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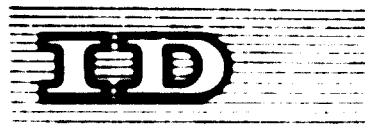
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D04094



United Nations Industrial Development Organization

Distr.
GENERAL

E/IS/43
20 January 1969

ORIGINAL: ENGLISH

Industrial Development Board

Third Session

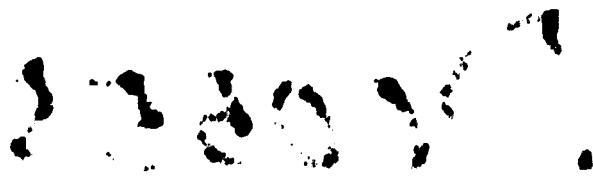
Via wa, 24 April - 15 May 1969

Agenda item 5(a)

REPORT ON 1968 ACTIVITIES

OF THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Submitted by the Executive Director of UNIDO



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United Nations Industrial Development Organization

Distr.
GENERAL

ID B.42 C.rr.1
17 April 1969

Original: English

Industrial Development Board

Third Session

Vienna, 24 April - 15 May 1969

Agenda item 5(a)

REPORT ON 1968 ACTIVITIES OF THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Corrigendum

Page 130, para. 269

Delete the first sentence and substitute the following:

"Due to the fact that the number of small industrial enterprises in Africa was very limited, only one operation pertaining to industrial extension services to existing industries was carried out in that region."

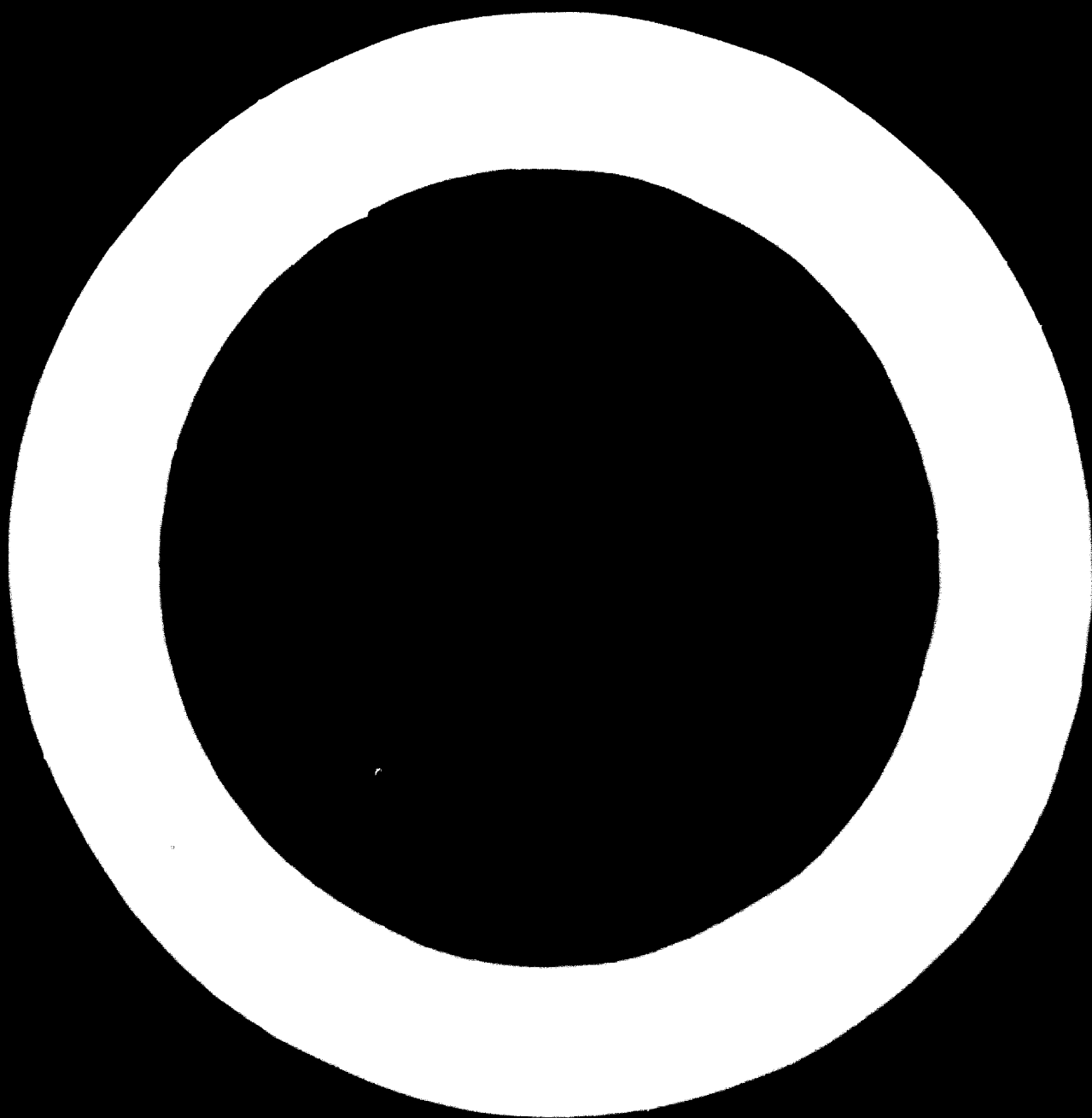
Page 130, para. 270

In the first line delete the words "in Africa".

Annex VI, page 2, para. 7

Delete the last sentence and substitute the following:

"In 1967, the rate of implementation was 77.5 per cent."



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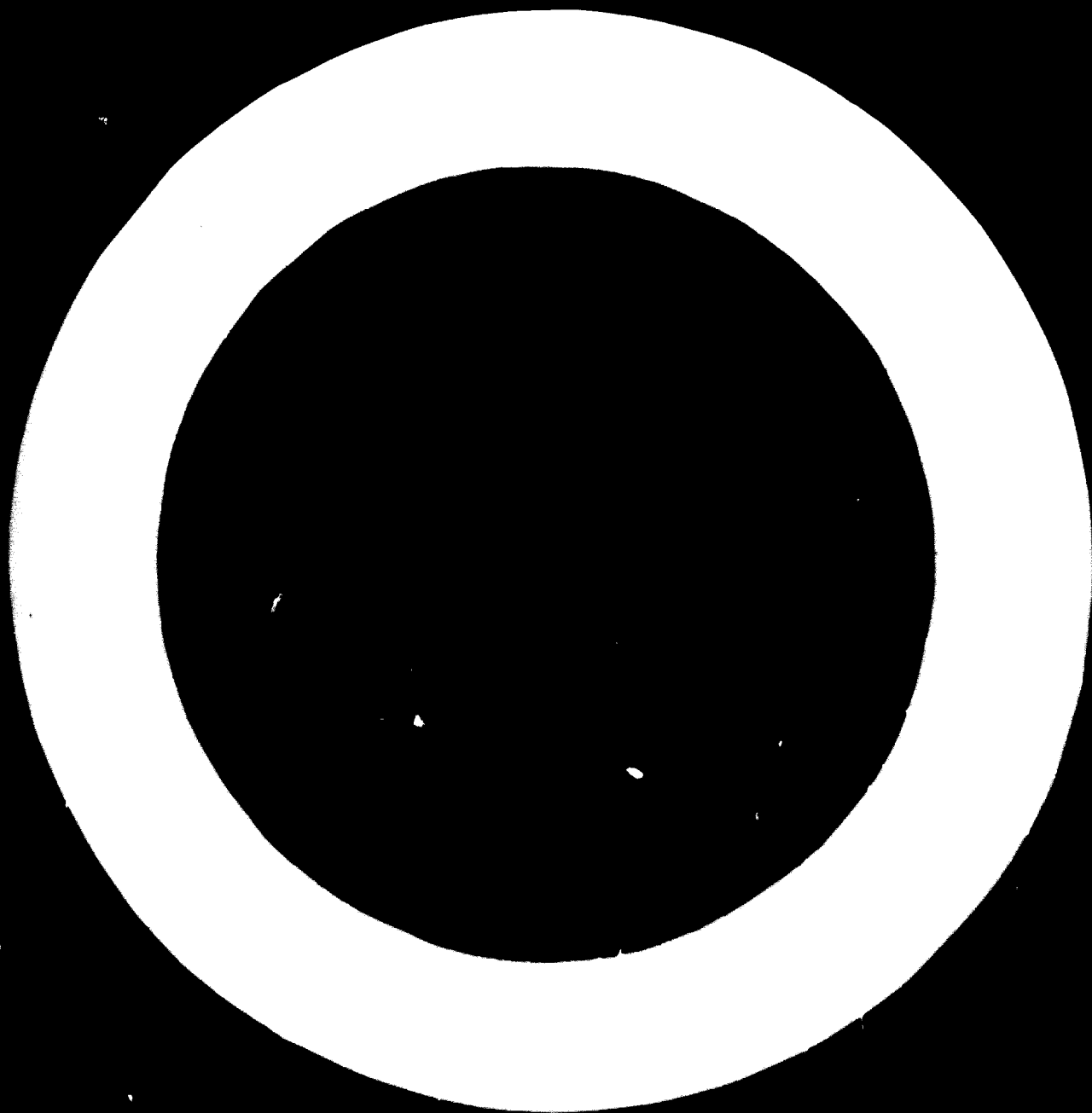
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Introduction

1. This report on the activities of UNIDO in 1968 is submitted to the Board in compliance with the provision of General Assembly resolution 2170 (XVII). In the preparation of the report, account has been taken of the guidelines set up by the Board at its first and second sessions.
2. The activities described in the report should be considered in the context of the Programme of Work of UNIDO for 1968 submitted to the Board at its second session (ID/B/20/Rev.1 and Add.1). A number of activities carried out by UNIDO in 1968 represent a continuation of the projects initiated in 1967 or earlier.
3. In order to maintain continuity in the method of reporting, the material has been organized in fifteen groups of activities following the procedure adopted in the preparation of the work programme for 1968. As regards operational activities, in order not to overburden the main text of the report, projects are given in the main text only in summary form; details of these projects appear in Annex IV where they are classified by programmes and regions. In addition, a list of field activities for each region, classified by countries, appears in Annex V. It should be noted that because of the time-table imposed by the preparation of the report, it was not possible to put the cut-off date at the end of the calendar year. For the non-operational activities the cut-off date is 1 December; for the operational activities it is the end of the third quarter. An addendum (ID/B/43/Add.2) updating the present report will be issued at a later date.
4. The attention of the Board at its second session was drawn to certain factors which had had to be taken into account in the preparation of the 1968 work programme and which related to a certain degree of dislocation of activities arising from the transfer of UNIDO headquarters to Vienna, including problems of staffing. An intensive effort has been made in the past year to reduce the recruitment gap; at the same time, the administrative and physical set-up of UNIDO have been considerably developed and strengthened. Emphasis was placed in this connexion on the extension of budgetary and accounting controls to provide a better basis for budget estimates.

5. The past year can be considered as a period of consolidation. During the year the Austrian Government continued, as in the past, to extend its full co-operation in providing additional office facilities. Further office space and facilities will be provided by the Austrian Government in 1969 to meet increasing requirements pending the completion of the permanent headquarters in the Donaupark.
6. The New York Liaison Office of UNIDO, operating from the United Nations Headquarters in New York, represented UNIDO at intergovernmental and other meetings and helped to co-ordinate the activities of UNIDO with those of the United Nations Secretariat, in particular with the UNDP and with the activities of international agencies located in the United States and Canada. Liaison was also maintained with industries, research organizations and other agencies located in North America in relation to the operational and research programmes of UNIDO.
7. The work of UNIDO in 1968 as regards both operations and supporting activities is presented in Part One and Part Two of this report. The following paragraphs are intended to highlight some of the features of these activities.

Follow-up of the International Symposium on Industrial Development, Athens, 1967 - Proceedings of the Symposium

8. It was decided to publish the proceedings of the Athens Symposium in the form of separate monographs, each devoted to a substantive sub-item of the agenda. The following twenty monographs are planned for publication:

Policies and measures in developing countries

- Industrial manpower
- Administrative machinery for industrial development
- Industrial research and other technical services
- Promotion of industrial exports and of export-oriented and import-substituting industries
- Small-scale industry

Situation, problems and prospects of main industrial sectors

- Iron and steel
- Non-ferrous metals
- Engineering industries
- Basic chemicals and petrochemicals
- Synthetic fertilizer industry

Food-processing industries
Textiles
Building material and wood products
Construction industry
Standardization

Policies and measures in developing countries and international aspects of industrial development

General issues of industrial policy and its implementation
Part 1: Economic aspects
Part 2: Social aspects
Formulation and implementation of industrial programmes
Regional co-operation
Domestic financing of industry
External financing
Technical co-operation

The monographs are planned as self-contained documents on each particular subject. They are being prepared on the basis of the documentation submitted to the International Symposium, the discussions at the Symposium and all other relevant United Nations documents; they will also incorporate other relevant information on the subjects concerned. The preparation of the monographs was assigned to high-level consultants in the particular fields under the guidance and supervision of the UNIDO secretariat. As of the end of the year, a total of eleven monographs have been assigned to consultants and it is expected that the entire set of monographs will be published in 1969.

Co-operation with specialized agencies and regional economic commissions

9. Considerable progress was made in the past year as regards the co-ordination of activities and co-operation in the field of industry with the specialized agencies, the regional economic commissions, UNESOB and other organizations concerned. UNIDO has entered into agreements with certain specialized agencies, namely ILO and UNESCO, to promote a co-operative effort in a number of fields of joint interest and to avoid duplication in others so as to utilize to the best advantage available resources in the field. UNIDO is also about to finalize an agreement with FAO which will provide for co-operation and co-ordinating arrangements in such fields as industrial inputs in agriculture (fertilizers, pesticides and insecticides, agricultural machinery, food-processing, fibres etc.). Exchanges of views took place with WHO with regards to collaboration in fields of mutual interest which offer scope for co-operation in the establishment of future programmes for joint action.

10. Close co-operation was also established between UNIDO, UNCTAD and the UNCTAD/GATT International Trade Centre in the field of promotion of exports of manufacturing, where the activities of the organizations concerned are complementary. A number of joint projects were carried out in 1968 and a general agreement of co-operation was reached concerning joint action in this field.

11. Extensive discussions with ECA, ECAFE, ECE and UNESOB have resulted in understandings for a co-operative effort in the field of industry including harmonization of respective programmes and joint implementation of projects. The arrangements reached relate to co-operation in research projects, including meetings and seminars; co-ordination of the activities of the regional industrial advisers attached to the regional commissions; the setting up of procedures for co-operation with the regional commissions in the UNIDO operational projects in the respective regions; and the establishment of close working relationships of the field advisers with the commissions of the region in which they serve. Preliminary exchanges of views on similar arrangements took place with the Economic Commission for Latin America (ECLA).

Field adviser programme

12. As mentioned in the previous documents submitted to the Board, the field adviser programme was initiated by UNIDO and UNDP in the second half of 1967 with the aim of strengthening the links of UNIDO in the field. In spite of its modest size, this programme proved to be highly satisfactory. The activities of the field advisers in 1968 contributed greatly to the promotion and co-ordination of UNIDO programmes of technical assistance. In co-operation with UNDP resident representatives, the field advisers assisted various Governments in the preparation and development of technical assistance programmes in the industrial field. A number of SIS requests were also formulated with their assistance. Following the approval of the UNDP Governing Council of the financing of these advisory posts, a number of candidates were submitted in the latter part of 1968 to UNDP for posts in all four regions which, when filled, should bring the total number of these officers in the field to ten in 1969.

Second Development Decade

13. UNIDO co-operated with the Committee for Development Planning and the CDPPP in the preparatory work for the Second Development Decade, particularly with regards to the establishment of targets for industry and to the formulation of policies on regional, national and international levels that could be instrumental in achieving these targets. In this connexion UNIDO collaborated with the Centre for Development Planning, Projections and Policies (CDPPP) at New York Headquarters in the elaboration of the industrial projections; in addition it engaged in a certain number of parallel projections of the development of selected industrial sectors on the basis of empirical data. Continuing contacts have also been maintained with the regional commissions and the relevant specialized agencies, in particular ILO and FAO, for a co-ordinated approach.

UNIDO in-plant training and industrial branch programmes

14. The successful in-plant training schemes for senior personnel from developing countries led to discussions with some of the industrialized host countries about more permanent arrangements for such training courses. In a document submitted by the Executive Director to the second session of the Board,^{1/} a proposal was made for the establishment of long-range programmes in specific industrial branches for the training of senior managers and qualified technical personnel in selected industrialized countries. The programmes were intended to prepare a group of highly qualified experts in selected branches of industry and to acquaint them with modern industrial activities. In addition, these programmes were to develop as focal points of contact for each particular industry between the interested parties in the developed and developing countries. During the past year, UNIDO initiated negotiations with several Governments and representatives of industry for the formulation of a limited number of special fund projects for industry branch programmes in the electronics industry (the Netherlands), automotive industry (Italy), textile industry (Poland) and electrical engineering industry (Sweden).

Repair and maintenance programme

15. A long-term programme for the improvement of repair and maintenance in the developing countries was initiated by UNIDO in September 1968. In response

^{1/} Document ID/B/26/Add.III.

to the widespread interest shown by developing countries, arrangements were made for surveying the situation on the spot so as to develop a certain number of pilot projects in 1969 which would lead to a more comprehensive programme some time in 1970. The first phase of the programme thus consists of a sample survey of approximately ten selected countries, located in various regions, with the purpose of identifying particular fields in which the problem of maintenance and repair is particularly urgent, the priorities to be given and the order of magnitude of the required resources. The second phase, to be started in 1969, should see the establishment of a number of projects which, in addition to solving local needs, should provide experience for developing a widely based action of repair and maintenance for industrial equipment. Further discussions of this programme are to be held with Governments and industrial institutions of the developed and developing countries and with the interested bodies of the United Nations family. It is anticipated that the survey work in the ten countries will be completed by the end of February 1969 and that the first assessment of the results of this survey will be submitted to the third session of the Industrial Development Board.

Promotion of industrial investment

16. UNIDO is in the process of developing a comprehensive promotion programme to stimulate the flow of resources, both domestic and foreign, into the industries of the developing countries. In addition to technical assistance rendered in the area to a number of developing countries, UNIDO conducted a special training programme in 1968 in techniques of investment promotion and industrial banking for nationals of the developing countries. This training course, held in New York, 15 March to 7 June 1968, met with considerable success; it was attended by representatives from leading banking and financial institutions.

Assistance to regional and subregional groups

17. Within its programme of assistance to regional and subregional groups of developing countries, UNIDO entered into negotiations with the Common Afro-Malagasy Organization (OCAM) on technical co-operation. During the visit of OCAM representatives to Vienna in November 1968, agreement was reached between OCAM and UNIDO, subject to approval of the governing bodies, on the principles and procedures of co-operation for technical assistance provided by UNIDO to

OCAM for specific projects and on other forms of co-operation in promoting industrial development.

18. UNIDO is also rendering assistance under a special field project to the Maghreb countries in the establishment and operation of a Centre of Industrial Studies. The Centre will prepare, at the request of the four countries concerned, general industrialization surveys, including market and location studies, and in addition to giving advisory services, it will engage in training activities in the region.

Voluntary contributions - Pledging Conference

19. Reference was made by the Secretary-General of the United Nations, U Thant, to the conviction expressed by the Industrial Development Board that the autonomy and effectiveness of UNIDO could be better ensured if it had its own independent financial resources. He stated that vast resources would be required to finance the industrialization of the developing countries, and that while most of the efforts to achieve a meaningful level of industrialization would have to come from the countries themselves, international machinery had a role to play in promoting concerted efforts and as a catalyst for the provision of specialized assistance in key areas of industrial development.

20. Of particular significance in this connexion was the holding of the first annual Pledging Conference at United Nations Headquarters in New York in early December 1968, in response to the resolution adopted by the Industrial Development Board at its first session^{2/} which invited the Secretary-General of the United Nations to convene an annual Pledging Conference in accordance with the provisions of General Assembly resolution 2152 (XXI)^{3/}. A total of \$1,656,108 for the 1969 operations of UNIDO was pledged by 43 Governments at the Conference. In the same meeting the Government of the Federal Republic of Germany announced a contribution of \$1,000,000 to the Special Industrial Services programme for 1968. In addition to the Governments which announced contributions, a number of representatives stated that their Governments would announce their contributions at a later stage.

^{2/} IDB resolution 2 (I).

^{3/} General Assembly resolution 2152 (XXI), section II, paragraph 23(a).

National committees

21. A number of Member States have informed the UNIDO secretariat that they have established national committees for UNIDO or assigned the functions of a national committee to an already existing organ, in accordance with the recommendation adopted by the International Symposium on Industrial Development held in Athens from 29 November to 1 December 1967. Communications to that effect were received from: Chile, China, Honduras, India, Kuwait, Laos, Lesotho, Morocco, the Netherlands, Nicaragua, Rwanda, Somalia, Sudan, Tunisia, the United Arab Republic and the Republic of Viet-Nam. These national committees are being kept informed of all UNIDO activities and close contact is being maintained with them in order to assist these bodies to fulfil their statutory functions in the field of industrial development. Detailed information on the present status of national committees and the arrangements made by the secretariat to establish close relationship with them is contained in document ID/B/53.

Relations with intergovernmental and international non-governmental organizations

22. Relations between UNIDO and the intergovernmental and international non-governmental organizations associated with UNIDO were further developed in 1968. Since the last session of the Board, a number of applications have been received from intergovernmental organizations and international non-governmental organizations to be granted consultative status with UNIDO. These requests are submitted to the Board for its consideration, in accordance with rules 75 and 76 of the Rules of Procedure of the Industrial Development Board.

23. A number of measures have been taken to strengthen the co-operation with the international non-governmental organizations associated with UNIDO. This co-operation extended to all issues of mutual interest, in particular to the exchange of information, the consultations on the UNIDO work programme and the joint participation in meetings organized by UNIDO or by international non-governmental organizations.

Public information

24. In its first full year of operation from the Vienna headquarters, the Public Information Service organized its activities along a number of lines, in an effort to use mass communications media not only for purposes of general

information on the work of UNIDO, but also to promote the industrial development of the developing countries.

25. In the developed countries, the aim of these public information activities has been to increase understanding of, and support for, multi-lateral action in the industrial field. In the developing countries, public information seeks to foster a wider knowledge of the complex development process and of the need for public involvement in it.

