</b>	<b>TOTAL</b>	<b>95</b>
<i>Asia and the Far East</i>		<i>Latin America</i>	
Afghanistan (1 P-2)	1	Argentina (1 D-1)	1
Australia (2 P-5, 2 P-3)	4	Bolivia (1 P-3)	1
Burma (1 P-3)	1	Brazil (2 P-5, 2 P-4)	4
China (1 P-4)	1	Colombia (1 D-2)	1
India (2 D-1, 1 P-5, 2 P-3)	5	Ecuador (1 P-1)	1
Japan (4 P-4, 1 P-2)	5	El Salvador (2 P-4)	2
Khmer Republic (1 P-2)	1	Guatemala (1 P-2)	1
Nepal (1 P-4, 1 P-3)	2	Panama (1 P-2)	1
New Zealand (2 P-5)	2	Peru (1 P-3, 1 P-2)	2
Pakistan (1 D-1)	1		
Philippines (1 P-3)	1		
<b>TOTAL</b>	<b>24</b>	<b>TOTAL</b>	<b>14</b>
<i>Europe (Eastern)</i>		<i>Middle East</i>	
Bulgaria (1 P-5, 1 P-4)	2	Iran (1 P-5, 2 P-3)	3
Byelorussian Soviet Socialist Republic (1 P-3)	1	Iraq (1 P-5, 1 P-4)	2
Hungary (1 D-1, 1 P-5, 1 P-4)	3	Israel (1 P-5, 1 P-4)	2
Poland (1 P-5, 3 P-4, 2 P-3)	6	Jordan (1 P-4)	1
Romania (2 P-4, 1 P-3)	3	Lebanon (1 P-4)	1
Ukrainian Soviet Socialist Republic (1 P-2)	1	Syrian Arab Republic (1 P-2)	1
Union of Soviet Socialist Republics (1 D-2, 1 D-1, 2 P-5, 10 P-4, 9 P-3)	23	Turkey (1 P-3)	1
Yugoslavia (1 P-5, 1 P-4, 1 P-2)	3	Yemen (2 P-4, 1 P-2)	3
<b>TOTAL</b>	<b>42</b>	<b>TOTAL</b>	<b>14</b>



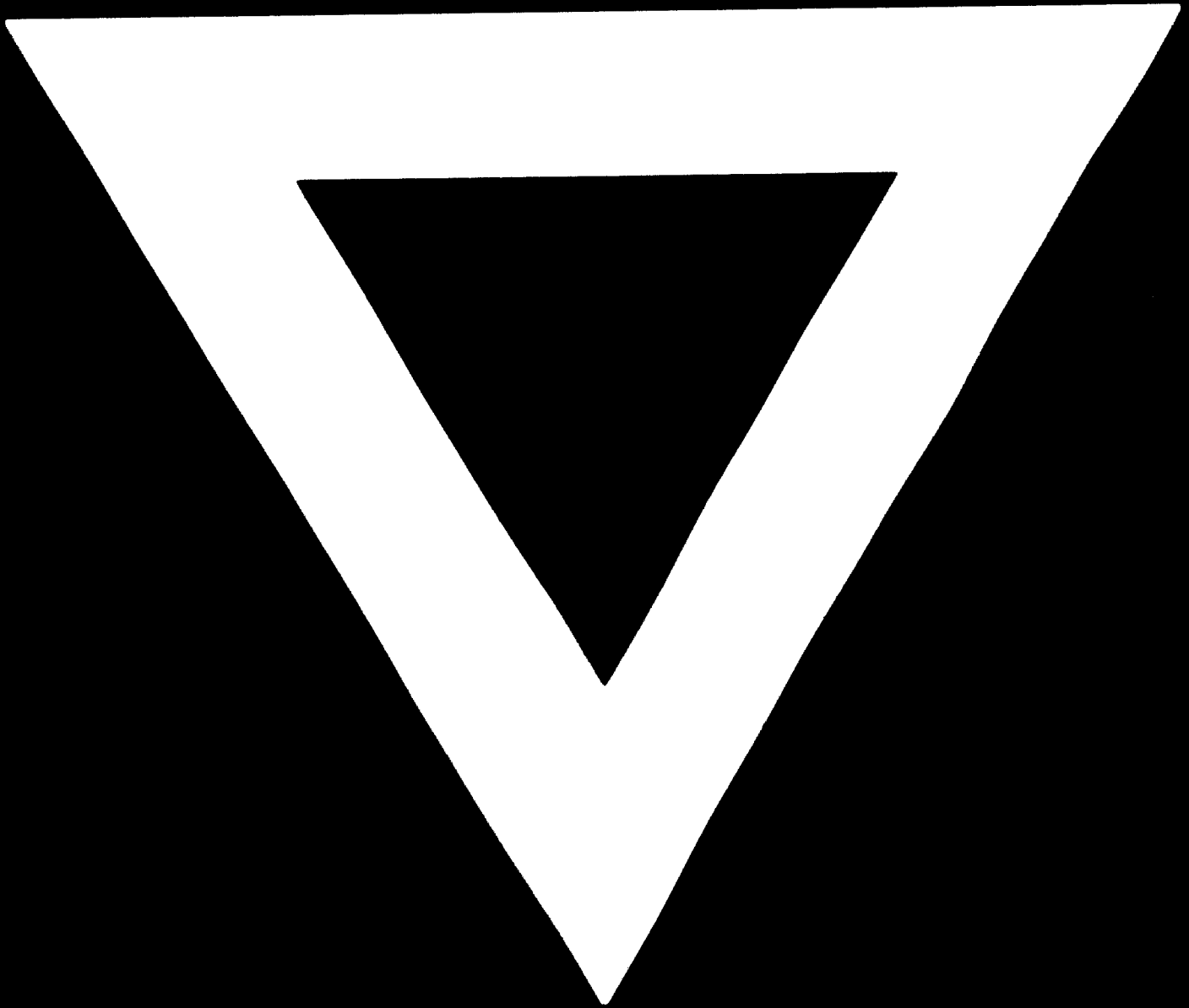
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<i>Number</i>	<i>Number</i>
<i>North America and the Caribbean</i>	
Canada (1 D-1, 1 P-5, 3 P-3, 2 P-2)	7
Jamaica (1 P-3)	1
Trinidad and Tobago (1 P-3)	1
United States of America (1 D-2, 2 D-1, 11 P-5, 17 P-4, 13 P-3, 6 P-2)	50
<b>TOTAL</b>	<u>59</u>
<i>Non-Member States</i>	
Republic of Korea (1 P-4)	1
Switzerland (1 D-1)	1
<b>TOTAL</b>	<u>2</u>
<b>GRAND TOTAL</b>	<u><u>278</u></u>
(77 nationalities)	





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