Organization of the Report on 1968 Activities

26. Following the introduction, the material is organized in two parts. Part One contains a summary review of UNIDO activities in 1968, covering operational activities, supporting activities and other activities. Part Two gives a detailed presentation of the activities of projects under both operational and supporting activities, arranged by the fifteen groups of activities.

27. The report contains in addition six annexes: Annex I on Administrative Activities of UNIDO in 1968; Annex II, Report on Public Information Services; Annex III, Report on the Activities of the New York Liaison Office; Annex IV, Detailed List of Field Activities by Programmes and Regions; Annex V, List of Field Activities by Regions and Countries; Annex VI, Progress Report on the Implementation of UNDP Projects by UNIDO; and Annex VII, Note on Voluntary Contributions.

28. A separate report on the Special Industrial Services Programme is submitted in document ID/B/43/Add.1.

29. An updating of the report on 1968 Activities as of 31 December is given in document ID/B/43/Add.2.

PART ONE: SUMMARY REVIEW OF UNIDO ACTIVITIES IN 1968

FIELD ACTIVITIES

Summary review by programmes

General remarks

30. On 1 July 1967 UNIDO was designated by the UNDP as a participating and executing agency of the part of the programme that falls within its field of competence. As of this date UNIDO assumed operational responsibility for industrial development projects financed from the Special Fund and Technical Assistance components of UNDP.
31. In 1968 UNIDO continued work on seventeen UNDP/SF projects which were already under various stages of implementation in 1967. The number of these projects was increased in the course of the year to 25 as the Governing Council of UNDP approved new projects in the field of industry.
32. The UNDP/TA programme for 1967/1968 was drawn up for the biennium, and thus the values and commitments mentioned below on a yearly basis are only for statistical purposes. The 1968 programme constituted the second half of the biennial programme, and the implementation of the industrial projects continued uninterruptedly from 1967 into 1968.
33. Besides the United Nations Development Programme, UNIDO was responsible for the execution of projects financed from the United Nations Regular Programme of technical assistance and from the Special Industrial Services. In 1968 UNIDO was charged with that part of the United Nations Regular Programme devoted to industry, and from 1969 a separate section will be

established in Part V of the budget of the United Nations to provide for the programme of technical assistance to industry. This action was taken on the basis of a recommendation made by the Industrial Development Board at its first session and subsequently endorsed by the General Assembly.

34. The SIS programme is financed from a trust fund established in 1966 in accordance with articles 7.2 and 7.3 of the Financial Regulations of the United Nations in response to a decision of ECOSOC. Contributions are made to the fund by a number of Governments. The programme is jointly administered by the Administrator of UNDP and the Executive Director of UNIDO; activities financed from the trust fund are executed by UNIDO.

UNDP/SF

35. As a participating and executing agency in the United Nations Development Programme, UNIDO is charged with the execution of 25 long-term pre-investment projects financed from the UNDP/SF component. This figure includes seventeen projects continuing in operation from previous years and eight new projects approved by the Governing Council of UNDP in January and June 1968. The total cost of these projects amounted to \$58.6 million comprising \$23 million of UNDP earmarkings and \$35.6 million in government contributions. The average annual value of all UNIDO Special Fund projects in 1967 was \$11.1 million, \$6.1 million of which were UNDP earmarkings and \$5 million in government contributions. In addition to these projects, UNIDO is participating in ten projects executed by ILO, FAO, UNESCO and the United Nations.

36. The 1968 target of expenditure for UNIDO executed projects, based on the plans of operation of the projects, amounted to \$3,561,382. The rate of actual expenditure for these projects is determined in many cases by factors extraneous to the executing agency, including the readiness and ability of assisted countries to deliver their counterparts to the project as well as the availability of candidates, particularly project managers, acceptable to the Governments. The expenditure for the first nine months of 1968 and the estimated expenditure for the last quarter of the year amount to \$2,662,954.

UNDP/TA

37. Projects undertaken in 1968 under the UNDP/TA component were part of the 1967/1968 biennium programme established by UNIDO in 1966. The original

allocation to this two-year programme for industrial development was \$5.1 million. By 31 December 1967, projects amounting to \$1,887,500 were implemented. Projects amounting to \$3,073,100 were scheduled for implementation in 1968. The difference between the original allocations and the funds utilized is accounted for by changes in the programme requested by Governments, particularly through inter-agency transfers and contingency allocations in the amount of \$182,700. Increased efforts in recruitment and the fruition of implementation efforts commenced prior to 31 December 1967 resulted in a higher percentage of implementation in 1968 than was achieved in 1967. Expenditures on UNDP/TA projects by 30 September 1968, together with the estimated expenditure for the last quarter of 1968, amounted to \$3,005,657, including contingency allocations. The total value of the 1967/1968 UNDP/TA programme for all agencies was \$110 million.

38. With the activities undertaken in 1968, the entire 1967/1968 programme is nearing completion; most of the projects have already been implemented or are under implementation. A certain amount of carry-over into 1969 is unavoidable due to the fact that recruitment of experts was possible only late in the term of the programme.

39. As of January 1969 a new continuous programming procedure will take effect. Requests for assistance will be made by Governments as and when the needs arise within the limitations of country targets from UNDP financial allocations. Implementation of such requests will be carried out immediately after approval.

Regular Programme

40. The total United Nations Regular Programme of technical assistance for 1968 amounted to \$6.4 million. Of this amount, the share of UNIDO was \$991,400. As this is an annual programme, special effort was made to deliver the programme within the year. Implementation of projects under this programme proceeded apace during 1968 with the result that actual expenditures by 30 September 1968, together with the estimated expenditures for the last quarter of the year, amounted to \$1,077,760. The excess of expenditures over the value of the assigned programme was made up from anticipated local cost assessments which will be credited to the relevant project budget thereby making the expenditures conform to the resources available.

SIS

41. The demand for assistance under the SIS programme continued at a brisk pace during 1968. The cumulative cost of projects approved under the programme since its inception in 1966 reached \$4.2 million by 30 September 1968. It is estimated that this amount would reach about \$4.8 million by the end of the year. In addition there were, at the time this report was prepared, projects amounting to about \$300,000 with UNDP for approval plus firm requests from Governments of about \$1,500,000 pending clearance. Resources pledged to the programme by donor countries as of 30 September 1968 amounted to \$7.4 million. In terms of funds available for assistance, the latter figure should be reduced by 11 per cent to take into account the overhead expenses in connexion with the administration of the programme, in accordance with the United Nations financial regulations to which the voluntary contributions are subjected. Details on the operations under the programme are contained in Addendum 1 to this document.

Funds-in-Trust

42. In addition to the above programmes of technical assistance, UNIDO provided expert advice and service to a number of countries which deposited with the United Nations the funds for these projects. The value of these Funds-in-Trust amounted in 1968 to \$863,633, \$761,140 of which will have been utilized by the end of the year.

Table 1

Resources available and commitments under the
various programmes - 1967 and 1968^{a/}

(in US dollars)

	<u>1967</u>		<u>1968</u>	
	<u>Resources</u>	<u>Commitments</u>	<u>Resources</u>	<u>Commitments</u>
Regular	1,049,000	952,780	991,400	1,027,760
UNDP/TA	1,887,500 ^{b/}	1,887,500	3,073,100 ^{c/}	3,005,657 ^{c/}
UNDP/SF	3,144,936	1,715,400	3,561,482 ^{d/}	2,662,954 ^{d/}

a/ For SIS, see Add.1 to this document.

b/ Original programme value \$2,435,800, balance of \$548,300 carried over to 1968.

c/ The resources available for UNDP/TA in 1968 were \$3,073,100, made up as follows:

2,559,800 original value of 1968 programme
+ 548,300 carried over from 1967
3,108,100
- 136,700 inter-agency transfers recorded as of 30 September 1968
2,971,400
+ 182,700 contingency allocations
3,154,100
- 81,000 anticipated inter-agency transfers by 31 December 1968
3,073,100

d/ An annual expenditure target figure is used against resources available. This target of expenditure is calculated at the beginning of each year of the operational projects, taking into consideration the schedule of implementation established in the plans of operation of the projects.

Summary review by regions

43. The geographical distribution of UNIDO's technical assistance for all programmes followed more or less the pattern of previous years with Africa receiving 33.9 per cent, the Americas 18.94 per cent, Asia and the Far East 30.93 per cent, and Europe and the Middle East 16.23 per cent of the total programme value.

Africa

44. Thirty-five countries in Africa requested and received assistance in the following fields: iron and steel, metalworking, vehicle industries, foods, essential and vegetable oils, fertilizers, petrochemicals/chemicals, asbestos, ceramics, hides and skins, leather processing, textiles, drugs, building materials, glass, metallurgy, pulp and paper, sugar-cane and its by-products, railways maintenance and shipbuilding.

45. Assistance was also provided to institutions concerned with small-scale industries, industrial estates, planning and programming, standards and export promotion, investment and industrial development banking. Through OPEX, UNIDO rendered advice on over-all management to existing industries, supplied trouble-shooting missions and assisted in the rehabilitation of certain industries. During 1968 there were some 100 experts in the field engaged in the implementation of these projects. Expenditure in Africa under the various programmes amounted to about \$3.5 million.

46. The number of UNDP/SF projects in which UNIDO is the executing or associated agency has doubled in Africa since 1966. During 1968 there were eleven UNIDO executed UNDP/SF projects in that region.

47. Several projects relating to the establishment of industrial development centres have been approved and implemented or are under implementation in Africa; from the experience gained, it can be said that this gives rise to new similar requests for centres in other countries. Interest has also increased during this year in demonstration plants in the fields of cement, pesticides, fertilizers, agricultural implements and food processing.

48. The Regular Programme and the UNDP/TA component have not shown, to date, an increase commensurate to that of the UNDP/SF component. The

proportionately small technical assistance activities under these two programmes (54 projects) are largely due to the limited resources available to UNIDO; an increasing part of the need for industrial development was met by requests financed from SIS. The latter have shown a very significant increase in Africa since the inception of the programme and have continued to grow, thus providing to African countries urgent short-term expertise not available under the other programmes.

49. The trend among higher developed African countries was towards increasing specialization such as engineering or tool design, and the same trend applied to experts' services; the demand in such countries was for experts and consultants with relatively high qualifications in specialized fields.

50. A certain delay in the implementation of projects was experienced due to established procedures for the approval of candidates in some countries. The more developed countries found it necessary to give lengthy consideration to candidacies for posts requiring a high degree of specialization.

51. Close co-operation with ECA and other regional bodies in Africa was maintained throughout 1968. Exchange of views between these bodies led to more and more pragmatic industrial planning than had been the case heretofore.

The Americas

52. In the Americas some 10 countries received assistance during 1968 in field projects, in which 81 experts and consultants were engaged, at an expenditure of about \$3 million for all programmes. Technical assistance was requested and provided for the following industries: foods, textiles, iron and steel, fertilizers, petrochemicals, asbestos, ceramics, essential and vegetable oils, metalworking and automobiles. Assistance was provided to institutions concerned with small-scale industries, industrial estates, planning and programming, industrial standards and export promotion. Assistance in design and testing helped to improve techniques for textile manufacture, machine tool production, analysis, laboratory installations and leather processing.

53. In comparison with previous years, the volume of assistance increased during 1968. Assistance was provided to several countries in the region to

built up or strengthened national and regional centres for technological research; three UNDP/SF projects were in operation in 1968 in this field, and two more were prepared for future implementation. Additionally, individual experts were posted in other similar institutions to advise on specific problems financed under the UNDP/TA and SIS programmes.

54. Food processing industries received particular attention as at least eight Governments requested assistance in this field. The same may be said of the textile industry, which faced difficulties in some countries in the region due to obsolete equipment and a shortage of managerial and technical personnel.

55. Assistance was provided to the pulp and paper industry, at least four Governments having requested feasibility studies to find ways of utilizing local raw materials in the production of paper.

56. Following the recommendations of an exploratory mission that visited Brazil in 1967, a comprehensive programme of assistance under SIS was initiated during 1968 in the form of high-priority projects.

57. Implementation of technical assistance during the year benefited from closer collaboration with governmental entities concerned with industrial development that recognized the importance of long-range programming for technical assistance and of rational selection of technical assistance projects. There was a marked trend towards more specialized and selective requests for assistance among countries of a higher level of industrialization.

Asia and the Far East

58. A total of 22 countries in Asia and the Far East received UNIDO expert assistance in 1968, with 188 approved projects under implementation as compared with 140 on 31 December 1967. In addition, approximately 50 new projects are in various stages of preparation. With regard to the 188 projects, 136 experts have been accepted by Governments, are already in the field, or have completed their assignments during 1968. The value of technical assistance to all countries in the region amounted to about \$3.2 million.

59. Although government requests for new projects under SIS continued at an accelerated pace, a number of countries have yet to take full advantage of the opportunities offered by SIS. As in other regions, the requests of

countries with a higher level of industrialization related to a number of very specialized fields.

60. During the year a sustained effort was made to develop closer relations with the field through increased co-operation with the resident representative and Governments. Co-operation with regional agencies such as ECAFE and the Asian Development Bank were also intensified.

Europe and the Middle East

61. During 1968 the over-all volume of technical assistance rendered by UNIDO to the countries of Europe and the Middle East increased. The value of this assistance amounted to about \$1.7 million. Although activities in the region vary, two major trends became evident, namely an increase in the need for technical assistance and a rising degree of sophistication of such assistance.

62. Assistance to European countries was mostly in the form of fellowships and short-term experts - specialists of very high level of professional skill and experience - with the SIS programme contributing to a major portion of the technical assistance. Fellowships also tended to become shorter and to have very specific programmes of study. This situation has led to certain difficulties in recruitment of experts and placement of fellows. It may be noted in this connexion that while fellows from European countries represented the major part of the UNIDO fellowship programme, countries of this region also acted as host countries for training fellows from other regions.

63. In comparison with previous years, the 1968 programme for Middle Eastern countries underwent certain changes, the most important of which was a gradual departure from services of long-term general advisers and an increase in the need for medium-term specialists in specific industrial fields. This was a consequence of previous activities in these countries which had led to the accumulation of a number of feasibility studies and technical economic surveys which are now being analysed with a view towards implementing the most promising projects. Areas in which countries of the Middle East needed technical assistance in 1968 included market studies, quality control and standardization and evaluation of industrial projects and tenders. Food processing, engineering and the ceramics industries were among the branches of industries that received technical assistance. Preparatory activities for the establishment of pilot plants were also undertaken.

Table 2
Value of technical co-operation activities of UNCTAD by
geographical areas^{b/}
(in US dollars)

	<u>Regular</u>	<u>UNDP/FA^{b/}</u>	<u>UNDP/SIS^{c/}</u>
<u>Africa</u>			
Country projects	248,700	556,569	708,226
Regional projects	96,000	-	277,000
Total	344,700	556,569	1,075,226
<u>The Americas</u>			
Country projects	60,200	531,187	390,431
Regional projects	93,300	144,846	118,000
Total	153,500	676,033	508,431
<u>Asia and the Far East</u>			
Country projects	123,300	1,010,711	1,153,591
Regional projects	121,000	43,880	-
Total	244,300	1,054,591	1,153,591
<u>Europe and the Middle East</u>			
Country projects	79,900	464,092	824,134
Regional projects	19,000	25,373	-
Total	98,900	489,465	824,134
<u>Interregional</u>	150,000	296,442	-
Grand total	991,400	3,073,100	3,561,382

a/ For SIS, see ID/B/43/Add.1.

b/ These figures include contingencies.

c/ An annual expenditure target figure is used against resources available. This target of expenditure is calculated at the beginning of each year of the operational projects, taking into consideration the schedule of implementation established in the plans of operation of the projects.

64. The number of fellowships requested by the countries of the Middle East did not increase, but considerable difficulties were experienced in obtaining suitable candidates for these fellowships. In this as in the other regions difficulties were experienced in finding candidates for expert posts, especially for research short-term posts in specific industrial fields.

Summary review by groups of activity

65. In table 3, the percentages of the assistance (under all programmes) are given by groups of activities. It can be seen that the major area of assistance is in Industrial Programming and Projects (Group 1), followed by Industrial Research, Standardization and Quality Control, Industrial Information (Group 8) and Chemicals, Petrochemicals and Synthetics, Insecticides and Pesticides, Pharmaceuticals and Other Related Industries (Group 4). Groups which account for a low share of total assistance are Metallurgical Industries (Group 2), Construction and Building Materials Industries (Group 3) and Industrial Policies and Industrial Financing (Group 13). Finally, a rather insignificant share of total assistance is taken up by Industrial Consulting Services and the Organizational and Administrative Machinery for Industrial Development (Group 9) and Promotion of Exports of Manufactures and Semi-manufactures (Group 14).

66. The figures are somewhat biased, of course, by the fact that areas with a concentration of UNDP/SW projects appear in a more favorable light because of a magnitude of the expenditures in these projects. Nevertheless, it appears that not enough attention has been given by the requesting Governments to a certain number of areas such as the promotion of exports of manufactured goods.

Table 3

Distribution of technical assistance to
industry by groups of activity

<u>Activity group</u>		<u>Percentage of total funds</u>
<u>Industrial Technology Division</u>		
1	Mechanical and Electrical Engineering Industries	11.0
2	Metallurgical Industries	2.0
3	Construction and Building Materials Industries	2.2
4	Chemicals, Petrochemicals and Synthetics, Insecticides and Pesticides, Pharmaceuticals and Other Related Industries	13.6
5	Fertilizer Industries	1.3
6	Light Industries	4.3
	Subtotal	<u>38.6</u>
<u>Industrial Services and Institutions Division</u>		
7	Industrial Legislation, Patents and Licensing	0.1
8	Industrial Research, Standardization and Quality Control, Industrial Information	18.0
9	Industrial Consulting Services and the Organizational and Administrative Machinery for Industrial Development	0.1
10	Industrial Management and Industrial Training	8.1
11	Special Problems and Institutions for Small-scale Industry including Industrial Estates	10.4
	Subtotal	<u>36.7</u>
<u>Industrial Policies and Programming Division</u>		
12	Industrial Programming and Projects	22.0
13	Industrial Policies and Industrial Financing	2.4
14	Promotion of Exports of Manufactures and Semi- manufactures	0.3
	Subtotal	<u>24.7</u>
	Total	100.0

Administration

67. The administrative procedure for administering UNIDO fellowships was established during the completion of arrangements whereby UNIDO headquarters would take over the overall administration of its fellowship programme. This administrative procedure provided for the submission of nominations to UNIDO headquarters in Vienna, where they were processed and evaluated and where programme recommendations were made. Thereafter the nominations were transferred either to the Technical Assistance Office of the Economic Commission for Europe, Geneva, or to the Office of Technical Co-operation at United Nations, New York, for issuance of letters of award, the handling of placement and the supervision of the fellows. This concerned all individual fellowships, except those for Bulgaria, Hungary, Poland, Romania and Yugoslavia (decentralized fellowships). In these cases the nominations were submitted by the Governments to Geneva, where all administrative arrangements were dealt with.

68. A fellowship officer from UNIDO headquarters visited six European countries during the year to discuss the placement of UNIDO fellows and to arrange for visits of the participants to the UNIDO special training programme.

69. As of 30 September 1968 there were 372 (1528 man-months) individual fellowship posts established. The number of nominations received as of that date was 189 (990 man-months); for 89 (443 man-months) fellowships no nominations were received.

70. Reminders were sent to the countries for which fellowships had been earmarked, requesting that they submit candidates as soon as possible and informing them that these funds would lapse should nominations not be received before the end of 1968.

71. Table 4 gives a summary of the implementation of individual UNIDO fellowships for the year 1968 as of 30 September 1968. Included in these totals are those for the decentralized fellowships handled by ECE, Geneva.

Table 4

1968 Fellowship Programme: Distribution by geographical regions of origin of the fellows^{a/}

(in man-months)

	<u>Established posts</u>		<u>1968 nominations</u>
	<u>1967</u>	<u>1968</u>	<u>(as of 30 September 1968)</u>
Africa	27/190	30/162	25/144
The Americas	27/200	25/178	11/70
Asia and the Far East	46/370	58/488	25/220
Europe	121/554	154/670	126/550
Middle East	9/42	5/30	2/12
Total	230/1356	272/1528	189/996

^{a/} The figures apply to individual fellowships and do not include fellowships awarded for participation to regional and interregional seminars and in-plant training programmes.

72. It will be seen from this table that in some regions there has been a decline in the number of established fellowship posts in 1968 as against the previous year. This reflects the preference by Governments to make use of the technical assistance funds for financing experts. The attention of Governments is being drawn to this point in current programming.

73. From table 4 it can also be seen that the nominations received from Governments ran substantially behind the budgeted posts. In order to make use of the unutilized fellowships, the UNIDO secretariat is making an effort to re-programme the funds in order to finance other projects that had originally been deferred into category 2. The projects which are envisaged in this connexion are: an interregional seminar on the development of small-scale industries, Hyderabad, India; an interregional in-plant training programme on production and utilization of pesticides and insecticides, Syracuse University, USA; and a regional workshop on industrial investment promotion, East Africa.

Industrial Field Advisers

74. In order to carry out the programme of implementation, the field advisers' programme was coordinated with UNIDO and UNIP in the regional field offices, following the recommendations of the Industrial Development Board. The functions of these advisers include the promotion and co-ordination of UNIDO technical assistance projects, advice to recipient representatives and national authorities and institutions on matters relating to operational activities within the competence of UNIDO and the maintenance of contact with the regional economic commissions.

75. During 1968 Asia was serviced by two field advisers stationed in the field. Central and South America were serviced by one adviser in the field and by one temporarily operating from the New York Liaison Office of UNIDO. Africa was serviced on an ad hoc basis from headquarters by three staff members. In the Middle East, arrangements were made by which the UNIDO regional industrial adviser attached to UNESOB acted as field adviser in the region. A number of new candidates were nominated by UNIDO either to fill vacant posts or as replacements for posts vacated during the year in the four regions; these candidates are now being considered by UNDP, which assumed the financing of the field advisers from 1 July 1968 in accordance both with the agreement concluded with the advisers and with the decision of the UNDP Governing Council at its 126th meeting of June 1968. At that meeting, the Administrator proposed five additional posts in the 1969 budget which should bring the total number of field advisers to ten in the course of 1969. It is hoped that this number will be increased to 15 during 1970.

76. The activities of the field advisers in 1968 contributed greatly to the promotion and co-ordination of UNIDO's programmes of technical assistance. In co-operation with the UNDP resident representatives, the advisers assisted various Governments in the development of their technical assistance programmes in the field of industry. In particular they helped Governments in the formulation of submissions of continuing projects under UNDP/TA for 1969-1972, and a number of SIS requests were formulated with their assistance. Information supplied in the course of the year by field advisers contributed to the development of data for future technical assistance programming. These advisers were also instrumental, through contacts with UNIDO experts in

the field, in clearing a number of administrative problems and thereby facilitating the implementation of projects, particularly those financed by UNDP, SW component.

77. Co-ordination of UNIDO activities with those of the regional economic commissions and UNESOB was enhanced during the year by the close contact which the field advisers maintained with the commissions. In Latin America, the UNIDO field adviser was located at ECLA headquarters with the result that daily contacts were maintained with the officers of the regional economic commissions. The field advisers for Asia maintained liaison with ECAFE, and the headquarters staff who serviced Africa kept in contact with the subregional offices of ECA on their regular visits to the region. As stated earlier, the regional industrial adviser of UNESOB combined the functions of a regional and a field adviser.

78. On a number of occasions the field advisers were called upon to represent UNIDO in meetings of the regional economic commissions and other organizations, thereby providing UNIDO with an opportunity to explain and promote its purposes and functions in the field of industrial development. Among the various meetings attended by the field advisers were the third session of the Asian Industrial Development Council, Bangkok (12-14 April); twenty-fourth session of ECAFE, Canberra (17-30 April); sixteenth session of the Commission on Asia and Far Eastern Affairs of the International Chamber of Commerce (CAFEA-ICC), Manila (2-4 May); ninth Governing Body Meeting of the Asian Productivity Organization, Tokyo (7-10 May); twelfth session of the ECLA Committee of the Whole, Santiago (23-25 April); the ECLA Historical Round Table, Santiago (9-13 September); and the UNESCO Meeting on Co-operation in Technological Research on Processing of Local Materials, Sao Paulo (5-9 August).

SUPPORTING ACTIVITIES

79. The supporting activities are summarized in the following tables. Table 5 gives the breakdown of the 1968 expenditures on supporting activities by sources of funds. Table 6 contains a list of expert group meetings, seminars, group training and workshops held during 1968; table 7 a list of studies and research projects carried out during the year; and table 8 the programme of publications printed in 1968.

Table 5
Expenditures on supporting activities in 1968
(in US dollars)

	<u>Expert groups, seminars, in-plant training and workshops</u>		<u>Consultants</u>	
	<u>Allotment</u>	<u>Estimated requirements ^{a/}</u>	<u>Allotment</u>	<u>Estimated requirements ^{a/}</u>
UNIDO Budget	96,000	67,000	260,000	388,000
Regular Programme	189,000	189,000		
UNDP/TA	504,725	531,930		
Total	849,725	787,930		

^{a/} Expenditures as of 30 September 1968 and projected requirements to the end of the year.

Table 1

Expert group meetings, seminars, group training and work-
shops and other meetings held during 1968

A. Organized by UNIDO

<u>Group of activity</u>		<u>Date in 1968</u>	<u>Place</u>
1	<u>Mechanical and Electrical Engineering Industries</u>		
	Expert Group Meeting on the Design, Manufacture and Utilization of Dies and Jigs	9-27 Dec.	Vienna
2	<u>Metallurgical Industries</u>		
	Second Interregional Iron and Steel Symposium	19 Sept.-9 Oct.	Moscow
3	<u>Construction and Building Materials Industries</u>		
	Interregional Seminar on the Development of Clay Building Materials Industries in Developing Countries	12-25 Aug.	Copenhagen
	Workshop on Organizational and Technological Measures for the Development of Building Materials	25 Sept.-18 Oct.	Moscow
4	<u>Chemicals, Petrochemicals and Synthetics, Insecticides and Pesticides, Pharmaceuticals and Other Related Industries</u>		
	Expert Group Meeting on Modernization and Mechanization of Salt Industries based on Sea-water	25-29 Sept.	Rome
	Preparatory Meeting for the Second Interregional Seminar on Petrochemicals	11-15 Nov.	Vienna
	Expert Group Meeting on the Development of Plastics (Polymer Industries) in Developing Countries	11-15 Nov.	Vienna

Table 1 (cont'd)

<u>Group of activity</u>	<u>Date in 1968</u>	<u>Place</u>
5. <u>Fertiliser Industries</u>		
Meeting of the Ad Hoc Group of Experts from Fertilizer Deficient Countries	6-10 May	Vienna
6. <u>Light Industries</u>		
Expert Group Meeting on Processing Problems and Selection of Machinery in the Woollen and Worsted Industry with Special Reference to Developing Countries	4-9 Nov.	Bursa (Turkey)
Seminar on Integrated Food Processing	4-12 Nov.	Novi Sad (Yugoslavia)
10. <u>Industrial Management and Training</u>		
Management clinic	18-29 March	Gresik (Indonesia)
In-plant training programmes		
Cement industry	10 March-1 June	Denmark
Diesel engines	12 March-18 June	Czechoslovakia
Electrical industries	1 March-1 July	Sweden
Iron and steel	6 May-6 Oct.	USSR
Textile industry	8 May-28 Oct.	Poland
Mechanical industry	30 Sept.-8 Dec.	Japan
11. <u>Special Problems and Institutions for Small-scale Industry including Industrial Estates</u>		
Expert Group Meeting on the Development of Small-scale Industries in the Arab Countries of the Middle East	11-16 Nov.	Beirut (Lebanon)
12. <u>Industrial Programming and Projects</u>		
International Seminar on Industrial Location and Regional Development	11-26 Aug.	Minsk
International Working Paper on Industrial Programming Data	15-27 Nov.	Vienna

Table 6 (cont'd)

<u>Group of activity</u>	<u>Date in 1967</u>	<u>Place</u>
13	<u>Industrial Policies and Industrial Financing</u>	
	Expert Meeting on Training Programme on Industrial Investment Promotion Techniques for English-speaking Countries	15 March- 7 June New York
	Workshop on Financial Planning of Industrial Projects	5-30 Aug. Karachi
	Meeting on Investment Promotion Services	23-26 Sept. Vienna
14	<u>Promotion of Exports of Manufactures and Semi-manufactures</u>	
	Training Course for Development of Industrial Exports	28 Oct.-6 Nov. Zagreb
	Expert Working Group Meeting on the Incentives for the Development of Industrial Exports	11-16 Nov. Rome
<u>B. UNIDO participation in meetings organized by the regional economic commissions, by other entities of the United Nations family and by other institutions</u>		
	Fourth International Conference on Input-Output Techniques (organized by the United Nations)	8-12 Jan. Geneva
	ACC Sub-committee on Science and Technology	8-10 Feb. Geneva
	Board Meeting of Turin Institute	21-24 Feb. Geneva
	Second United Nations Conference on Trade and Development	26 Feb.-15 March New Delhi
	International Conference on Engineering Institutions	4-9 March Paris
	Ad Hoc Inter-agency Meeting on Development and Utilization of Human Resources	11-12 March Geneva

Table 2 (cont'd)

	<u>Date in</u> <u>1966</u>	<u>Place</u>
Meeting of the Working Group on the BIRPI Plan for a Patent Co-operation Treaty	24-29 March	Geneva
International Symposium on Spatial Planning of the Metropolitan Regions (organized by the Yugoslav Institute of Economics)	26-29 March	Zagreb
Participation in Preparatory Workshop for a Seminar on the Relevance of European Experience in Management Education in the Developing Countries	31 March-3 April	Rotterdam
Third session of the Development Planning Committee (organized by the Committee for Development Planning)	29 April-10 May	Addis Ababa
Seminar on East-West Trade (organized by the Management Centre, Europe)	6-8 May	Vienna
International Standards Organization (ISO) Council Meeting	12-15 May	Geneva
Conference on Industry and Finance (organized by ECA)	25-27 May	Addis Ababa
Sixth session of the Board of the International Centre for Advanced Technical and Vocational Training, ILO	27-28 May	Geneva
IDEP Meeting	10-15 June	Dakar
Meeting on organizing a seminar on European experience in management education in relation to developing countries	11-13 June	Brussels
AFRASEC Conference	8-9 July	Tangier
Meeting ACC Computer Users' Committee	17-19 July	Geneva
Second session of the Central Committee of the ICSU/UNESCO Joint Project on the Communication of Scientific Information	23-25 July	Paris

Table 6 (cont'd)

	<u>Date in</u> <u>1968</u>	<u>Place</u>
Alpbach European Forum and Economic Symposium - The Protection of Private Investment in Foreign Countries (organized by Austrian College Society)	29-31 Aug.	Alpbach (Austria)
Working Party on the Socio-economic Factors Influencing the Location of New Industries (organized by the European Co-ordination Centre for Research and Documentation in Social Sciences)	16-18 Sept.	Belgrade
Interregional Technical Meeting cum Study Tour on Management of Small Business (organized by ILO)	23 Sept.-11 Oct.	Turin (Italy)
Meeting of the Operations Research Association of Austria, the Federal Republic of Germany and Switzerland for the Standardization of the Terminology Used in the Application of Network Techniques in Project Planning (organized by the Oesterreichischer und Deutscher Normenausschuss)	3-4 Oct.	Vienna
Third session of the Committee on Manufactures (organized by UNCTAD/TDB)	8-19 Oct.	Geneva
Seminar on the Needs for Specialist Personnel for the Preparation and Evaluation of Investment Projects (organized by OECD)	21-25 Oct.	Athens
Inaugural session for the Establishment of the World Federation of Engineering Organizations (jointly with UNESCO)	4-7 March	Paris
Inter-agency Working Party on Indexing	28-29 Nov.	Paris
Thirty-fourth Conference and International Congress on Scientific Information	December	The Hague

Index

Studies and research projects carried out in 1967

Group 1

Mechanical and Electrical Engineering Industries

Modern aspects and trends in the design and manufacture of dies, jigs and fixtures (five studies)

Organization of die and jig production shops (two studies)

Experience of the developing countries in die and jig making (two studies)

Influence and interrelation of product design and design and production of dies and jigs (two studies)

Economic and management aspects of die and jig production (one study)

The establishment of a cutting tool manufacturing plant (guidelines)

Hand tool plants (guidelines)

Tile plant (guidelines)

Group 2

Metallurgical Industries

Collection and processing of iron and steel scrap for the iron and steel industry

Modern techno-economic indices and ways for their attainment in blast furnaces, steel works and rolling mills

New methods of beneficiation of iron ores for blast furnaces and their efficiency

Recent achievement in continuous casting technology

Improvement of steel quality by treatment of synthetic slags

Influence of the different factors (market, deposits, energy, finance etc.) on the location of steelmaking plants

Energetics of iron and steel plants

Table 7 (cont'd)

Group 2
(cont'd)

Effect and design parameters, price of equipment and methods of financing and the investment requirements for iron and steel plants and their parts

Alumina production from various ores

Modernization and expansion of plants in the copper industry

Group 3

Construction and Building Materials Industries

Testing and evaluation of brick clays

Small-scale manufacture of Portland cement

Sanitary ware from common clays

The development of a brick and tile industry in developing countries

Production and utilization of lightweight aggregates

Fuzzulana cements

Plastics as building materials

Building lime: its properties, uses and manufacture

Group 4

Chemicals, Petrochemicals and Synthetics, Insecticides and Pesticides, Pharmaceuticals and Other Related Industries

Italian experience in the modernization and mechanization of salt industries based on sea-water

French experience in the modernization and mechanization of salt industries based on sea-water

Venezuelan experience in the modernization and mechanization of salt industries based on sea-water

Kuwaiti experience in the modernization and mechanization of salt industries based on sea-water

Indian experience in the modernization and mechanization of salt industries based on sea-water

The present situation in the modernization and mechanization of salt industries based on sea-water in Japan

Essay on the modernization and mechanization of sea salt production in Portugal

Energy requirements of selected desalination processes and related costs

ATT (cont'd)

Group 4
(cont'd)

Machinery, equipment and components utilized in the solar industry

The problems of transfer of technology in developing countries

The problems of the initial development of petrochemical industry in the developing countries

New polymers and fabricating technology

Problems and possibilities of substitution of natural materials by petrochemical products

Proteins from petroleum

Recent developments in polyolefins

Group 5 Fertilizer Industries

The first regional survey of fertilizer production facilities in Africa, in co-operation with ECA

Critical study of different nitro-phosphate processes

The monograph on the fertilizer industry based on the Athens Symposium (1967)

Group 6 Light Industries

Background papers for the meeting on refrigeration techniques and equipment standards to be held in Vienna at the end of February 1969

Packaging, packaging materials and techniques in developing countries

Water-saving techniques in food processing plants

Production of foodstuffs and protein enriched mixtures and concentrates

Presentation of up-to-date flash sterilized methods for milk processing

Starch production in developing countries

Group 7 Industrial Legislation, Patents and Licensing

A bibliographical survey of existing publications covering industrial legislation in developing countries

Table 7 (cont'd)

- Group 8 Industrial Research; Standardization and Quality Control; Industrial Information
- Preparatory work on a directory of industrial and technological research institutes
- Directory of industrial agencies for four countries
- UNIDO Newsletter - six issues
- Group 9 Industrial Consulting Services and the Organizational and Administrative Machinery for Industrial Development
- Feasibility study on the possible needs for, form of, and interest in, the creation of special UNIDO-sponsored industrial equity funds
- Feasibility study to investigate the possibility of establishing medium industry multiple plant chains
- The nature and role of industrial co-operatives in industrial development
- Reports on the organization and administration of industrial services in developing countries (mimeographs)
- The role of professional associations and similar organizations in industrial development
- Group 10 Industrial Management and Industrial Training
- Preliminary study defining the organizational framework and scope of work of the consultants consortium planned for 1969
- A study on UNIDO-university co-operative programme
- Studies on manpower development for industrialization in New Zealand, the United Arab Republic and in the United Republic of Tanzania
- Group 11 Special Problems and Institutions for Small-scale Industry including Industrial Estates
- Preparatory reports for the organization of two meetings on subcontracting, to be held in 1969 in co-operation with OECD and ECAFE

File 17 (cont'd)

Item 11
(cont'd)

Twenty discussion papers prepared for the Expert Group Meeting on the Development of Small-scale Industries in the Arab Countries of the Middle East (Beirut, 11 to 15 November 1969)

Among the papers are:

Situation, problems and prospects of small-scale industries in selected countries of the Middle East

A comparative analysis of small-scale industries in Arab countries of the Middle East and in selected other countries

The future of the traditional sector in an industrializing economy

The future of rural industries in a modernizing economy

Extension service and development finance for small industry

Hire-purchase schemes for the modernization of small-scale industries

A proposal for the establishment of a regional centre for industrial development in the Middle East with special reference to the development of small-scale industries

Small-scale industry and the Arab Common Market

Three studies for presentation to the interregional symposium on financing of small-scale industries, to be organized in 1969:

Leasing societies for procurement of machinery and equipment and mutual co-operation societies for joint financing of small-scale industries: the experience of some European countries

Commercial bank financing of small-scale industries: policies and measures

Public and semi-public financing of small-scale industries: a comparative analysis of institutions, policies and measures in Asian countries

Table 7 (cont'd)

Group 11
(cont'd)

Small-scale manufacturing: No. 2: Sewing machines
(The first study, No. 1, on the manufacture of bicycles
was prepared during 1967 and was submitted for publication
late in 1968)

The subcontracting exchange

Small-scale industries in centrally planned economies
(Poland)

Common service facilities for small-scale industries

Specialized industrial estates

Monograph on the International Symposium, Athens

Interrelations between small and large industries (one paper
to be incorporated in a collection of papers on subcontracting,
prepared for a meeting to be held in 1969)

Promotion of small-scale industry in the developing countries

Small-scale industry - its place in the industrial framework

Group 12 Industrial Programming and Projects

Industrial project implementation programming, co-ordination
and control (two studies)

Structure of material inputs in manufacturing industries and
inter-industry relations (the results of the completed analysis
were drafted in 1968 and will be ready for publication
(ID/Ser.E/6) in 1969)

Comparative study on industrial programming data (technical
studies on data bank techniques for industrial programming),
prepared for the International Working Party on Industrial
Programming Data, Vienna, 18 to 27 November 1968

Preparatory country studies (Hungary, Iran, Israel, Mexico
and Yugoslavia) for survey of industrial plans and programmes

Four preparatory empirical papers for an operational guide to
regional industrial planning and for supporting studies on
industrial location

Report on the activities of UNIDO in regional planning within
the over-all system of planning, prepared for the International
Symposium on Spatial Planning of the Metropolitan Regions, held
in Zagreb, 25 to 29 March 1968

Table 1 (cont'd)

Group 12 Sectoral planning and programming studies - Evaluation of
(cont'd) draft studies concerning the iron and steel sector

Industrial project implementation in Silesia (part of a broader study entitled "Evaluation and dissemination of experience gained in industrial project implementation" to be undertaken in 1969)

Preparatory draft chapters for the industrial programming manual

UNIDO contribution to the Second Development Decade projections and policies: Long-term projections of industrial outputs, employment, exports and imports

Report on the technical assistance mission concerning the organization of the Ministry of Industry and on industrial project implementation in Iraq

Proceedings of the Athens Symposium (three monographs to be completed in early 1969)

Manual on project formulation and evaluation

Group 13 Industrial Policies and Industrial Financing

Comparative studies and analysis of country experiences in the field of industrial policies

Preliminary studies of policies and measures to further regional co-operation in industrial development

Preliminary collection of basic technical material for the establishment or improvement of investment promotion centres

Preliminary collection of information and material for the **guide on external sources of industrial planning**

Preparatory studies for the promotion of industries through the World Food Programme

Case studies of domestic-foreign joint ventures in the field of manufacturing (in co-operation with the Columbia University Law School)

Case studies for the second workshop on financial planning of industrial projects, to be held in January 1969 in Dar-es-Salaam

Table 7 (cont'd)

- Group 13
(cont'd) Background papers for the Interregional Seminar on Financial Aspects of Manufacturing Enterprises in the Public Sector, to be held in Rome early in 1969
- Preliminary research for the planned publication: model forms for financial planning of industrial enterprises
- Background papers for the Seminar on Incentive Policies for Industrial Development, to be held in Vienna in March 1969
- Preparation of model statutes and related basic material for the establishment and operation of industrial financial institutions
- Proceedings of the Athens Symposium (first drafts of three monographs)

Group 14 Promotion of Exports of Manufactures and Semi-manufactures

Report on joint exploratory missions regarding promotion of export-oriented industries (Indonesia, Malaysia, Pakistan, the Philippines, Singapore and Thailand)

Six case studies prepared for the Expert Group Meeting on the Utilization of Excess Capacity of Manufacturing for Export, to be held in 1969

Two country methodology studies on metalworking industry operations (Hungary and Israel), prepared for the Expert Group Meeting on Metalworking as Potential Export Industry in Developing Countries, to be held early in 1969

Country studies on industrial co-operation in the promotion of industrial exports

Repayment of credits through exports from the developing countries

Protection of infant industries in the developing countries (two technical papers)

Proceedings of the Athens Symposium (one monograph on the promotion of exports and export-oriented and import substitution industries in an industrial development strategy)

Table 7 (cont'd)

Group 15 General Research Projects Established as Continuing Activities

Sectoral surveys in depths (collection and analysis on a continuous basis of basic industrial data relating to the branches covered in Groups 1 through 6)

World industrial development survey 1968

Projection studies regarding the Second Development Decade

Country industrial development studies

Review of the activity of the United Nations in the iron and steel industry in developing countries (Second Iron and Steel Symposium, Moscow, 1968)

Table 8

Publications printed by UNIDO in 1968²

<u>INDUSTRIAL TECHNOLOGY DIVISION</u>		<u>Languages</u>
CID/15	Fertilizer manual	F S
ID/2	Fertilizer technology, production and use (papers of the Interregional Seminar on the Production of Fertilizers, Kiev, 1965)	E
ID/5	Fertilizer production in six selected countries with good natural gas resources	E
ID/6	Development of metalworking industries in developing countries - Proceedings of Symposium (Moscow, 1966)	E
ID/7	Technological and economic aspects of establishing textile industries in developing countries	E
ID/8	Report of the Interregional Symposium on Metalworking Industries in Developing Countries (Moscow, 1966)	E S
ID/WG.8/1	Report of Expert Group Meeting on the Selection of Textile Machinery in the Cotton Industry (Vienna, 1967)	E
ID/WG.11/10	Alumina production from various ores (Report of the first meeting of the Expert Consulting Group on the Aluminium Industry, Vienna, 1967)	E
ID/WG.12/7	Modernization and expansion of plants in the copper industry (Report of the first meeting of the Expert Consulting Group on the Copper Industry, Vienna, 1967)	E
<u>ID/Ser.F</u>	<u>Fertilizer Industry Series</u>	
ID/Ser.F/1	Chemical fertilizer projects: Their creation, evaluation and establishment	E S
ID/Ser.F/2	Guide to building ammonia fertilizer complex	E

Table (cont'd)

Languages

INDUSTRIAL TECHNOLOGY DIVISION (cont'd)

<u>ID/Ser.I</u>	<u>Petrochemical Series</u>	
ID/Ser.I/2	Selection of projects and production processes for basic and intermediate petrochemicals in developing countries	E
ID/Ser.I/3	Brazilian synthetic polymer industry	E
<u>ID/Ser.I</u>	<u>Food Industry Series</u>	
ID/Ser.I/1	Centrifugal evaporators	E
ID/Ser.I/2	Industrial processing of citrus fruit	E

INDUSTRIAL SERVICES AND INSTITUTIONS DIVISION

ID/3	Manual on the use of consultants in developing countries	E F S
ID/4	Industrial estates in Europe and the Middle East	E F
ID/16	Your questions answered	E F S
<u>ID/Ser.B</u>	<u>Industrial Research and Development News</u>	
ID/Ser.B/4	Vol. II, No. 2 (with F and S synopses)	
ID/Ser.B/5	Vol. III, No. 1/Rev. (with F and S synopses)	
ID/Ser.B/6	Vol. III, No. 2 (with F and S synopses)	
<u>ID/Ser.D</u>	<u>Training for Industry Series</u>	
ID/Ser.D/1	Training of industrial administrators	E
ID/Ser.D/2	Estimation of managerial and technical personnel requirements in selected industries	E

Table B (cont'd)

		<u>Languages</u>
<u>INDUSTRIAL PLANNING AND PROGRAMMING DIVISION</u>		
ID/12	Technical assistance and training in the implementation and follow-up of industrial projects	E F S
<u>ID/Ser.A Industrialization and Productivity Bulletin</u>		
ID/Ser.A/11	Bulletin No. 11	E F S
ID/Ser.A/12	Bulletin No. 12	E F S
ID/Ser.A/13	Bulletin No. 13	E
<u>ID/Ser.E Industrial Planning and Programming Series</u>		
ID/Ser.E/2	International comparisons of inter-industry data	E
ID/Ser.E/3	Planning for advanced skills and technologies (Studies presented at the Ad Hoc Meeting of Experts on the Role of Advanced Skills and Technologies in Industrial Development, New York, 1967)	E
ID/Ser.E/5	Profile of manufacturing establishments, Vol. II (with introduction in F, S and R)	E
<u>ID/Ser.H Project Formulation and Evaluation Series</u>		
ID/Ser.H/1	Evaluation of industrial projects; selected studies presented at the Interregional Symposium on Industrial Project Evaluation, Prague, 1965	E
<u>TECHNICAL CO-OPERATION DIVISION</u>		
ID/14	Functions and activities of UNIDO	E F S

a/ Excludes the printed report of the Industrial Development Board, second session (A/7215); the UNIDO Newsletter (produced in 1968 as a public information activity); the printed Report of the Symposium on Industrial Development (Athens); and the Survey of Industrial Development, Vol. I.

10. The following...

RECOMMENDATIONS

10. The first recommendation is that the Commission should continue to be kept informed of the progress of the work in this field, and should continue to be kept informed of the progress of the work in this field. In addition, a number of other recommendations are being prepared, requests for which are being made.

11. In the latter part of the study, the Commission has prepared a proposal to launch a four-year programme of research and development in repair services in developing countries. The first part of the programme, which is to be a key element in an overall strategy programme, will involve the following steps:

- (a) Establishing a baseline of the situation in the developing countries as regards repair and maintenance, including general neglect, the resulting waste both in materials and loss of production and the order of magnitude of this waste;
- (b) Examining in depth the various factors involved in the neglect of repair and maintenance, such as managerial shortcomings, lack of skills, lack of awareness of the problem by industry and public authorities, etc., and the socio-economic factors;
- (c) Identifying the lines of attack on the problem. Taking into account the limited resources available for the attack, in order to be effective, should be concentrated on a selected basis, both geographically and technically, at the strategic points of the repair and maintenance problem. It is envisaged to concentrate the initial efforts on certain countries or regions and on certain well-recognized areas, e.g. management skills, supply of spare parts and equipment, where the situation is particularly unsatisfactory. Even a limited scale action will contribute towards creating or stimulating a climate of general awareness of the problem and of its importance.

12. It is clear that the long-range solution of the problem should involve, in addition to the above activities, action by everybody concerned, in particular by industry and Government in developed countries, and the co-operation of developing countries. The role of UNCTAD should be to serve

as a focal point of a comprehensive effort of stimulation, co-ordination, and, within its resources, direct action. Technical assistance should be considered as one of the means, but not necessarily the most important one.

83. If only to create a certain polarization of the efforts of countries and Governments, it is envisaged to convene sometime late in 1951 an inter-regional conference on the repair and maintenance of equipment. This meeting would serve to make the subject of repair and maintenance a major issue in developing countries by examining and discussing the various technical, economic, managerial, educational and social aspects involved. It is envisaged to hold a preparatory meeting to define the general organization and agenda of the conference.

84. Having established this focal point, work would be developed by UNIDO along four lines:

- (a) **Headquarters' activities** - these activities, in the form of studies, expert groups, country visits by consultants financed out of UNIDO funds etc., would involve co-operation of the various divisions and units involved in the problem of maintenance and repair.
- (b) **Field operations in repair and maintenance** - an effort would be made to follow through on existing requests in this field and also to stimulate new requests. The organization of a number of exploratory visits to selected countries is envisaged. These visits would have a twofold purpose: to promote technical assistance projects related to maintenance and repair which would be of direct assistance to the countries concerned; and to have information from the field fed back into the headquarters project to serve as a basis for further action.
- (c) **Enlist the interest of the developed countries** - the advanced countries would be called upon to contribute their experience and know-how in the field of maintenance and repair and to participate actively, both financially and technically, in the programme.
- (d) **Government contributions** - a number of Governments have expressed their willingness to make contributions in the form of either fully equipped machine shops or machine tools to technical assistance programmes. Such a form of assistance, in order to be effective, should be integrated into the comprehensive programme which, as it develops, will stimulate or create a receptive and effective market for such equipment.

85. The active participation of the regional commissions and specialized agencies is to be enlisted in the programme. As regards the regional

Some of the projects are - provide the necessary spare parts and maintenance facilities. Some of the agricultural machinery will be directly interested in various aspects of the project; others are interested in the training aspects, UNESCO in the educational aspects and ILO in the agricultural productivity aspects of maintenance and repair of agricultural equipment.

86. The programme for the improvement of repair and maintenance in developing countries was brought to the attention of the Governments concerned through the offices of the resident representatives. In response to the wide interest shown by the developing countries, a certain number of expert missions consisting of consultants and staff members were sent out in late 1968 to several developing countries to carry out initial surveys along the lines indicated above.

87. The implementation of the programme in the immediate future provides for sample surveys of approximately ten countries. The surveys are expected to be completed early in 1969, in time for an assessment to be submitted to the Board at its third session. The second phase of the programme, to be started in 1969, envisages the establishment of a number of pilot projects which should lead to the launching of an extensive programme in 1970.

88. In agreement with UNDP, it was decided to finance the initial phase of the programme from SIS funds. The UNDP and bilateral sources are being consulted to determine the availability of potential resources for additional follow-up action.

UNIDO industrial branch programmes

89. A proposal for UNIDO to sponsor a series of industrial branch programmes in developed countries for the training of senior managers and qualified technical personnel was submitted by the Executive Director to the Board at its second session.^{4/} The principal target of these training programmes would be to prepare within a short time a group of highly qualified experts in selected branches of industry and to acquaint them with modern practices

^{4/} ID/B/26/Add.III.

in related economic organization and research topics. These programmes would, in the course, become international focal points for the various aspects related to the development of the relevant branch of industry in developing countries, in particular for the promotion of technical and financial co-operation.

90. Each project would consist in setting up, for a period of three to five years, an industrial branch programme in one of the developed countries in a specified branch of industry. Provision is made also for maintaining the international character of these UNIDO sponsored programmes, which are to be jointly financed by the host country, UNDP/SF and the participating developing countries.

91. While several delegations stressed the value of the broader programme proposed and urged that UNIDO proceed with their launching without delay, reservations were made by some delegations at the last session of the Board who felt that UNIDO should confine its activities in this field to the expansion of the conventional in-plant training programme that has proved to be very successful in recent years. The matter was further taken up during the sixth session of the Governing Council where the principle of UNDP support for a limited number of programmes was contained in a proposal submitted by the Administrator to that session, provided requests for such training were received from developing countries.^{5/}

92. On the basis of resolution 8 (II), adopted by the Industrial Development Board at its second session, and of discussions at the sixth session of the Governing Council, UNIDO initiated negotiations with several Governments and representatives of industry for the formulation of a limited number of UNDP/SF projects for industrial branch programmes that would contain a substantial element of in-plant training of top management personnel. The negotiations involved the establishment of programmes in the electronics industry (the Netherlands), automotive industry (Italy), electrical engineering industry (Sweden) and in the textile industry (Poland).

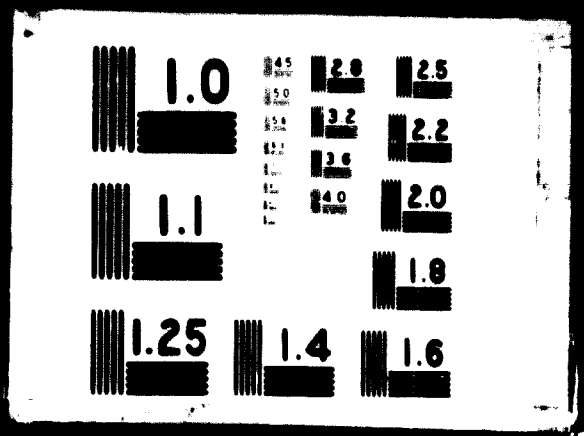
^{5/} E/4545 - Report of the sixth session of the Governing Council to the forty-fifth session of ECOSOC.



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93. In connection with the development of the industrial sector, the Government is forming UNIDO projects with a view to expanding the production of the textile industry. Steps are now being taken to establish industrial projects for UNIDO/EE project. It is expected that a considerable number of developing countries will, in the near future, introduce requests to the effect of UNIDO/EE.

Participation of UNIDO in the Second Development Decade

94. In 1967, the preparatory work on the United Nations Second Development Decade entered into its active phase. A meeting of the Committee for Development Planning was held in Addis Ababa in April. A working group of this Committee, which met in Geneva in June 1967, outlined a framework of international development strategy and drew up a set of questionnaires that were addressed to the various organizations of the United Nations system participating in the preparatory work.

95. The question of the Second Development Decade has been considered by ECOSOC in its forty-second session, and by the General Assembly in its twenty-first session. The General Assembly, in resolution 2212 (XXI), decided to establish a Preparatory Committee of the Second Development Decade, which will report to the next session of ECOSOC.

96. UNIDO participated actively in the preparatory work in the course of 1968. It expects to extend its participation in the course of the coming years. Moreover, it is envisaged that UNIDO will have a continuing role during the Decade itself in assisting Governments in the implementation of policies and in the achievement of targets in policies in the field of industrialization, within the general guidelines put forward by the United Nations.

97. The work of UNIDO in 1968 took the form of a study on the trends and structure of industrial development and a tentative projection of industrial outputs, employment, exports and imports for the developing countries and regions for the period 1970 to 1990. The study was based on an econometric analysis of the statistical information on manufacturing industries currently available from the United Nations Statistical Office; the results will be

submitted to the Committee for the Development of the Least Developed Countries. The analysis contained in this report represents a follow-up of the "Study of Industrial Growth (1967-1980)" which was prepared under the auspices of UNIDO (now UNIDO). The study was in need of amplification and of substantial updating on the basis of more recent data. The present study covers both the demand and supply sides of the industrial structure.

98. Parallel with the econometric projections, work is proceeding along an empirical approach, using a variety of data originating from the industry branches involved. On the basis of these data, including information on projects, development plans of selected key industry sectors in the 1970s are being studied. Studies have been initiated in steel, non-ferrous metals, chemicals, textiles and cement, and will be extended to other industries in 1969.

99. In addition to the quantitative studies of the Decade targets, which may be used by Governments for indicative planning of their industrial development, it is considered that the task of UNIDO is also to formulate a certain number of guidelines for policies on national, regional and international levels, so as to develop a strategy of industrialization for the next Decade. These guidelines would apply not only to the structure of the industrial sector in each country and its relationship with other sectors, but also to the broader aspects of the strategy in the long run, of distribution of industry among the developed and developing countries.

100. In addition to CDPPP at Headquarters, UNIDO co-operated with the regional economic commissions and UNESOB. It participated in two missions, organized by the CDPPP in collaboration with ECA, to East and West Africa, which the CDPPP had organized within its programme of studies for the Second Development Decade. Contacts have been maintained with the specialized agencies participating in the preparatory work for the Development Decade, in particular with ILO and FAO.

101. Finally, it is considered that the effectiveness of the work on the Development Decade will depend to a large extent on the co-operation of the countries themselves, and in this connexion UNIDO expects to utilize the

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Page 1

Country Three, Kazakhstan, which is a member of the Eurasian Union, is an important factor in the development of the countries concerned, not only as regards the economic work, but also, at a later stage, the follow-up and maintenance of the very same Decade itself.

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PART TWO: DESCRIPTION BY GROUPS OF ACTIVITIES

102. The programmed activities of UNIDO are classified in fifteen main groups which are enumerated in the contents. Some of the activities described may overlap two or more of the groups; in such cases the main component of the activity determines its place in the groups.

103. The description of UNIDO activities is presented in the order of the groups. In each group the material is subdivided into two main parts, field projects and supporting activities, the latter consisting of expert group meetings, studies and research other supporting projects and publications. The research activities of a continuing nature relating to some across-the-board problems such as the World Industrial Survey and preparatory work on the Second Development Decade are dealt with in Group 15.

104. As was mentioned above, the field projects appear with their titles only, the detailed description being given in Annex IV where they are listed by sources of finance: UNDP/SF, the Regular Programme, UNDP/TA (formerly EPTA) and the Special Industrial Services programme (SIS). In Annex V the projects are classified by regions and countries.

105. The activities involving the direct support by UNIDO staff at headquarters, which absorb a substantial part of the staff resources of the relevant substantive units, are not indicated specifically under the section on supporting activities. Some of the activities described in this section such as expert group meetings, seminars and research may involve, in addition to the contribution of the regular staff of UNIDO, expenditures

which are financed either from the budget of the technical assistance programme under the category of national and inter-national projects or from the Meeting Fund under the regular budget of UNIDO. When the preparation of documentation for the meetings requires contributions by consultants, the cost is financed from the Consultant Funds of the UNIDO budget. In this report it was considered expedient to present the implementation by projects rather than by forms of implementation, that is instead of organizing the material by type of activities (e.g. meetings, studies and research, publications) all relevant activities have been consolidated under the heading of the corresponding project. The studies and research projects are generally implemented by regular UNIDO staff, when required, with the assistance of consultants.

106. The 196^o publications include documents processed internally as well as printed publications. The cost of such items, which absorb regular staff, does not appear in the budget as a specific cost item.

INDUSTRIAL TECHNOLOGY DIVISION

Group 1 Mechanical and Electrical Engineering Industries

Field activities

107. During 196^o, the Engineering Industries Section was engaged in technical assistance activities in the following industrial fields: metalworking (use and production of machine tools, tools, dies, jigs and fabricated products); electrical and electronic equipment (power generating and power distribution equipment); transportation equipment (automotive, shipbuilding and repairing and rolling stock); and agricultural machinery and implements.

108. Most of the technical assistance work was concentrated in the metalworking industry. This phenomenon was anticipated, as metalworking industry represents the basic industry upon which all other industries are

Group 1 (cont'd)

developing in the less advanced countries. Other UNIDO activities in the field of engineering concentrated on giving technical assistance to established plants so that they could increase the use of their equipment and facilities and the range of their manufactured products.

109. The rate of industrialization based on substitution of imports depends, in the long run, on the domestic capabilities of creating new designs or of adapting foreign ones to the local needs and production means. Therefore, whenever applicable, the aspect of design capabilities was stressed by UNIDO, and consequently three UNDP/SF projects were launched in this field during 1968.

110. One important aspect of the 1968 technical assistance programme of UNIDO was the problem of maintenance and repair and the production of spare parts in the developing countries. Surveys indicated that this was an acute problem and technical assistance was given at a national level by providing experts who dealt with the general maintenance schemes, and specialists who offered advisory services to the local plants.

111. Due to the complexity of some engineering industries, which are established in stages, from the assembly of imported parts with a minimum of local content to a completely domestic final product, the establishment of a fully integrated domestic industry takes a long time to complete. In some cases, when the domestic market is small in relation to the economic size of an integrated industry, regional co-operation will be called for. UNIDO is engaged in studies related to such integration efforts.

112. The following is a listing of the field activities of Group 1 during 1968.

<u>AFRICA</u>		<u>UNDP/SF</u>		
		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Algeria	Centre for Industrial and Technological Studies (ALG-18)	3/18		1,449,700
United Arab Republic	Engineering and Industrial Design Development Centre (UAR-55)	3/30	3/66	2,668,400

Group 1 (cont'd)

UNDP/SF (cont'd)

<u>ASIA/FAR EAST</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
India	Design Centre for Electrical Measuring Instruments (IND-67)	1/5		1,572,000
Singapore	Foundry Demonstration and Service Unit (SIN-7)	4/60		109,500

UNDP/TA

THE AMERICAS

Argentina	Installation of High Speed Heavy Machinery (111-57)	2/6		11,340
Chile	Boiler Plate Manufacturing Industry (130-57)	1/12		22,000
Chile	Machine Tool Manufacture (130-57)	1/13½	1/6	27,340
Dominican Republic	Maintenance and Repair (XBO-642)	2/20		29,108
Peru	Automotive Industries (195-57)	1/6		11,220
Peru	Shipbuilding Industry (195-57)	1/6		13,260
Venezuela	Increase of Metalworking Products (201-57)	1/12		25,000

ASIA/FAR EAST

Afghanistan	Planning and Co-ordination of Industrial Projects (153-63)	1/2		4,000
India	Production of Machine Tools (37-57)	1/12		20,630
Indonesia	Maintenance and Inventory System for Spare Parts (43-57)	1/6		10,800
Iran	Development of the Electronic Industry (220-57)	1/6		11,400
Iran	Selection of Industries for Development Planning (220-57)	1/8		14,250
Singapore	Manufacture of Building Hardware (26-66)	1/3		5,500
Singapore	Establishment of Bicycle-manufacturing Factory (264-61)	1/12		19,700

Group 1 (cont'd)

UNDP/TA (cont'd)

<u>EUROPE/MIDDLE EAST</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Israel	Coin Making Equipment (243-57)	1/3	1/4	8,700
Lebanon	Development of Engineering Industries (26-58)	1/6		10,450
Turkey	Gear Manufacturing Training and Management (277-57)	1/1		1,800

Regular Programme

THE AMERICAS

Regional	Development of Mechanical Industries (ID-495)	1/12		17,000
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EUROPE/MIDDLE EAST

Bulgaria	Fellowships in Mechanical Engineering (ID-980)		3/10	3,600
Hungary	Fellowships in Various Engineering Fields (259/65)		8/45	15,900
Lebanon	Development of Engineering Industries (ID-217)	1/6		10,450

SIS

AFRICA

Algeria	Lock Factory Operations (67/89)	1/6		14,000
Somalia	Reducing the Cost of Electric Power (67/215)	3/3		8,000
Tunisia	Selection of Equipment and Production Methods (67/74)	1/6		14,000
Tunisia	Modernization of Dockyard Facilities and Equipment (68/217)	1/2		5,000
Tunisia	Industrial Cost Accounting System (68/297)	1/4		9,000
Uganda	Refrigerator and Stove Production and Supervision of Plant (68/290)	1/6		13,000

Group 1 (cont'd)

SIS (cont'd)

<u>AFRICA (cont'd)</u>		<u>Experts</u> m/m	<u>Fellows</u> m/m	<u>Cost</u> US\$
United Arab Republic	Exploitation of Heavy Black Beach Sand (67/234)	3/4 $\frac{1}{2}$		15,000
United Arab Republic	Design and Manufacture of High-voltage Porcelain (68/289)	2/3		9,000
Zambia	Survey of Metalworking and Engineering Industry (67/164)	2/6		15,000
<u>THE AMERICAS</u>				
Argentina	Machine Tool Design and Production (68/258)	2/8		20,000
Brazil	Agricultural Implements (68/265)	1/6		14,000
Colombia	Maintenance and Manufacture of Forging Dies (68/278)	1/8		18,280
<u>ASIA/FAR EAST</u>				
China	Survey of the Electronic Industry (67/116)	1/3		6,500
Indonesia	Rehabilitation of Mechanical Workshops (67/176)	3/36		72,000
Philippines	Evaluation of Engineering Projects (67/254)	1/12		25,000
Singapore	Manufacture of Padlocks and other Building Hardware (68/266)	1/9		20,000
Singapore	Improvement of Metal Products Design (68/333)	1/6		11,000
<u>EUROPE/MIDDLE EAST</u>				
Bulgaria	Instruments Design (67/50)	6/21		54,000
Israel	Metalworking Industries (67/52)	1/1		2,000
Malta	Manufacture of Industrial Components and Identification of Potential Assembly Industries (124/67)	1/6		11,000
Romania	Introduction of the Welding Techniques and Equipment (68/315)	2/6		15,100

Group 1 (cont'd)

Supporting activities

115. In 1968 the supporting activities of Group 1 were in the fields of metalworking and machine tools, electrical and electronic equipment and instruments, transportation equipment and agricultural machinery. As recommended by the Industrial Development Board at its second session (ID/B/41, para.116), particular attention has been paid by UNIDO to the manufacture of agricultural equipment in developing countries. Also in line with the recommendations of the Board, emphasis has been placed on repair and maintenance problems (ID/B/41, para.11).

Group of Experts on the Design, Manufacture and
Utilization of Dies and Jigs

114. Following the recommendations of the 1966 Moscow Metalworking Symposium as well as recommendations by the Industrial Development Board (ID/B/41, para.114), the Expert Group Meeting on the Design and Manufacture and Utilization of Dies and Jigs was held at UNIDO headquarters in Vienna from 9 to 22 December 1968. The substantive items on the agenda included the survey of up-to-date developments and trends in design, the economics of production of dies and jigs and the importance of product design and quality development of dies and jigs. Thirteen experts attended the meeting from the developing and developed countries (Brazil, Cameroon, Czechoslovakia, France, India, Hungary, Portugal, Switzerland, Tunisia, the United Arab Republic, the United States of America and the Union of Soviet Socialist Republics); observers from the Austrian industry also participated. The estimated cost of the project was \$10,000.

115. The corresponding recommendations have been summarized in a draft report entitled "Report of Expert Group Meeting on Design, Production and Utilization of Dies and Jigs in Developing Countries". The report and the background documentation of the meeting will be processed internally by UNIDO and distributed in 1969 to support and develop operational and training activities in this field.

116. Eleven studies were prepared by consultants as background information for discussion at the Expert Group Meeting. The studies deal with the

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Technical and economic analysis of design, manufacture and utilization of dies and jigs in several developing countries and provide information for a manual to be published in 1970. The main subjects treated by these eleven studies were:

- Modern aspects and trends in design and manufacture of dies, jigs and fixtures (five studies);
- Organization of die and jig production shops (two studies);
- Experience of the developing countries in die and jig making (one study and one field report);
- Influence and interrelation of product design and design and production of dies and jigs (two studies);
- Economic and management aspects of die and jig production (one study).

Estimated project
cost: US\$5,000

Ref: ID/B/20/Rev.1, para.
52(a) and 53(a).

Expert Group Meeting on the Status of Technology in Electric
and Electronic Industries with Recommendations for
Application to the Developing Countries

117. As no funds were made available for this meeting which had been programmed for 1968, it was agreed to hold a meeting in 1969 on the manufacture of telecommunication equipment in developing countries, including low cost radio and television receivers. The meeting will be financed under the UNDP/TA programme.

118. The preparation of documentation that was started in 1967 continued in 1968. The preliminary work which included selection of subjects and authors for studies is in process. Six authors were selected to submit papers. Attention is focussed on the subject of the production of two-way communication equipment and of low cost radio and television receivers in developing countries. These studies, with the information and recommendation to be derived from the 1969 meeting, will be published in 1970.

Estimated cost of studies:
\$4,000 from UNDP/TA funds

Ref: ID/B/20/Rev.1, para.
52(b) and 53(b).

Group 1 (cont'd)

Seminar on the Establishment and Development of the Automotive Industry in Developing Countries

119. This Seminar (originally planned as an expert group meeting) was to be convened in October 1968, as funds had been made available by a contribution from the Government of Czechoslovakia. The Seminar is scheduled to take place in the spring of 1969 in Czechoslovakia.

120. In addition to a number of papers prepared for this Seminar during the last two years, six studies were submitted in 1968 by Czechoslovakia and four were prepared by Polish authors and financed from Czech and Polish national contributions. These studies are to provide advice and guidelines to developing countries on technological, economic and organizational problems related to the establishment and development of indigenous automotive industries. Participants invited to the Seminar have prepared 25 papers on the present situation in the automotive and ancillary industries in developing countries. These papers, financed under the contributions of Czechoslovakia and Poland, will be submitted for discussion to the Seminar.

Ref: ID/B/20/Rev.1, para.
52(c) and 53(c).

Maintenance and repair in developing countries

121. Following the recommendations of the Athens Symposium (ID/B/21, Annex 1, para.6) and the Industrial Development Board (ID/B/41, para.115-117) UNIDO launched a comprehensive programme in 1968 in the field of maintenance and repair. In 1967 several UNIDO missions dealt with this problem. In the fourth quarter of 1968, UNIDO consultant missions were sent to selected countries to identify the nature and extent of maintenance and repair needs in the countries they visited.

122. The French and Spanish versions of the report of the meeting of the Group of Experts on Maintenance and Repair of Industrial Equipment (published in English in 1967 in mimeographed form - ID/1) were printed in 1968 and distributed through the United Nations resident representatives and the regional economic commissions.

Group 1 (cont'd)

Agricultural machinery

123. During the third quarter of 1968 an expert in the production of agricultural machinery and implements was engaged by UNIDO to programme the work in this field. The programme covers the manufacture of agricultural machinery and implements and is geared to the possibilities of establishing production facilities, engineering development centres and maintenance and repair centres for agricultural equipment. Advance specifications and plans were initiated including the preparatory work for the expert group meeting on agricultural machinery industry, to be held in 1968.

Collection and dissemination of information

124. The staff of UNIDO was engaged in 1968 in the collection and dissemination of information in the metalworking field. From the information collected, three guidelines were prepared for distribution in developing countries: "The establishment of a cutting tool manufacturing plant"; "Hand tool plants"; and "Tile plant".

Interregional Symposium on Metalworking Industries in
Developing Countries

125. The Report on the Interregional Symposium on Metalworking Industries in Developing Countries (held in Moscow in 1966) was published in 1968 and distributed in English and Spanish (document ID/8, Sales No. E.68.II.B.9); it will be published in French in 1969. The edited papers presented at the above mentioned Symposium were also published in 1968 under the title The Development of the Metalworking Industries in the Developing Countries (document ID/6, Sales No. E.68.II.B.8).

Project cost: \$14,000

Ref: ID/B/20/Rev.1, para.57

Group 1 (cont'd)

Co-operation with the regional economic commissions

126. There was an exchange of papers and publications between UNIDO and the regional economic commissions. Specifically the following activities are of note:

Africa - As a large amount of information had been collected by ECA on the subject of repair and maintenance, views were exchanged between ECA and UNIDO on the utilization of this information. In keeping with the recommendation of ECA resolution 163/VIII of 24 February 1967, an exchange of ideas also took place on the subject of the manufacture of low cost radio and television receivers.

Asia - The programme of UNIDO in the field of agricultural machinery and implements was discussed with ECAFE and plans for co-operation were agreed upon. An agricultural machinery expert from UNIDO visited the ECAFE region as a first step towards implementation of these plans.

Latin America - Co-operation with ECLA on the Automotive Seminar began in 1967 and continued in 1968. Plans for a comprehensive study of the metalworking industry in the ECLA region were also discussed in 1968.

Group Metallurgical Industries

Field activities

127. There were 27 technical assistance projects in the metallurgical field in 1968. These included nine continuing projects and eighteen projects initiated during the year.
128. Developing countries with non-ferrous mineral resources are continuing to pay attention to the up-grading of these minerals and to the possible production of non-ferrous metals. With regard to the field of light non-ferrous metals, two developing countries were assisted in the development of aluminium industries based on local raw materials. One country received technical assistance in carrying out a feasibility study, and another was advised by experts on a detailed design for a large integrated aluminium production plant. A number of developing countries examined the possibility of processing local deposits of ferro titanium ores to obtain foundry iron and a titanium-rich component. Experts were provided to assess the possibility of evolving methods of concentrating the titanium-rich content and of developing the market for the foundry iron and titanium-rich products.
129. The interest of developing countries in exploiting local mineral resources was also evident with regard to heavy mineral non-ferrous metal. Experts were provided to advise a number of countries on the possibility of establishing and further developing lead, copper and other heavy non-ferrous metals such as chromium, zinc and tin.
130. In 1968, the main form of assistance in the foundry field was the improvement of the technology of iron, steel and various non-ferrous metal foundries. In one country, an expert advised on the production of aluminium castings; in another, an expert advised on increasing the productivity of a number of iron foundries. In yet another country an expert assisted in setting up a metallurgical testing laboratory to serve the local foundry industry.
131. A large number of developing countries have relatively advanced iron and steel industries and in 1968, technical assistance in this field was

Group 2 (cont'd)

given on a number of aspects. Experts were provided to assist in the utilization of local refractories in the steel industry, on quality control of steel plates, on vacuum degassing techniques and on the production of special steels. Experts assessed the possibility of erecting iron and steel plants in a number of developing countries.

132. Interest in the utilization of indigenous fuel resources for metallurgical processing was shown in 1968. Experts were provided to improve the efficiency of existing coking facilities and of the briquetting of lignite.

133. The following is a listing of the field activities of Group 2 during 1968.

		<u>UNDP/TA</u>		
		<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
		<u>m/m</u>	<u>m/m</u>	<u>US\$</u>
<u>THE AMERICAS</u>				
Argentina	Steel Products Marketing (111-57)	1/6		5,400
Argentina	Steel Production and Rolling (111-57)	1/3		5,670
Argentina	Evaluating Resources of Non-ferrous Ore and Minerals (111-57)	1/3		5,670
<u>ASIA/FAR EAST</u>				
India	Industry Investment Survey in Metallurgy (37-57)	5/38		65,330
India	Steel Foundry Operation (37-57)	1/12		22,000
Iran	Development of Non-ferrous Metals Industries (220-57)	1/6		11,400
Philippines	Steel Industry Surveys (79-57)	1/18	1/12	44,400
<u>EUROPE/MIDDLE EAST</u>				
Bulgaria	Automation of Ore Dressing (269-65)	1/2		4,200
Romania	Application of Modern Technology in the Construction Industry (134-64)	1/1		1,800
Turkey	Establishment of Forging Plant (277-57)	1/4		1,200

Group 2 (cont'd)

Regular Programme

<u>ASIA/FAR EAST</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Regional	Regional Industrial Adviser with ECAFE (ID-1083)	1/12		22,000
<u>EUROPE/MIDDLE EAST</u>				
Romania	Fellowships in Metallurgy (ID-876)		2/6	2,400
<u>SIS</u>				
<u>AFRICA</u>				
Congo (Brazzaville)	Development Programme for Metal- lurgical Industries (67/159)	2/6		16,000
Liberia	Steel Project Study (66/26)			110,000
Liberia	Advisory Services for Steel Pro- ject (67/64)	1/4		30,000
Liberia	Analysis of Data and Execution of Steel Project (67/133)	1/12		28,000
Senegal	Expansion and Development of Aluminium Foundries (67/191)	1/12	1/6	28,600
<u>THE AMERICAS</u>				
Argentina	Establishment of Aluminium Industry (68/286)	1/5		12,000
<u>ASIA/FAR EAST</u>				
Ceylon	Extraction of TiO_2 from Heavy Beach Sand ² (68/285)	1/3		9,000
China	Manufacture of Clinker Using Local Magnesite and Dolomite (67/182)	1/6		15,000
India	Survey and Utilization of the Titanium Products Industry (67/242)	3/3		10,500
Indonesia	Use and Maintenance of Steel Plant Equipment (67/214)	1/1		3,500
Indonesia	Installation and Initial Operation of a Cold Steel Wire Drawing Mill (68/200)	1/6		11,000
Pakistan	Evaluating Iron and Steel Project Proposals (68/201)	1/6		16,000

Group C (cont'd)

SIS (cont'd)

<u>EUROPE/MIDDLE EAST</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Jordan	Setting up and Running of Steel Rolling Mill (66/12)	1/12		23,100
Syria	Supervision of Erection and Initial Operation of Steel Rolling Mill (68/306)	1/14		26,500
Turkey	Survey of Iron and Steel Industry and Improvement of Operations (67/195)	1/6		15,000
Turkey	Installation of a Barite Ore Grinding Mill (67/212)	1/1		4,500
Turkey	Conducting Agglomeration and Briquetting Pilot Plant Trials (67/245)	1/12		24,000
Turkey	Establishment of Alumina and Aluminium Plant (68/313)	4/18		36,500

Supporting activities

134. The 1968 programme of UNIDO for this sector was by and large successfully completed. In keeping with the recommendations of the Industrial Development Board (ID/B/41, para.118, 119), particular attention was paid to co-operation with the regional economic commissions and to the problems connected with direct reduction of iron ore in developing countries.

Second Interregional Iron and Steel Symposium

135. The Second Interregional Iron and Steel Symposium was held in Moscow from 19 September to 9 October 1968 in co-operation with the Government of the Union of Soviet Socialist Republics, the host country. Some 200 participants from 51 countries attended the Symposium; UNIDO financed the participation of 50 individuals (iron and steel specialists from developing countries, leading world iron and steel experts and staff members of

Group 1 (cont'd)

regional economic commissions concerned with iron and steel activities). The other participants were from iron and steel firms, iron and steel equipment manufacturers, professional organizations, trade federations and research institutes in developed countries, including a large contingent from the host country. Seventy-eight papers were presented, including one by ECA, one by ECAFE, six by ECE, two by ECLA and two by UNIDO. Plant tours of steel works were organized in the host country, Czechoslovakia, France, India, Poland and the United Kingdom.

136. The Moscow Symposium was divided into five parts. In the first two parts, papers were reviewed on the present state of recent technological developments in, and the capacity of, the world steel industry. In the three remaining parts, the prerequisites for the development of iron and steel industries on a regional and interregional basis, were examined in greater detail, together with optimum capacities, stages of completion of iron and steel plants under construction as well as the entire spectrum of economic analyses, expansion plans and modernization efforts of the steel industry. A report was approved by the participants of the Symposium which will be circulated to all developing countries in 1969. The final proceedings of the Symposium will be published at a later date.

Funds available for the Symposium: US\$150,000.

137. The following papers were commissioned under Special Service Agreement under the general heading of techno-economic aspects of the development of iron and steel industries in developing countries. All but one of the studies were received in time to be presented at the Second Iron and Steel Symposium.

"Collection and processing of iron and steel scrap for the iron and steel industry"

"Modern techno-economic indices and ways for their attainment in blast furnaces, steel works and rolling mills"

Group 2 (cont'd)

"New methods of beneficiation of iron ores for blast furnaces and their efficiency"

"Recent achievement in continuous casting technology"

"Improvement of steel quality by treatment of synthetic slags"

"Influence of the different factors (market, deposits, energy, finance etc.) on the location of steelmaking plants"

"Energetics of iron and steel plants"

"Effect and design parameters, price of equipment and methods of financing and the investment requirements for iron and steel plants and their parts"

Cost of the above studies: US\$4,800.

138. A number of iron and steel experts, mainly from developing countries, prepared summary reports from preprints of papers presented at the Symposium. These reports were amended in the light of the subsequent discussions and recommendations and were used as a basis for the report which was approved by the Symposium.

Cost of these studies: US\$3,000 Ref: ID/B/20/Rev.1, para.60, 61, 62

Expert Consulting Group on the Aluminium Industry

139. The report of the expert group meeting held in Vienna at the end of 1967 was published (off-set, processed internally) in August 1968 as:

"Alumina production from various ores - the report of the first meeting of an Expert Consulting Group on the Aluminium Industry" (ID/WG.11/10).

Expert Consulting Group on the Copper Industry

140. The report of the expert group meeting held in Vienna at the end of 1967 was published (off-set, processed internally) in August 1968 as:

"Modernization and expansion of plants in the copper industry - the report of the first meeting of an Expert Consulting Group on the Copper Industry" (ID/WG.12/1).

Group 2 (cont'd)

Co-operation with regional economic commissions

141. Early in the year a procedure was established for co-operation between UNIDO and ECE in matters pertaining to iron and steel. Two representatives of ECE attended the second interregional symposium, and six papers based on the previous specialized studies of ECE were presented at the Moscow Symposium. As already indicated, representatives concerned with iron and steel from ECE, ECAFE and ECLA attended and presented papers; during the course of the Symposium, meetings were held between them and UNIDO representatives. The present and future activities and the possibilities for future co-operation in the iron and steel field were discussed.

Group 3 Construction and Building Materials Industries

Field activities

142. The largest single project in this field was the establishment in one country of an asbestos pilot plant financed by UNDP/SF. This was an attempt to overcome a problem common in many developing countries, namely a shortage of asbestos which is important as a constituent of many fibro-cement products such as roofing tiles, panels etc.

143. The increasing consumption of cement in developing countries was reflected in several requests for assistance from Africa and Europe, not only for the rehabilitation and modernization of existing plants but also for feasibility studies and market surveys for new installations. This is considered as an important field of technical assistance, for many developing countries spend a great deal of foreign exchange for the import of cement, often at very high prices due to the cost of transport.

Group 3 (cont'd)

144. The ceramics and pottery industry was also the subject of many requests for technical assistance which were spread over a number of countries but mainly in the African and Latin American regions. The requests included assistance to brickworks as well as to plants producing tiles, glass, sanitary-ware and chinaware. In many cases there were old-established factories in need of rehabilitation and modernization; in other cases, traditional manual methods required mechanization to keep abreast of modern industrialization.

145. Finally, surveys were requested, and are under way, of the general situation of the building materials and construction industry in certain countries. UNIDO considers this a very promising activity which will lead to the working out of a balanced plan of development for the construction industry

146. The following is a listing of the field activities of Group 3 during 1968.

UNDP/SF

THE AMERICAS

		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Bolivia	Experimental Production Plant for Asbestos Processing (BOL-20)			764,000

UNDP/TA

ASIA/FAR EAST

Ceylon	Operation of Ceramic Plant (20-57)	1/20		37,000
Nepal	Survey for Building and Construction Materials (83-65)	1/2		3,850
Papua and New Guinea	Production of Building and Construction Materials (216-67)	1/9		17,000

Annex (cont'd)

		<u>SIS</u>		
<u>AFRICA</u>		<u>Experts m/m</u>	<u>Wellows m/m</u>	<u>Cost US\$</u>
Algeria	Improved Operation of Glassware Industry (67/82)	1/6		14,000
Madagascar	Rehabilitation of Brickworks Industry (67/128)	1/3		7,000
Malawi	Manufacture of Pottery (68/293)	1/3		6,200
Mauritius	Feasibility Study on the Establishment of a Glass Industry (67/231)	1/2		7,000
Rwanda	Establishment of a Cement Factory (67/181)	1/2		11,960
Somalia	Commercial Utilization of Gypsum and Sepiolite (67/135)	1/3		4,500
<u>THE AMERICAS</u>				
Bolivia	Production of Tiles and Ceramics (68/296)	1/6		12,000
Jamaica	Utilization of Local Clays and Glazing Techniques (68/272)	1/12		18,000
<u>EUROPE/MIDDLE EAST</u>				
Cyprus	Establishing an Asbestos Pipe Manufacturing Plant (66/48)			6,000
Turkey	Cement Granulating Plant Operation (67/55)	1/7		11,800
Turkey	Cement Production Using Slags from Iron and Steel Factories (67/55)	1/6		13,600
<u>Funds-in-Trust</u>				
<u>AFRICA</u>				
Libya	Building Materials Research and Products Evaluation (9001-69)	1/12		23,100

Group 3 (cont'd)

Supporting activities

147. In accordance with the recommendations of the Industrial Development Board (ID/B/41, para.120) that UNIDO should be involved in the construction and building materials industries, with particular emphasis on the use and adaptation of locally produced construction materials, an effort was made during 1968 to increase the activities of UNIDO in this field. In addition to the emphasis on the use of local materials, such as clay building materials, activities connected with the cement industry also received special attention.

148. Close co-operation was maintained with the United Nations Centre for Housing, Building and Planning (UNCHBP), and active steps were taken to obtain a clearer delineation of the relative areas of responsibility between the two organizations. In this connexion UNIDO was invited to act as host in 1969 to the thirteenth session of the Working Group on Housing and Urbanization at the Administrative Committee on Co-ordination (ACC).

Interregional Seminar on the Development of Clay Building Materials Industries in Developing Countries

149. The Interregional Seminar on the Development of Clay Building Materials Industries in Developing Countries was held in Copenhagen from 12 to 25 August 1968, organized by UNIDO and the Government of Denmark, with the participation of UNCHBP. Lecturers and thirty participants from twenty countries discussed technological and economic problems of production and utilization of heavy clay products. The papers presented by the participants on issues relevant to the respective countries contributed substantially to the exchange of experience and ideas. The visits to Danish plants, building sites, research and testing stations and to training institutions offered further opportunities for meaningful discussion, both among the participants as well as between participants and lecturers. In addition, a series of recommendations and conclusions were formulated defining specific forms of technical assistance, as well as guidance for policy makers and managers. The report will be distributed to all States Members of the United Nations.

Estimated Cost of Seminar: US\$55,000 financed
under Danish contribution

Group 2 (cont'd)

150. The following papers were completed and issued in connexion with this Seminar:

"Testing and evaluation of brick clays" (This paper was available in preliminary form in 1967, but was extensively modified in 1968 and then mimeographed and issued at an additional cost of US\$325 from Consultant Funds.)

"Production and utilization of lightweight aggregates" (Available in draft in 1967 - mimeographed and issued in 1968.)

Workshop on Organizational and Technological Measures for the Development of Building Materials

151. UNIDO participated in the Workshop, held in Moscow from 25 September to 18 October 1968 which was organized by UNCHBP and the Government of the Union of Soviet Socialist Republics in collaboration with UNIDO. The Workshop was attended by 28 participants (from the manufacturing and policy making levels), by representatives from ECA, ECAFE, UNESOB and UNIDO and by 13 experts from the host country. UNIDO supervised the preparations of seven technical studies on different building materials. UNIDO also contributed to the Workshop documents presented by ECE in the field of building materials and construction industries. Among those documents submitted by UNIDO were:

"Small-scale manufacture of Portland cement" (Available in draft in 1967; revised, mimeographed and issued in 1968.)

"Puzzuolana cements" (Available in 1967, mimeographed and issued in 1968.)

"The development of a brick and tile industry in developing countries" (Commissioned, written, mimeographed and issued in 1968 at a cost of US\$1,000 from Consultant Funds.)

"Sanitary ware from common clays" (Available in draft in 1967, but extensively revised by the author in 1968 at no additional cost; mimeographed and issued at a cost of US\$800 from Consultant Funds.)

"Building lime: its properties, use and manufacture" (Available in draft in 1967; revised, mimeographed and issued in 1968.)

"Plastics as building materials" (Available in draft in 1967; mimeographed and issued in 1968.)

Ref: ID/B/20/Rev.1, para.68(b)
and 71.

Group 3 (cont'd)

Other studies and research

152. The following studies were commissioned as background documentation for meetings to be held in 1969 to 1970:

Mineral wool, manufacture and uses - mineral wool, which is an excellent thermo-insulating material, is produced from blast furnace slag or natural rock. In many countries it is often wasted due to a lack of knowledge of its utilization. In 1967 a paper on this subject was commissioned from the Government of the Union of Soviet Socialist Republics.

Cost: US\$2,500 from Consultant Funds Ref: ID/B/20/Rev.1, para. 6(a)

Asbestos-cement and similar fibro-cement materials - A paper on this subject was authorized for 1968 as a background document for a 1969 expert group meeting. Due to the difficulty in finding a suitable author, the issuance of the paper has been postponed to 1969.

Cost: US\$1,000 from Consultant Funds Ref: ID/B/20/Rev.1, para. 6(b) (cancelled in 1969).

Cement from gypsum - This is an important process for developing countries possessing gypsum, as it yields not only cement but sulphuric acid as a by-product. This paper was commissioned in 1968.

Cost: US\$1,500 from Consultant Funds Ref: ID/B/20/Rev.1, para. 6(c)

Plastics in building materials - In view of the importance of this subject to developing countries, where the use of plastics in conjunction with available local materials can provide the solution to certain construction problems, a second paper was commissioned in 1968.

Cost: US\$1,000 from Consultant Funds

Co-operation with the regional economic commissions

153. Apart from the liaison with UNCHBP, co-operation was maintained with ECAFE, and three ECAFE papers were submitted by UNIDO to the Interregional Seminar on Clay Building Materials on the subjects of structural clay products, development of lightweight aggregates in the ECAFE region, and ceramics industry in Australia. Moreover a paper on the subject of "Brick and ceramics industries of Africa, present situation and future developments" was submitted by ECA. In co-operation with UNCHBP, ECAFE undertook the organization of a regional seminar on prefabrication in the building industries in Asia and the Far East region. While UNIDO could not participate in this meeting, the proceedings have been carefully studied by UNIDO.

Ref: ID/B/20/Rev.1, para. 6.

Group 4 Chemicals, Petrochemicals and Synthetics, Insecticides
and Pesticides, Pharmaceuticals and Other Related Industries^{6/}

Field activities

154. Although technical assistance in the chemical field remained on a modest scale in 1968, it covered a wide range of topics including industrial fermentation, use of industrial wastes, instrumentation of chemical laboratories and general surveys of chemical industry, all topics of great importance to a developing country. Plans to increase the assistance have been included in the 1969 and 1970 programmes.
155. Within this group of activity, technical assistance projects in the pulp and paper industry constituted an important part. There was considerable interest in developing countries with surplus bagasse in the use of bagasse to make various products including building board and paper. Technical assistance was also given by UNIDO in rehabilitating and improving the operation of pulp and paper mills. This type of work was undertaken in Africa, Asia, Europe and Latin America.
156. Pharmaceuticals comprised one of the more vigorous areas of activity; four projects were carried out and enquiries were received regarding several others. This activity was particularly commented on by the Industrial Development Board (ID/B/41, para.12¹), which urged that special attention be given to it and that efforts be made to develop the industry beyond the stage of processing and packaging to the manufacture of basic ingredients. The current projects relate mainly to the organization of the industry which, in certain developing countries, has not progressed favourably. In one country, however, a well-organized pharmacological institute has been established, and this is a prerequisite to the functioning of a modern pharmaceutical industry.
157. Two UNDP/SF projects were pursued in the pesticide sector in 1968, one to assist in the establishment of a demonstration plant for the production of pesticides from chlorine and bromine, which constitute valuable by-products of existing chemical industry, and the other to assist in the establishment and initial operation of a pilot plant for pyrethrum production. Preliminary feasibility studies also were carried out on the use of chlorine and bromine as raw materials for pesticides.

^{6/} The functional grouping has been reorganized in 1968. However, for purposes of comparison with the 1968 Programme of Work, the old grouping has been maintained in this report of activities.

Group 4 (cont'd)

158. In developing countries with ample petroleum and natural gas resources, there was a growing interest in the establishment of petrochemical production facilities as evidenced by the fact that 25 technical assistance requests were received by UNIDO in 1968 in the general field of petrochemicals. Included in this figure are not only requests related to large-scale projects but also requests for feasibility studies on a relatively smaller scale.

159. Experience gained in 1968 has shown that developing countries in a relatively advanced stage of development in petrochemicals are now in a position to ask for technical assistance for more sophisticated intermediates and end-products, for relatively advanced technology in the fabrication and application of petrochemicals and for quality improvement and control of plastics, synthetic rubber and synthetic fibres. UNIDO assistance was also made available in 1968 in the establishment of petrochemical research and development institutes. Other projects in progress in 1968 involved expert assistance in polymer research and technology.

160. The following is a listing of the field activities of Group 4 during 1968.

		<u>UNDP/SF</u>		
<u>AFRICA</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Algeria	Industrial and Marketing Surveys on Petroleum Derivatives and Natural Gas (ALG-5)	2/4		1,215,566
Rwanda	Pilot Plant for Industrialization and Pyrethrum Production, Mukingo (RWA-3)	1/41	6/36	2,166,800
United Arab Republic	Demonstration Pesticide Production Plant Based on Chlorine and Bromine Resources (UAR-69)			2,306,600

Group 4 (cont'd)

		<u>UNDP/FA</u>		
<u>THE AMERICAS</u>		<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
		<u>m/m</u>	<u>m/m</u>	<u>US\$</u>
Argentina	Control of Chemical Process Operations Using Gas Chromatographic Techniques (111-5)	1/2		3,230
Brazil	Solving Problems Related to the Chemical Industry (2-59)	1/12		21,000
Dominican Republic	Organization of Laboratory and Inspection Services	1/12		15,000
Haiti	Establishment of an Essential Oils Industry (8005-68)	1/4		7,100
Mexico	Pharmaceutical Industry (190-65/Rev.1)	1/6		11,000
Peru	Projections for Basic Petrochemical Products (195-57)	1/8		14,600
 <u>ASIA/FAR EAST</u>				
India	Dyeing and Finishing of Leather (37-57)	1/12		20,630
India	Investigations in the Field of Polymers as Applied to the Leather Industry (37-57)	1/12		20,630
Indonesia	Rubber Production Techniques (43-57)	1/6		10,800
Iran	Development of Dyestuffs Industry (220-57)	1/6		11,400
Iran	Development of Pharmaceutical Industry (220-57)	1/2		3,600
Pakistan	Expansion of Chemical Manufacturing Industries (75-57)	1/8½		13,700
Philippines	Research in Industrial Microbiology (79-57)	1/4		8,500
 <u>EUROPE/MIDDLE EAST</u>				
Bulgaria	Coloured Coatings for Chromo Paper and Board (269-65)	1/1		2,100
Bulgaria	Production of Unsaturated Polyester Resins (269-65)	1/2		4,200

Group 4 (cont'd)

UNDP/FA (cont'd)

<u>EUROPE/MIDDLE EAST (cont'd)</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Israel	Pharmacological Research (243-57)	1/12		22,100
Poland	Development of Pharmaceutical Industry (189-60)	1/1		1,800
Poland	Fellowships in Chemical Industries (276-65)		37/146	55,400
Turkey	Development of Petrochemical Engineering (277-57)	1/12		21,600
Yugoslavia	Fellowships in Chemical and other Industries (294-51)		9/30	10,650
Yugoslavia	Training Chemists in Analytical Methods Relating to Celluloses and Hemicelluloses (294-57)	1/6		10,400
Yugoslavia	Problems of Polymer Production (294-57)	1/2		3,400
Yugoslavia	Production of Bleached Sulphate Pulp Paper (294-57)	1/6		10,400
Yugoslavia	Development of Process to Dispose Waste Waters from Wood Pulp (294-57)	1/2		3,400
Yugoslavia	Manufacture of Kraft Pulp Paper (294-57)	1/6		10,100
Yugoslavia	Paper Coating and Sizing (294-57)	1/6		10,400
Yugoslavia	Production of Neutral Sulphite Pulp and Paper (294-57)	1/6		10,400
Yugoslavia	Paper Technology (294-57)	1/6		10,400
Yugoslavia	Straw Pulp Production (294-57)	1/6		10,400

Regular Programme

THE AMERICAS

Regional	Evaluation of Projects for New Chemical Industries (ID-495)	1/12		17,000
Regional	Planning of New Pulp and Paper Industries (ID-495)	1/2		17,000

Group 4 (cont'd)

Regular Programme (cont'd)

<u>ASIA/FAR EAST</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
China	Qualitative and Quantitative Analysis of Synthetic Fibres (ID-599)	1/6		11,000
<u>EUROPE/MIDDLE EAST</u>				
Poland	Fellowships in Chemical Industries (ID-83)		6/15	6,000
<u>SIS</u>				
<u>AFRICA</u>				
Kenya	Feasibility of Producing Caustic Soda (67/126)	1/1		9,500
Libya	Fodder Yeast Production from Petroleum Refinery By-products (68/310)	2/1		1,000
Mauritius	Survey of Industries Using Sugar-cane Bagasse as Principal Raw Material (67/230)			30,000
United Arab Republic	Supervising the Operation of Bagasse Pulp and Paper Mill (67/18)	1/24	2/18	57,200
United Arab Republic	Organic Chemical Industries (67/223)	1/2		5,000
<u>THE AMERICAS</u>				
Bolivia	Building Materials Pre-investment Survey (67/12)	1/6		15,000
Bolivia	Plateglass Manufacture (68/299)	1/6		12,000
Dominican Republic	Evaluation of Machinery and Installations of a Bagasse Building-boards Factory (67/146)			49,200
Nicaragua	Evaluation of a Petrochemical Project based on Indigenous Surplus Hydrochloric Acid (67/109)	2/6		12,400
Peru	Feasibility of Establishing a Bagasse Pulp and Paper Mill (67/161)			72,000

Group 4 (cont'd)

SIS (cont'd)

<u>THE AMERICAS (cont'd)</u>		Experts m/m	Fellows m/m	Cost US\$
Trinidad and Tobago	Rehabilitation of a Paper Mill (68/303)	1/1		3,000
Venezuela	Survey for the Petrochemical Institute (68/295)	3/3		7,000
 <u>ASIA/FAR EAST</u>				
Afghanistan	Feasibility of Modernizing a Match Factory (67/125)	1/3		6,000
Ceylon	Improving the Efficiency and Quality of a Plant Producing Caustic Soda and Chlorine (67/178)	1/4		8,000
China	Improvement of Production Techniques in Plastics Manufacture (67/118)	1/4		8,000
China	Manufacture of Melamine from either Urea or Calcium Cyanamide (67/119)	1/2		5,000
China	Development of Man-made Fibre Industry (67/120)	1/6		15,000
Singapore	Control on Industrial Effluents and Trade Waste Discharges (67/130)	1/6		15,000
Singapore	Improvement of Plastic Products Design (68/333)	1/6		11,000
 <u>EUROPE/MIDDLE EAST</u>				
Iceland	Report on the Manufacture of Marine Salts (67/115)	1/2		2,050
Yugoslavia	Hydrotreatment of Lubricating Oils; Improvement of the Octane Number of Gasoline and Production and Quality Control of Petrochemicals (68/345)	4/20		37,400

Funds-in-Trust

AFRICA

Libya	Production of Petrochemicals (9001-68)	1/12		23,100
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Group 4 (cont'd)

Supporting activities

161. With the increase in technical staff during 1968, it became possible for UNIDO to undertake work recommended by the Athens Symposium and the Industrial Development Board in the field of the basic chemical industry. At the same time, work in this field was divided between Groups 4 and 5, the former dealing with basic chemicals, pharmaceuticals and related industries including pulp and paper, and the latter - in addition to the fertilizer industries and pet.chemicals - with synthetics, insecticides and pesticides.

162. In Group 4, the main effort in 1968 was devoted to the basic chemicals in the marine salt industries since, in some cases, this may be the first step taken by a developing country to set up an indigenous chemical industry. Increasing attention was paid by UNIDO in 1968 to pharmaceutical industries in developing countries, and preparations were made for increasing activities in this field in 1969.

**Expert Working Group on Modernization and
Mechanization of Salt Industries Based on Sea-water**

163. The purpose of the Expert Working Group Meeting, held from 25 to 29 September 1968 in Rome, was to assist developing countries in assessing their marine salt industries with regard to improving equipment and modernizing production techniques.

164. The meeting was held in two parts. The first part was devoted to a presentation of technical papers describing the experience of various countries in the evolution of their solar salt industries, and fifteen country papers summarizing the status of industries in the relevant countries; ICA provided a regional paper. The second part of the meeting included recommendations to establish salt industries in developing countries. The recommendations covered such subjects as the use of fellowships for the training of personnel to staff salt plants manufacturing products based on sea-water; transport, handling, storage and packaging of salt; separation and manufacture of by-products; concentration through solar energy; linkages with

Group 4 (cont'd)

existing industry complexes based upon sea-water; and other relevant factors. In addition, the Working Group members visited a modern salt plant in Barletta, Italy.

Cost of Meeting: US\$6,000

165. The following papers were commissioned in 1968 and presented at the meeting:

"French experience in the modernization and mechanization of the salt industries based on sea-water"

"Indian experience in the modernization and mechanization of salt industries based on sea-water"

"Italian experience in the modernization and mechanization of salt industries based on sea-water"

"Italian investigations on the possible starting of sea salt production in areas in a stage of industrial development"

"The present situation in the modernization and mechanization of salt industries based on sea-water in Japan"

"Kuwaiti experience in modernization and mechanization of salt industry based on sea-water"

"Essay on the modernization and mechanization of sea salt production in Portugal"

"Energy requirements of selected desalination processes and related costs"

"Machinery, equipment and components utilized in the solar industry"

The cost of these papers was US\$7,000. (In addition to the programmed amount of US\$4,000, US\$3,000 were authorized from Consultant Funds for 1969.) The fifteen country papers were presented by: Algeria, Argentina, Brazil, Bulgaria, Chile, China, Cuba, Haiti, Malta, Nicaragua, Peru, the Sudan, Turkey, Uruguay and the Union of Soviet Socialist Republics.

Ref: ID/B/20/Rev.1, para. 80, 84
and 89

Interregional Seminar on the Manufacture and Use of Basic Chemicals

166. An Interregional Seminar on the Manufacture and Use of Basic Chemicals was scheduled to be held in the second half of 1968 in the Union of Soviet Socialist Republics as a category II UNDP/TA project to be financed from the

Group 4 (cont'd.)

Union of Soviet Socialist Republics' rouble contribution. It was found necessary to postpone this Seminar, which is to be held at a later date in the Union of Soviet Socialist Republics. The preparation of the country studies on basic chemicals in connexion with this Seminar was accordingly postponed.

Ref: ID/B/20/Rev.1, para.81 and 85

Second Interregional Seminar on Petrochemicals

167. A preparatory meeting for the Second Interregional Seminar on Petrochemicals (the title was changed from "Second Petrochemical Conference" to "Second Interregional Seminar"), which is to be held in Baku, Union of Soviet Socialist Republics in 1969, was convened from 11 to 15 November 1968 in Vienna. The preparatory meeting which was attended by twelve participants who discussed the agenda of the Seminar and the technical papers to be presented. The modified agenda will be sent to all participants, six months prior to the Seminar.

Cost: US\$4,000

168. In accordance with the discussions in the second session of the Industrial Development Board (ID/B/41, para.134) studies on the world production consumption and trade in petrochemicals were carried out in 1968 on a regional basis by the regional economic commissions and by UNESOB. The studies cover the period from 1965 to 1968 and make projections for the future trend in petrochemical development up to 1975. The studies, which will be presented to the Second Interregional Seminar on Petrochemicals, will assist developing countries in planning future development projects in the field of petrochemicals.

Cost: US\$5,000

169. The following studies on the establishment of the plastic industry are to be widely distributed and will be used for the Second Interregional Seminar on Petrochemicals.

Printed in 1968:

ID/Ser.I/2 "Selection of projects and production processes for basic and intermediate petrochemicals in developing countries"

Allocation

US\$1,050

Group 4 (cont'd)

Printed in 1968: (cont'd)

ID/Ser.J/3 "Brazilian synthetic polymer industry"

Allocation

US\$1,000

To be printed in 1969:

ID/Ser.J/1 "Plastic fabrication, potential applications and coatings/adhesives industry"

US\$1,000

ID/Ser.J/4 "Studies in plastic industries - Research and development in chemical industries"

US\$1,000

ID/Ser.J/5 "Standardization of plastics in developing countries"

US\$1,000

Ref: ID/B/20/Rev.1, para.82 and 86

Expert Group Meeting on the Development of Plastics (Polymer Industries) in Developing Countries

170. The Expert Group Meeting was held in Vienna consecutive to the preparatory meeting for the Second Interregional Seminar on Petrochemicals. The Group consisted of ten experts, three from developing countries and seven from developed countries. A technical paper on the subject of developments in the plastic industry since 1964 was presented to the Meeting. The Group discussed the present status of the plastics industry and made recommendations for its future development. Particular attention was paid to areas requiring or receiving current technical assistance by UNIDO. Proceedings of the Meeting will be published in 1969 and made available as a UNIDO sales document.

Cost of project: US\$5,000

171. The following studies were commissioned during 1968 to outside consultants:

"The problems of transfer of technology in developing countries"

"The problems of the initial development of the petrochemical industry in the developing countries"

"New polymers and fabricating technology"

"Problems and possibilities of substitution of natural materials by petrochemical products"

"Proteins from petroleum"

"Recent developments in polyolefins"

Cost: US\$6,000

Ref: ID/B/20/Rev.1, para.83 and 84

Group 5 Fertilizer Industries

Field activities

Fertilizers

172. The technical assistance operations of UNIDO in 1968 were oriented mainly towards assisting certain developing countries during the pre-investment period of setting up domestic fertilizer industries. Assistance was provided to one country in making a nation-wide pre-investment study for the promotion of the fertilizer and petrochemical industries. At the same time, attention was given to regional co-operation in fertilizer production and marketing. General feasibility and market studies were carried out in twelve countries, mainly in Africa and the Middle East. Two additional projects helped the recipient Governments to check and evaluate tenders submitted by subcontractors for the construction of fertilizer plants.

Sulphur

173. Due to the increasing world shortage of sulphur, UNIDO directed its attention towards assisting the developing countries to utilize non-classical resources for the manufacture of sulphur and to avoid sulphur usage in the manufacture of fertilizers. No request for technical assistance in this area was received by UNIDO in 1968, but there are indications that this activity will be stepped up in 1969 and 1970.

174. The following is a listing of the field activities of Group 5 during 1968.

		<u>UNDP/SF</u>		
<u>ASIA/FAR EAST</u>		<u>Experts m/m</u>	<u>Fellows m/m</u>	<u>Cost US\$</u>
Pakistan	Pre-investment Studies for the Promotion of the Fertilizer and Petrochemical Industries (PAK-26)	8/64	6/60	2,515,911

1/ The functional grouping has been reorganized in 1968. However, for purposes of comparison with the 1968 Programme of Work, the old grouping has been maintained in this report of activities.

Group 5 (cont'd)

UNEP/FA

<u>THE AMERICAS</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Peru	Formulation of Projects for the Production of Nitrogen, Phosphate and Potash Fertilizers (195-5)	1/6		13,300

EUROPE/MIDDLE EAST

Isreal	Fellowships in Fertilizer Industry (243-5)	1/6	1/6	9,200
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Regular Programme

AFRICA

Congo (Democratic Republic of)	Fertilizer Production and Marketing	1/1 week		500
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EUROPE/MIDDLE EAST

Syria	Natural Gas Development (ID-513)	1/6		15,000
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SIS

AFRICA

Guinea	Production of Organic Fertilizers (67/197)	1/1½		4,000
Madagascar	Nitrogen Fertilizers Production and Export Possibilities (67/192)	1/1½		4,000
Rwanda	Uses of Methane Gas (68/323)	1/11 days		400
Sudan	Ammonia and Urea Fertilizer Plant Specifications (67/152)	1/3		7,000
Uganda	Fertilizer Industry; Investment and Market Arrangement (68/324)	1/1 week		1,000
United Arab Republic	Urea and Ammonium Sulphate Projects Preparation (67/57)	1/10 days		3,000

Group 5 (cont'd)

SIS (cont'd)

<u>THE AMERICAS</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Bolivia	Evaluating tenders for the Installation of a Petro-chemical Industrial Complex (68/269)	1/2 weeks		2,500
Ecuador	Organic Materials and Com- post Fermentation for Ferti- lizers (67/236)	1/12		24,000
<u>ASIA/FAR EAST</u>				
Indonesia	Problems of Superphosphate Plant Operation (68/379)	3/3		5,800
Iran	Feasibilities of Manufacturing Phosphorus Based Pesticides (68/352)	1/2 weeks		2,200
<u>EUROPE/MIDDLE EAST</u>				
Syria	Possibilities of further Assistance to the Fertilizer Industry (67/204)	1/1 week		481
Syria	Evaluation of Tenders for a Triple Superphosphate Project (68/270)	1/2		5,000
Syria	Nitrogen Fertilizer Project (68/309)	2/18		34,100
Syria	Study of Fertilizer Requirements and Urea Production (68/325)	1/6		11,000

Supporting activities

175. The major portion of the proposed 1968 programme for this sector was carried out although shortage of funds and, during the first half of the year, lack of professional staff affected its implementation to some extent. The recruitment and availability of professional headquarters staff improved considerably during the second half of the year. Due to a lack of financial

Group 5 (cont'd)

resources, however, the preparatory meeting for the governmental World Fertilizer Congress and the publication of the "World Fertilizer Report" were postponed.

**Meeting of the Ad Hoc Group of Experts from Fertilizer
Deficient Countries**

176. On the basis of recommendations of the Athens Symposium (ID/B/1, Annex I, para.23), and of the Ad Hoc Expert Group Meeting on Fertilizer Production in Six Selected Countries, held in New York from 9 to 16 December 1966 (ID/5), the Meeting of the Ad Hoc Group of Experts from Fertilizer Deficient Countries was held at UNIDO headquarters from 6 to 10 May 1968. Five experts from fertilizer deficient countries (Brazil, India, Mexico, the Sudan and the United Arab Republic) attended the Meeting; the expert from Indonesia could not attend. Five consultants from fertilizer surplus countries (Austria, the Federal Republic of Germany, Japan, the United Kingdom and the United States of America) also participated; the consultant from the Union of Soviet Socialist Republics could not attend. A total of US\$10,000 was allocated for this project. The report containing a certain number of recommendations is being printed as document ID/13 and will be issued in 1969.

Publication cost: US\$5,000

Ref: ID/B/20/Rev.1, para.95(a)

**Ad Hoc Consultative Panels of Experts and Financiers from Developed
and Developing Countries**

177. During the discussions in the second session of the Industrial Development Board, there was general agreement on the importance of a meeting for the promotion of fertilizer industry in Asia (ID/B/41, para.130). Due to budgetary reasons this meeting could not be held in 1968, but it is included in the 1969 Work Programme. The meeting will be called "Fertilizers and Pesticides Promotion and Development Meeting", and will take place in the ECAFE region.

Ref: ID/B/20/Rev.1, para.95(b)

Group I (cont'd)

Preparatory Meeting for the Preparation of the World
Fertilizer Program

178. Although one delegation to the second session of the Industrial Development Board offered host country facilities, to be financed from its national contribution (ID/B/41, para.121), the preparatory meeting for this Congress had to be postponed due to logistical reasons. It is now proposed to hold it on a reduced scale in 1971 as the Second Interregional Seminar on Fertilizer Production.

Ref: ID/B/20/Rev.1, para.95(c)

Survey of fertilizer production facilities by regions

179. The plans for a "World directory of fertilizer production facilities" were re-assessed in 1968 in accordance with the recommendations of the Industrial Development Board (ID/B/41, para.129) and were modified by basing them on a regional approach. The first regional survey was undertaken in cooperation with ECA in 1968. The East African region was surveyed by a UNIDO staff member, and the North and West African region by an outside consultant. A similar survey for Asia will be completed, jointly with ECAFE, in 1969 and one for Latin America will be carried out jointly with ECLA in 1970.

Total project cost: US\$1,000

Ref: ID/B/20/Rev.1, para.96

Feasibility studies for the manufacture and marketing of
multi-nutrient fertilizers

180. The UNIDO secretariat is participating in the "Feasibility studies for manufacture and marketing of multi-nutrient fertilizers" at the Centre for Industrial Development in Amman, Jordan (JOR-13) which is a UNDP/SF project.

Publications

181. In addition to the papers mentioned above, the following techno-economic studies are being published under the Fertilizer Industry Series:

Printed in 1968

ID/Ser. F/1

Chemical fertilizer projects: Their creation, evaluation and establishment.

Allocation

US\$1,147

Language

E S
(F-1969)

Group 5 (cont'd)

Printed in 1968 (cont'd)

		<u>Allotment</u>	<u>Language</u>
ID/Ser.F/2	Guide to building an ammonia fertilizer complex	US\$ 1,000	E (F S I P J A)
CID/15	Fertilizer manual	US\$ 1,000	E S
ID/2	Fertilizer technology production and use (Kiev Seminar papers)	US\$ 100,000	E (F S I P J A)
ID/5	Fertilizer Production in six selected countries with good natural gas resources (Report of the Meeting of the Ad Hoc Expert Group)	US\$ 1,200	E S

To be printed in 1969

ID/Ser.F/3	Reduction of sulphur needs in fertilizer	US\$ 2,087	E F S
ID/Ser.F/4	Ammonium chloride and soda-ash dual manufacturing process in Japan	US\$ 1,010	E F S
ID/Ser.F/5	New process for production of phosphate fertilizers	US\$ 1,147	E F S

The "World fertilizer report", originally planned for publication in 1968, has been postponed for budgetary reasons.

Ref: ID/B/20/Rev.1, para.100 and 101

Co-operation with the regional economic commissions

182. In addition to the co-operative efforts between UNIDO and the regional economic commissions, two studies were commissioned in 1968 which have a bearing on all the regions and particularly on Africa: "Critical study of different nitro-phosphate processes" (completed) and "Study on the utilization of by-product gypsum for production of sulphuric acid". Also in 1968, ECLA was requested to prepare a study on "Supply and demand position of fertilizers in the Latin American region". Discussions were held with ECAFE in August 1968 with the aim of harmonizing the work programmes of UNIDO and ECAFE in this sector.

Project allocation: US\$7,500

Ref: ID/B/20/Rev.1, para.97, 98 and 99

Group 6 Light Industries

Field activities

Food industry

183. The assistance in the field of food industry, requested from UNIDO by developing countries, had to do mainly with the elaboration of local raw materials, for by utilizing local raw materials, the indigenous food industry could reduce the volume of imported goods. Special attention was given to the establishment of plants for the production of vegetable oil. In several incidences feasibility studies for the establishment of plants to elaborate feedstuffs were prepared. Such plants, using by-products of the vegetable oil industry that previously have been wasted could contribute towards the production of goods which, at present, have to be imported.

184. UNIDO has been assisting various countries in food research aimed at creating conditions for the adaptation of technology or methods of production. Technical assistance was frequently given in the reorganization of meat plants, where the basic problems were usually the low quality of the raw material and managerial deficiencies. Assistance was also given to improve the technology related to the elaboration of products that represent the staple food for many countries, e.g. milling of millet and industrialization of cassava. Both these products are widely used in many African and Latin American countries. UNIDO has also rendered assistance in the reorganization of plants for fruit and vegetable processing, milk reconstitution, coffee processing, canning of citrus fruits, fishmeal production and milling.

Textile industry

185. Most of the technical assistance given in this field was in planning for the textile industry on a national level. Assistance was also given in plant reorganization, marketing, quality control, better use of raw materials, garment industry establishment, management and research. Summarizing the technical assistance given in the textile industry, three main areas demanded the most attention: general policy guidelines on the establishment of the industry; advice on appropriate quality control methods; and guidance on selection of equipment.

Group 6 (cont'd)

Wood industry

186. Assistance provided to the wood industry in 1968 dealt with improvement in the design and production of furniture, feasibility surveys for wood processing industries and improvement of the quality of wood-based panels. Assistance was also given to a match factory and a plywood mill. UNIDO's activities in the wood industry sector began in 1968 and the number of requests is growing steadily, including requests for preparation of UNDP/SF projects.

Leather industry

187. In the leather and leather products sector, the most frequent requests were for shoe industry development, hides and skins grading and marketing, tanning production reorganization and research on leather technology.

188. The results obtained were of vital importance to the various countries being assisted. The experts made suggestions on how to make better use of hides and skins, diffused modern methods of tanning and assisted in the development of the production of footwear and other leather products. Special reference should be made to the assistance given to an advanced research laboratory which was basically created under the guidance of a UNIDO expert. This laboratory is assisting one of the largest leather products exporters in the world.

189. The following is a listing of the field activities of Group 6 during 1968.

		<u>UNDP/TA</u>		
<u>AFRICA</u>			<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>
				<u>Cost</u> <u>US\$</u>
Guinea	Development of the Chemical Industry (149-61)		1/12	22,000
Morocco	Textile Industry Development (421-57)		1/11	22,000
Nigeria	Food Processing (10-61)		1/24	34,800

11/3/67
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Industrial Cooperation

TIDP/A (cont'd)

<u>THE AMERICAS</u>		<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
		<u>m/m</u>	<u>m/m</u>	<u>US\$</u>
Argentina	Wool Technology Problems of Industrial Research (111-94)	1/3		5,700
Argentina	Leather Processing (111-57)	1/6		11,340
Dominican Republic	Specifications for Raw Materials and Products in Light Industries (1000-68)	1/12		17,000
Jamaica	Leather Industry Improvement (8006-68)	1/12		23,100
Venezuela	Development of the Textile Industry (X80-25)	1/12		28,000
Venezuela	Installation of a Pilot Plant for Food Products (X80-25)	1/6		14,400
<u>ASIA/FAR EAST</u>				
Ceylon	Operation of Textile Plant (ID-482)	1/12		22,000
Indonesia	Production Problems and Quality Control of Textile Industry (43-57)	1/6		10,800
Iran	Long-range Programme for the Food Processing Industries (220-57)	3/18		34,650
Iran	Food Industry Production Problems (220-57)	1/6		11,400
Malaysia	Operation of Leather Tannery (19-66)	1/12		21,000
Malaysia	Improvement of Leather-products Industries (19-66)	1/12		21,000
Mongolia	Production of Packaging Material (27-67)	1/3		5,500
Mongolia	Improving Technological Processes for Leather (27-67)	1/12		21,900
Nepal	Feasibility Studies of Cotton Textile Production (83-65)	1/2		3,850
Nepal	Industrial Feasibility Survey of Wood Products (83-65)	1/2		3,850
Papua	Development of a Clothing and Textile Industry (16-67)	1/9		17,000

Group C (cont'd)

UNDP/FA (cont'd)

<u>EUROPE/MIDDLE EAST</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Bulgaria	Use of Modern Contact Glues in the Manufacture of Furniture (269-65)	1/1		2,000
Bulgaria	Improvement of Design and Production in the Furniture Industry (269-65)	1/1		2,100
Israel	Fellowships in Diamond Cutting (243-57)		1/3	2,500
Yugoslavia	Sawdust Panel Manufacturing (249-57)	1/2		3,000

Regular Programme

AFRICA

Sudan	System of Grading and Standardization of Oil Seeds (ID-235)	1/11		20,900
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THE AMERICAS

Uruguay	Productivity of the Food Processing Industry (ID-858)	1/6		9,500
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ASIA/FAR EAST

Regional	Regional Industrial Adviser with ECAFE (ID-1083)	1/12		23,750
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EUROPE/MIDDLE EAST

Spain	Development of Footwear Industries (ID-506)	1/3		5,700
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SIS

AFRICA

Algeria	Reorganization of Biscuit and Pastry Factories (67/85)	1/6		14,000
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Group 6 (cont'd)

SIS (cont'd)

<u>AFRICA (cont'd)</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Algeria	Management of Fruit and Vegetable Processing Plants (67/86)	1/6		14,000
Algeria	Study for a Milk Reconstitution Plant (68/283)	1/3		7,500
Central African Republic	Feasibility Study for Cassava Industrialization (68/351)	1/3		6,200
Chad	Technical and Economical Analysis of Meat Complex (68/349)	1/3		6,200
Congo (Brazzaville)	Modernization of Palm Oil Extraction Plants (67/151)	1/4		9,000
Congo (Brazzaville)	Study of an Agro-industrial Complex to Manufacture Canned Pineapple (67/171)	1/2		5,000
Ethiopia	Hides and Skins Purchasing and Export Organization for Leather Producing and Processing Industry (67/141)	1/12		25,000
Ethiopia	Meat Processing Operations (68/282)	1/12		23,100
Guinea	Establishing a Laboratory for Vegetable and Essential Oils (67/186)	1/3	1/6	10,600
Guinea	Techno-economic Feasibility Study of a Cotton Ginning Pilot Plant (67/187)	1/2		5,000
Kenya	Feasibility Study on Dry and Wet Maize Milling (67/122)	1/4		10,000
Kenya	Feasibility Study of a Castor Oil Factory (67/124)	1/1½		5,000
Kenya	Analysing Techno-economic Problems of the Textile Industry (67/157)	2/6		15,000
Madagascar	Setting up of Vegetable Oil Plant (67/154)	2/24	4/19	60,500
Mali	Improvement of Meat Processing Production (67/183)	2/6		13,000
Mauritius	Evaluation of a Feasibility Report for the Establishment of a Textile Industry (67/137)	1/2		5,000

Group 6 (cont'd)

SIS (cont'd)

<u>AFRICA</u> (cont'd)		Experts m/m	Fellows m/m	Cost US\$
Niger	Five-year Programme of Development of the Agro-industry in Niger (67/249)	1/2		6,000
Rwanda	Establishment of a Malt Factory (68/328)	1/2		5,000
Rwanda	Fruit and Vegetable Processing (68/329)	1/3		2,000
Rwanda	Development of the Tea Industry (68/330)	1/3		6,200
Somalia	Survey of Food Processing Plants (67/140)	1/2-3 weeks		1,000
Somalia	Operation of the Chisimaio Plant (68/287)	1/6		11,000
Sudan	Personnel Training of Food Processing Plants (68/257)	1/3		7,000
Sudan	Leather Production Technology and Marketing (68/262)	4/24		58,000
Togo	Establishment of a Plant to Manufacture Dry Cassava Flakes (67/166)	1/6		14,000
Tunisia	Increasing Efficiency of Fruit-Oil Processing (67/73)	1/6		14,000
Uganda	Survey of Food Processing (68/255)	1/1 week		250
United Arab Republic	Extension of Cotton Textile Facilities (67/83)	1/2		4,000
United Arab Republic	Establishment of a Central Textile Research and Development Institute (68/274)	2/3½		7,300
United Arab Republic	Production of Raw and Natural Silk (68/291)	2/12		26,000
Upper Volta	Exploratory Mission for Millet Milling (68/319)	1/1		5,500
Upper Volta	Development of the Vegetable Oil Processing Industry (68/320)	1/3		6,200
Upper Volta	Development of the Fish Processing Industry (68/321)	1/2		5,000

Group 2 (cont'd)

SIS (cont'd)

<u>THE AMERICAS</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Argentina	Food Processing Development (67/206)	1/12		24,000
Argentina	Operation of Textile Laboratory and Establishment of Quality Control (67/207)	1/3		24,000
Brazil	Possibilities of Assistance to the Food Industry (67/241)	2/20 days		3,800
Brazil	Rehabilitation of Textile Mill (68/259)	2/2		6,000
Ecuador	Processing of Naranjilla Fruit (67/98)	1/2 weeks		750
Ecuador	Assistance to the Industrial Centre for Development of Textile Production (68/302)	4/12		24,800
Guyana	Food Industries Productivity and Quality Improvement (68/355)	2/7½		14,000
Peru	Analysis of Industrial Production Costs of the Textile Industry (67/188)			19,500
Trinidad and Tobago	Food Processing Industry (67/90)	1/½		950
<u>ASIA/FAR EAST</u>				
Ceylon	Survey of Textile Industry (67/216)	2/8		20,000
Ceylon	Vegetable Oil Industry (67/222 67/243)	2/24		48,000
India	Footwear Machinery and Equipment (66/17)	1/12		32,000
India	Development of Chrome Tanning Pro- cesses for Village Tanneries (68/288)	1/3		9,000
Laos	Match Factory Production Methods (68/336)	1/3		6,200
Malaysia	Textile Marketing Policy (67/112)	1/8		19,000
Malaysia	Leather Tanning Quality Improvement (67/244)	1/6		14,000

Group 1 (cont'd)

SIS (cont'd)

<u>ASIA/FAR EAST (cont'd)</u>		<u>Experts</u>	<u>Follow-up</u>	<u>Cost</u>
		<u>m/m</u>	<u>m/m</u>	<u>US\$</u>
Singapore	Improvement of Wooden Furniture Product Design (68/333)	1/0		11,000
Singapore	Modernization and Expansion of Woodworking Establishments (68/337)	1/0		11,000
Singapore	Modernization and Expansion of Printing Establishments (68/338)	1/0		11,000
Singapore	Modernization and Expansion of Fancy Leather Products Industries (68/339)	1/0		11,000

EUROPE/MIDDLE EAST

Spain	Development of the Textile Industry (68/396)	1/1		13,000
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Funds-in-Trust

AFRICA

Libya	Management of Vegetable Oil Operations (XBO-460)	1/12		23,100
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Supporting activities

190. Most of the 1968 work programme for light industries was implemented. In the textile industry sector the work was based essentially on the Lodz Conference on Textiles and on the experience gained in the meeting on selection of machinery in the cotton industry, held in Vienna 1967. In industrial food processing, part of the programme - the meeting on refrigeration - was postponed until 1969 due to the lack of time for preparation. It was possible, however, to carry out a seminar on agro-industries which was of considerable interest to several developing countries. Regarding co-operation with other United Nations bodies, various positive results were achieved, in

Group 6 (cont'd)

Technological and economic aspects of establishing textile industries in developing countries

124. The UNIDO publication on "Technological and economic aspects of establishing textile industries in developing countries" (ID/) is based on a working paper submitted by CID (now UNIDO) to the First United Nations Interregional Workshop on Textile Industries in Developing Countries, held in Lodz, Poland in September 1965. The basic paper was revised and supplemented by UNIDO in 1967. The publication contains information on processes, new production and administrative methods and other matters relevant to a successful development of the textile industry in developing countries.

Ref: ID/B/20/Rev.1, para.111(d)

Seminar on Integrated Food Processing (new project)

195. This Seminar, held by UNIDO in Novi Sad, Yugoslavia from 4 to 28 November 1968, provided representatives of governmental departments and of industry in developing countries with an opportunity of acquainting themselves with the latest methods of organization of agro-industrial combines in a country where this form of vertical integrated food processing had already reached an advanced level.

196. The possibility of organizing this Seminar in Yugoslavia was discussed during the Athens Symposium. About twenty participants from all over the world attended the Seminar, heard lectures, discussed papers and visited agro-industrial establishments. Most of the participants were from countries that had requested technical assistance in this field or that had expressed interest in this form of production organization.

197. As a result of this Seminar approximately twenty fellowships in food processing have been programmed for 1970. The texts of the courses held within the Seminar will be published in a manual to serve as a guide for the establishment of agro-industrial combines in developing countries.

Cost: US\$25,000 from UNDP/TA Savings
US\$ 4,200 from Consultant Funds
amount equivalent to US\$23,000
Yugoslav Government contribution

Group 1 (cont. 1)

Meetings on Refrigeration Techniques and Equipment Standards

199. This Meeting, scheduled for 1968, could not be held due to organizational difficulties. The Institut für Lebensmittelchemie of the University of Stuttgart, Federal Republic of Germany, agreed to co-operate in the holding of this meeting which will take place in Vienna in the last week of February 1969. The funds scheduled for this meeting were reallocated to other UNIDO projects. The background papers for this meeting were prepared and distributed in 1968.

Cost: US\$9,000 from Consultant Funds Ref: ID/B/20/Rev.1, para.110 and 111(c)

Studies and publications under the Food Industry Series

199. Four special service agreements have been signed for information papers on food processing development at a cost of US\$4,000 and the following studies were prepared in 1968:

"Packaging, packaging materials and techniques in developing countries" (ITD/7)

"Water saving techniques in food processing plants"

"Production of foodstuffs and protein enriched mixtures and concentrates"

"Presentation of up-to-date flash sterilization methods for milk processing in developing countries"

"Starch production in developing countries"

Two documents were printed in English in 1968:

ID/Ser.I/1 "Centrifugal evaporators"
(French and Spanish versions to be printed in 1969)

ID/Ser.I/2 "Industrial processing of citrus fruit"
(Spanish version to be printed in 1969)

Co-operation with regional economic commissions and UNESOB

200. Preliminary contacts were established in 1968 with ECA, ECAFE and ECLA with regards to activities in the textile industry. These bodies have co-operated with UNIDO in various field activities such as briefing and assisting UNIDO field experts.

Group 7 (cont'd)

201. A joint UNIDO/ECAFE programme was established in 1968 for the realization of a seminar on rice processing to be held in 1970. Preparatory work will be undertaken in 1969. Another joint programme with ECA for a working group on cassava industrialization to be prepared in 1969 and held in 1970.

202. Preliminary contacts with FAO and ECLA were established in 1968 with a view to undertaking preparatory work in 1969 leading to a series of surveys in 1970 on the subject of food processing in Latin America. These surveys will be the basis for a seminar, to be held in 1971, focussing on regional co-operation in the Latin American food industry.

INDUSTRIAL SERVICES AND INSTITUTIONS DIVISION

Group 7 Industrial Legislation, Patents and Licensing^{8/}

Field activities

203. Up to the end of 1968, UNIDO had received only a few requests for technical assistance in the field of industrial legislation. The two requests received in 1968 were for assistance in the drafting of necessary legislation on weights and measures and of legislation on fire safety in industry. However, developing countries are showing increasing interest in this field, and it is expected that the special missions undertaken by UNIDO in October and November 1968 concerning the industrial legislation series and other promotional work will result in more assistance requests in 1969.

^{8/} The functional grouping has been reorganized in 1969. However, for purposes of comparison with the 1968 Programme of Work, the old grouping has been maintained in this report of activities.

Group 7 (cont'd)

204. The following is a listing of the field activities of Group 7 during 1968.

		<u>UNDP/TA</u>		
<u>THE AMERICAS</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Argentina	Weights and Measures Legislation (111-87)	1/4		7,560
<u>ASIA/FAR EAST</u>				
Nepal	Industrial Legislation (82-61)	1/3		6,000
		<u>SIS</u>		
<u>ASIA/FAR EAST</u>				
Singapore	Legislation on Fire Safety Standards (67-129)	1/6		15,000

Supporting activities

205. In 1968 work in the field of industrial legislation, patents and licensing was primarily of a preparatory nature, in connexion with the proposed publication of an industrial legislative series. The work included visits to a number of developing countries; it is expected that these visits will lead to requests by developing countries for technical assistance in the coming years. The over-all activity of UNIDO in this field was restricted, however, in 1968 by very limited staff resources.

Advisory meetings of experts on industrial patents

206. A proposed advisory meeting of experts on industrial patents with special regard to the developing countries was cancelled because there was no evidence of a clear need for an additional general meeting in this field.

Ref: ID/B/20/Rev. 1, para. 11^g

Studies and research

207. At its second session the Industrial Development Board expressed strong support for the collection by UNIDO, in co-operation with other interested organizations, of information on legislation affecting industrialization (see ID/B/41, para. 11). In response to this interest, UNIDO has

Group 7 (cont'd)

taken the following steps in 1968:

A bibliographical survey of existing publications covering industrial legislation in developing countries was prepared.

Ref: ID/B/20/Rev. 1, para.119

Contacts were established with associations and publishers who might be interested in co-operating with UNIDO in the publication of the legislation series. Concurrently, agencies and government departments responsible for the publication of industrial legislation were contacted.

Ref: ID/B/20/Rev.1/Add.1, para.119

After consideration of these factors, it was determined that the most useful form of UNIDO effort in this field would probably be a series of subregional reports, describing and analysing legislative provisions affecting industrialization in the various areas. These would be designed to help developing countries benefit from each other's experience in this field and to provide useful information to potential investors.

A detailed outline of a proposed coverage of such reports was then prepared and a UNIDO staff member and two consultants visited selected countries in Africa and Asia to test this outline and prepare first drafts of the proposed reports.

Cost: US\$10,000 (US\$2,000 from travel funds and US\$8,000 from Consultant Funds)

Group 8 Industrial Research, Standardization and Quality Control, Industrial Information 2/

Field activities

208. Through to and including 1968, UNIDO received a considerable number of requests for technical assistance in the field of industrial research and standardization. Most of the projects were concerned with the establishment or strengthening and expanding of research and standardization institutions financed through UNDP/SF. UNIDO supervised seven such projects in 1968.

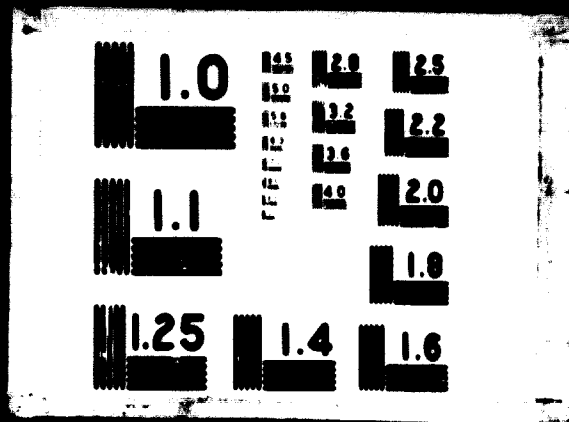
2/ The functional grouping has been reorganized in 1968. However, for purposes of comparison with the 1968 Programme of Work, the old grouping has been maintained in this report of activities.



31.7.74

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Group 2 (cont'd)

There were also in 1968 a number of technical assistance projects of individual experts who advised government departments on industrial research and standardization policies and on ways and means of consolidating them within the framework of the departments. Requests received in 1968 indicate that both types of assistance will continue and increase in 1969.

209. Field activities in the area of industrial information and promotion during 1968 consisted of the attachment of industrial information and documentation advisers to UNDP/SF projects.^{10/} In addition, an expert rendered advice on the establishment and operation of local industrial information, documentation and extension services. All these activities were designed to reinforce the national infrastructure, which is one of the main prerequisites for the functioning of an international network for the exchange of industrial information.

210. The following is a listing of the field activities of Group 8 during 1968.

		<u>UNDP/SF</u>		
<u>AFRICA</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Sudan	Industrial Research Institute. Khartoum (SUD-12)	6/54	4/12	2,159,039
 <u>THE AMERICAS</u>				
Colombia	Institute for Technological Research, Bogota, Phase II (COL-30)	8/17	4/27	1,763,700
Paraguay	Technical Standards National Institute (PARA-8)	6/66	6/44	1,232,151
Regional	Central American Research Insti- tute for Industry (ICAITI) Phase II (REG-68)	2/24	6/72	1,539,000
 <u>ASIA/FAR EAST</u>				
Thailand	Thailand Technological Research Institute, Bangkok (THA-16)	8/36	1/6	3,013,300

^{10/} TUN-15, SAA-14 and REG-72 (Africa).

Group 8 (cont'd)

UNDP/SR (cont'd)

<u>EUROPE/MIDDLE EAST</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Israel	Israel Industrial Research Centre (ISR-11)	13/00	10/00	10,32,100

UNDP/TA

AFRICA

Ethiopia	Establishment of a National Standards Institution (9-63)	1/12		22,000
Libya	Planning and Organization of Chemical Research Programme (282-63)	1/12		22,000
Libya	Organizing Specification and Standardization Section (XBO-460)	1/12		23,100
Nigeria	Directing the Federal Institute of Industrial Research (10-61)	1/24		34,800

THE AMERICAS

Argentina	Establishment of a Laboratory of Applied Combustion (111-57)	1/2 days		
Barbados	Elaboration of Industrial Standards System (87-63)	1/12		23,100

ASIA/FAR EAST

Afghanistan	Introduction and Implementation of the Metric System (155-63)	1/12		19,900
Burma	Establishment of a Metrology Laboratory (1-57)	1/8		10,920
Indonesia	Integration and Co-ordination of Industrial Research (43-57)	1/6		10,800
Iran	Planning and Execution of a Programme of Standardization (220-57)	1/12		23,100
Iran	Preparation and Implementation of National Standards (220-57)	1/12		23,100
Iran	Preparation and Implementation of National Standards (220-57)	1/12		23,100

Group 8 (cont'd)

UNDP/TA (cont'd)

<u>ASIA/FAR EAST (cont'd)</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Singapore	Industrial Research Facilities and Their Improvement (203-67)	1/8		17,000
Thailand	Analysis and Appraisal of Applied Scientific Research (82-57)	1/12		17,650
Thailand	Establishment and Implementation of Industrial Standards (82-57)	1/12		17,650

EUROPE/MIDDLE EAST

Bulgaria	Fellowships in Hydraulics (236-67)		4/21	7,500
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Regular Programme

AFRICA

Morocco	Organization of an Industrial Information Service (ID-82)	1/3		5,700
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THE AMERICAS

Regional	Technological Research in Industry (ID-495)	1/12		17,300
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ASIA/FAR EAST

Iran	Increased Efficiency of Industrial Research Institute and Standards Organization (ID-272)	1/12		24,300
Regional	Regional Adviser on Industrial Research Attached to ECAFE (ID-1083)	1/12		23,750
Regional	Regional Adviser on Industrial Standardization Attached to ECAFE (ID-1084)	1/11		28,180

Group 8 (cont'd)

SIS

		<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
		<u>m/m</u>	<u>m/m</u>	<u>US\$</u>
<u>THE AMERICAS</u>				
Brazil	Establishment of Industrial Research Centre (67/23)	1/1		7,000
Brazil	Establishment of Industrial Standards (68/264)	2/8		21,000
<u>ASIA/FAR EAST</u>				
China	Review of the Programme of Research of the Union of Industrial Research Institute (68/392)	1/12		23,100
<u>EUROPE/MIDDLE EAST</u>				
Bulgaria	Establishment of a Packing Media Research and Experimental Institute (68/268)	1/1		2,500

Supporting activities *

211. During 1968 UNIDO continued its work in the area of industrial research by supervising technical assistance to research institutions in the developing countries and by preparing new projects. Promotional activities designed to improve applied industrial research and to develop closer co-operation of research institutions on regional and interregional levels were undertaken in 1968 in co-operation with the regional economic commissions.

Industrial research, standardization and quality control

212. In the field of standardization, UNIDO concentrated its activities in 1968 on setting up and supporting national or regional machinery for the application of standards in co-operation with the regional economic commissions and the International Organization for Standardization (ISO).

Group 2 (cont'd)

Expenditures on research and studies

213. A proposed international meeting on industrial research institutes in developing countries and a proposed seminar on industrial quality control were cancelled due to non-availability of funds.

Ref: ID/3/10/Rev.1 para.126

Promotional activities

214. Preparatory work was started on a directory of industrial and technological research institutes. Preparatory work was begun also on a proposed meeting to be held in early 1969, which will work out the objectives, membership, financial requirements and activities of the planned International Association of Industrial Research Institutions. In addition, UNIDO participated in the 1968 ISO Council Meeting where assistance to developing countries in the field of standardization was discussed. Discussions were held also with the secretariat of ISO concerning UNIDO/ISO collaboration in projects of assistance to developing countries and concerning a proposal for establishing a standards documentation centre.

Publications

215. The "Manual on the training of managers of research institutes", scheduled for publication in 1968, will be delayed until mid-1969.

Industrial information

216. In the field of industrial information UNIDO concentrated its activities throughout 1968 in developing the industrial information and promotion service as reported below.

Central Industrial Information Clearinghouse

217. Arrangements have been made to establish a network of correspondents to collect pertinent information from research and documentation centres in developed countries and to channel inquiries and answers between industry

Group 2 (cont'd)

and developing areas. A sum totalling 25 per cent of the amount of the Government of Austria was committed in 1968 for the repair of equipment for the Clearinghouse as well as for outside services and information material.

Cost: US\$12,500

Ref: ID/B/20/Rev.1, para.126

**Advisory service for the supply of industrial equipment
to developing countries**

218. As recommended by an expert group which met in November 1967 in response to ECOSOC resolution 1183 (XLI), UNIDO has established a service to provide information to Governments of developing countries on the selection and procurement of industrial equipment. In 1968 the service concentrated on building up comprehensive and selective lists of suppliers and their products. The service became operational in July 1968.

Cost: US\$2,750 from Consultant Funds Ref: ID/B/20/Rev.1, para.128(a)

Directory of industrial agencies

219. Compilation of a complete directory of industrial agencies was completed for four countries in 1968; the directory is ready for publication. In addition, preliminary lists of institutes and agencies have been identified in 30 additional countries.

Ref: ID/B/20/Rev.1, para.128(c)

Industrial inquiry service

220. The industrial inquiry service of UNIDO has been in operation for almost three years. It collects information from other parts of UNIDO's Industrial Information Clearinghouse and from outside specialists and organizations, and answers numerous requests for information on a variety of industrial problems.

Ref: ID/B/20/Rev.1, para.124

Group 2 (cont'd)

Collection of technical assistance reports and
feasibility studies

221. A number of technical assistance reports and feasibility studies made by the United Nations and by other international organizations have been collected and catalogued in 1967. Arrangements are being completed for assimilating a large catalogue and collection of such reports, an operation previously carried out by the USAID. Similar co-operative activities will be developed with the Governments of other industrialized and developing countries and with international agencies.

Ref: ID/B/20/Rev.1, para.124 and 125

Roster of industrial consultants

222. Information on industrial consultants from all over the world has been collected and systematized, and requisite registration forms have been prepared. Possible storage and retrieval systems for the roster were studied, and a computerized data processing system has been recommended that is applicable to the requirements of the Integrated Data System as a whole.

Ref: ID/B/20/Rev. 1, para.124 and 125

Technical library and reference centre

223. The technical library and reference centre serves the UNIDO staff and provides information for dissemination to developing countries through the other parts of the Industrial Information Clearinghouse. It also provides background material for staff members or consultants. The library now has a collection of about 500 professional journals and 5,000 specialized books and reference works.

Cost: US\$22,500 (library budget)

Ref: ID/B/20/Rev.1, para.124 and 125

Direct contact operations

224. As a follow-up to its initial operation in Athens, 28 November to 19 December 1967, the industrial promotion service has contacted each registrant and has published a list of participants. Preliminary arrangements

Group 2 (cont'd)

have been made for similar operations at the Second Asian International Trade Fair in Teheran in 1969 and at the World Exposition in Osaka in 1970.

Cost: US\$31,500

REF: ID/B/20/Rev.1/Ann.1, para. 10

Matrix for the assessment of industrial opportunities

225. Following an expert's mission to five countries in Africa and Asia and the establishment of Industrial Opportunity Assessment Panels in four of those countries, data for these countries have been collected and systematized. Preliminary work has been carried out for the establishment of panels in other developing countries and a computerized system has been formulated for processing the data which have been and will be collected from these countries.

Cost: US\$8,000 from Consultant Funds Ref: ID/B/20/Rev.1, para.128(b)

Liaison with the Advisory Committee for the Application of Science and Technology to Development

226. UNIDO contributed to the work of the United Nations Advisory Committee for the Application of Science and Technology to Development and participated, in co-operation with other United Nations agencies concerned and with regional economic commissions, in the elaboration of the chapter devoted to the acceleration of industrialization in the Committee's World Plan of Action, 1970-1980.

Industrial Research and Development News

227. Three issues (ID/Ser.B/4, 5, 6) were published in English, with French and Spanish synopses, in 1968. Plans and preparations were made for quarterly publications starting in 1969. The "Industrial Research and Development News" serves as a means of communication between industrial research institutes, with the primary aim of serving those in developing countries, and between UNIDO and persons interested in the industrial development of these countries.

Ref: ID/B/20/Rev.1, para.129(a)

Group 9 (cont'd)

UNIDO Newsletter

219. Six issues of the "UNIDO Newsletter" were published in English, French and Spanish in 1968. It provides brief accounts of current UNIDO activities, including field projects, meetings and publications.

Ref: ID/B/20/Rev.1, para.129(b)

Industrial Abstracts Bulletin

220. Plans for this new publication were completed and material for the first issue has been compiled. The "Industrial Abstracts Bulletin" is to be issued quarterly in 1969.

Group 9 Industrial Consulting Services and the Organizational and Administrative Machinery for Industrial Development 11/

Field activities

230. There have been only a few requests in 1968 for short-term technical assistance in the field of the administrative machinery for industrial development. Such requests were concerned with assistance to government departments having the responsibility of the public sector of industry. As a result of promotional work undertaken by UNIDO in 1968, it is expected that requests for this type of project will increase in 1969 as well as for assistance in the establishment and strengthening of private industrial organizations such as industrial co-operatives.

231. The following is a listing of the field activities of Group 9 during 1968.

Regular Programme

<u>AFRICA</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Morocco	Development of Small-scale Industries (ID-82)	1/3		5,700

11/ The functional grouping has been reorganized in 1968. However, for purposes of comparison with the 1968 Programme of Work, the old grouping has been maintained in this report of activities.

Group 2 (cont'd)

SIE

		<u>Expenditure</u>	<u>Revenue</u>	<u>Balance</u>
		<u>m/m</u>	<u>m/m</u>	<u>\$2</u>
<u>AFRICA</u>				
Mali	Advisory Services to the Ministry for State-owned Enterprises (68/304)	1/0		1,000
Sudan	Organization and Administration of the Public Sector (67/60)	1/0		10,000
<u>ASIA/FAR EAST</u>				
China	Setting up Consulting Services for Medium and Large Industries on Low-cost Technological Improvements (67/104)	1/0		15,000

Supporting activities

232. In 1968 UNIDO concentrated its activities on three main programmes related to the establishment or improvement of (a) industrial development or promotion centres; (b) government departments of industry and non-governmental organizations promoting the process of industrialization; and (c) certain novel types of institutions designed to mobilize resources for industrial improvement and expansion.

233. With regard to (a) and (b) above, UNIDO continued its promotional work and responded to several requests from Governments of developing countries for short-term assistance in reorganizing the public sector of industry, and in strengthening the administrative machinery of departments of industry.

234. UNIDO also undertook preparatory work with a view to the possible establishment of institutions, mentioned under (c) above, likely to have a catalytic effect on industrial development so that the injection of relatively limited resources by UNIDO would result in the mobilization of larger resources from external sources. Two feasibility studies were carried out on this subject: one on the establishment and promotion of international equity capital funds (first phase), and one on the establishment and promotion of franchising organizations.

Group 9 (cont'd)

Organization and administration of industrial services

235. The Regional Workshop on the Organization and Administration of Industrial Services in Asia has been postponed until 1969. Arrangements are in progress to hold this workshop in one of the Asian Republics of the Union of Soviet Socialist Republics.

Ref: ID/B/20/Rev.1, para.141

236. In continuation of previous work undertaken in 1966 and 1967, three more reports on the organization and administration of industrial services in developing countries were finalized and mimeographed in 1968.

Promotional activities

237. UNIDO joined UNESCO in the inaugural session for the establishment of the World Federation of Engineering Organizations (WFEO), held in Paris. UNIDO and UNESCO will assist the new engineering organization to carry out its role effectively in the field of industrial development.

238. A feasibility study was undertaken with the assistance of a consultant on the creation of special UNIDO-sponsored industrial equity funds which would supplement funds from entrepreneurs and loan capital from traditional financing institutions.

Cost: US\$4,650 from Consultant Funds

239. A feasibility study was prepared to investigate the possibility of establishing medium industry multiple plant chains as a new arrangement to bring adequate input of foreign capital and technical resources into medium-sized industries in developing countries. This study explores, in particular, possible adaptations of the franchise method for this purpose.

Cost: US\$7,500 from Consultant Funds

240. During the year, UNIDO explored areas of joint action with ILO to provide technical assistance to industrial co-operatives. It is envisaged that these preliminary contacts will enable UNIDO to make a useful contribution to programmes already developed by ILO and also to new programmes to be developed jointly. Work was also started on a manual on industrial co-operatives, based on a study already issued in mimeographed form entitled "The nature and role of industrial co-operatives in industrial development".

Group 9 (cont'd)

Other studies and research

241. In 1968, UNIDO finalized and published in mimeographed form a study on "The role of professional associations and similar organizations in industrial development". This study complemented two other private-sector studies completed earlier, namely, "The role of manufacturers associations in industrial development" and "Trade union contributions to industrial development".

Publications

242. In 1968 a "Manual on the use of consultants in developing countries" was issued as document ID/3 in English, French and Spanish.

Cost: US\$7,300

Ref: ID/B/20/Rev.1, para.143

Group 10 Industrial Management and Industrial Training^{12/}

Field activities

Industrial management

243. The largest single project in the field of industrial management was the assistance provided by a team of OPAS personnel to an industrial holding corporation and its individual enterprises. Other projects involved assistance by teams of experts (e.g. a cost accountant and a production planning and control expert) to a group of similar enterprises. Individual experts, specialized in various management techniques, were assigned to individual enterprises, mainly under the SIS programme.

244. This type of assistance is considered by UNIDO as particularly important since it will enable industry in the developing countries to increase production and decrease cost without substantial new investments, thus improving its competitive position in the domestic and foreign markets.

245. Requests for the introduction of more sophisticated management techniques such as system analysis and electronic computer applications have been received from countries where the level of industry is relatively advanced.

^{12/} The functional grouping has been reorganized in 1969. However, for purposes of comparison with the 1968 Programme of Work, the 1968 grouping has been maintained in this report of activities.

Group 10 (cont'd)

247. Finally, UNIDO assisted organizations in developing countries in establishing their own management research facilities and in reviewing and improving training in specific management techniques, particularly in-service training in specific industries.

Industrial Training

247. In 1968 the largest project in industrial training was the establishment of an in-plant training centre financed by UNDP/SF. This project aimed at giving intensive practical employment and up-grading training for engineers in the metalworking industry. The need for introducing in-plant training schemes in the developing countries was reflected in the many requests from countries for studies and advice on the establishment of such schemes.

248. Requests were received for assessing the needs for industrial training in specific industries. In addition, a study was undertaken, within the framework of a UNDP/SF project (a centre for industrial studies), to make a survey of training institutions and to suggest the establishment of an

249. The following is a listing of the field activities of Group 10 during 1968.

		<u>UNDP/SF</u>		
<u>EUROPE/MIDDLE EAST</u>		<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
		<u>m/m</u>	<u>m/m</u>	<u>US\$</u>
Turkey	In-plant Training Centre for Engineers, Kirikkale (TUR-29)			4,420,300

UNDP/TA

AFRICA

Ghana	Establishment of Systematic Methods of Planning and Implementation of Production Targets (46-61)	4/56		79,400
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UNDP/A (cont'd)

<u>THE AMERICAS</u>		<u>Experts m/m</u>	<u>Follows m/m</u>	<u>Cost US\$</u>
Chile	Managerial Advice on Production, Programming and Quality Control (130-57)	1/12		25,000
<u>ASIA/FAR EAST</u>				
China	Corporate Planning, Technological Improvements and Training for Managers of Industrial Enterprises (320-67)	2/12		25,000
Indonesia	Design, Production Quality Control and Marketing of Straw Hats (43-57)	1/6		12,000
Indonesia	Increasing Productivity in the Industrial Sector (43-57)	1/12		23,100
Malaysia	Improvement of Leather Products Industries (13-66)	1/12		21,000
<u>EUROPE/MIDDLE EAST</u>				
Israel	Training in the Fields of Graphic and Industrial Designs (243-57)	2/4	2/6	12,400
Turkey	Chemical and Petrochemical Engineering, Gear Manufacturing, Forging and Management (Training) (277-51)	3/32		56,850

Regular Programme

THE AMERICAS

Barbados	Increase of Industrial Productivity (ID-1050)	1/3		5,700
Peru	In-plant Training of Executives (ID-837)	1/6		11,400

ASIA/FAR EAST

China	Solving Management Problems Related to Manufacturing Process (ID-599)	1/6	1/6	17,800
Iran	Organizing In-plant Training Programmes (ID-272)	2/6	2/12	14,500

Group 10 (cont'd)

		<u>SIS</u>		Cost
<u>AFRICA</u>		<u>Experts</u> m/m	<u>Fellows</u> m/m	<u>US\$</u>
Ghana	Management of Fibre Bag Manu- facturing Plant (68-1)	2/1	1/3	101,000
Ghana	Reorganization of the State Enterprises Secretariat (68-103)	13/200		400,000
Liberia	Steel Fellowship (68-1)		1/3	3,600
<u>THE AMERICAS</u>				
Brazil	Establishment and Management of Technical Services Unit (68-227)	2/24		56,000
Colombia	Assistance in Production Planning (68-278)	1/6		13,720
Jamaica	Maintenance Workshops, Problems of Management and Training (68-311)	1/6		11,000
<u>ASIA/FAR EAST</u>				
China	Application of New Productivity and Management Ideas (68-211)	5/18		40,000
India	Training Programme for Marketing and Export Promotion of Industrial Goods (68-366)	1/8	20/30	66,000
Indonesia	Improving the Management, Pro- duction and Control of Spinning Mills (68-174)	1/12		24,000
Indonesia	Improving the Organization and Management of State-owned Paper Mills (68-177)	2/24		43,000
Iran	Decision-Making System for Industrial Projects (68-359)	2/20 days		1,800

Funds-in-Trust

<u>THE AMERICAS</u>				
Jamaica	Footwear Production and Quality (XRO-42)	1/11		16,030

Group 10 (cont'd)

Supporting Activities

250. In 1968 UNIDO concentrated on several particular activities, including updating existing ones in the fields of management and training. On the management side, particular attention has been paid to developing further the concept of industrial consultation workshops (management clinics) and working out new approaches such as a consultant consortium and a UNIDO-university co-operative programme. On the training side, special emphasis has been put on expanding the in-plant group training programmes and exploring possibilities of establishing some of these programmes on a continuing basis^{13/} Priority was given to these activities and to the promotion and servicing of technical assistance projects. Continuing staff shortages had to be absorbed therefore by curtailing proposed meetings and studies.

Industrial Management

Industrial consultation workshops (management clinics)

251. A pilot management clinic was held in Gresik, Indonesia from 18 to 29 March 1968. It was conducted by a team of four outside consultants and a UNIDO staff member, the latter acting as team leader. Forty top executives from Indonesian industry and government officials participated. The external and internal factors influencing the performance of Indonesian industry were discussed by the participants and the UNIDO team, and recommendations for short and long-term action were made. The UNIDO team visited a selected number of enterprises in order to assist management in solving problems on the spot; findings were used as case studies for discussion in the clinic.

252. A second clinic, to be conducted in Yugoslavia and originally scheduled for November 1968, was postponed until the first quarter of 1969.

Cost: US\$10,000

Ref: ID/B/20/Rev.1/Add.1,
para.146(a) to 148

^{13/} IDB resolution 8(II).

Group 10 (cont'd)

Seminar on Quantitative Techniques of Management

253. This report was cancelled in 1969 as it had a lower priority; it may be taken up at a later date, either in the original form or as an expert group meeting. The proposed study on the same subject was also cancelled.

Ref: ID/B/20/Rev.1 para.149
and 150(b)

Consultant consortium

254. In order to start the work of the consultant consortium on a pilot basis in 1969, a consultant prepared in 1968 a preliminary study defining the organizational framework and the scope of work of the consortium. The project aims at developing a mechanism whereby the unutilized time of experts of consulting firms could be put to use on short-term assignments in developing countries.

Cost: US\$2,500

Ref: ID/B/26, para.165

UNIDO - university co-operative programme

255. A study was prepared defining the scope of activities that university professors and graduate students could carry out in the proposed UNIDO - university co-operative programme. The programme is aimed at developing a system of matching the availability of expertise available at universities with specific problems in the industrial field in developing countries.

Cost: US\$2,000

Ref: ID/B/26, para.167

Problems of industrial maintenance in the developing countries

256. The studies made earlier will be reviewed and closely co-ordinated with the UNIDO campaign on repair and maintenance, which started late in 1968. Emphasis is being put on specific problems faced by the developing countries in the field of repair and maintenance management. Based on this work, a training manual on industrial maintenance management will be published in 1970. The publication scheduled for 1968 was cancelled.

Ref: ID/B/20, para.151

Group 10 (cont'd)

Other studies and research

25. The proposed studies on corporate planning, the organization and management of distribution channels, the organization and management of product development, and maintenance planning and training were cancelled due to the shortage of staff.

Ref: ID/B/20/Rev.1, para.150

Industrial training

In-plant training programmes

258. The following in-plant training programmes have been implemented in 1968:

<u>Area of Training</u>	<u>Country</u>	<u>Number of participants</u>	<u>Duration (in months)</u>
Diesel engines	Czechoslovakia	21	3
Cement industry	Denmark	17	2½
Mechanical industry	Japan	12	2½
Textile industry	Poland	14	6
Electrical industries	Sweden	20	4
Iron and steel	Union of Soviet Socialist Republics	41	5
Total		<u>125</u>	
Total number of trainees man-months:		505	

Total cost to UNIDO: US\$314,000; Ref: ID/B/20/Rev.1, para.159
8 man-months (staff)

259. A follow-up of group in-plant training programmes was carried out by sending a questionnaire to all former participants of these programmes and their employers. The results are being analysed and together with individual reports from the fellowship holders written at the completion of each programme, are expected to provide valuable guidance in improving the programmes.

Group 10 (cont'd)

260. The Industrial Development Board resolution 8 (II) calls for further development of in-plant training programmes and an outline for a detailed long-term programme for the various kinds of technical training in the field of industrial development. Consultations with ILO and UNESCO on the preparations of the outline for a detailed long-term programme have started. It is envisaged that in early 1969, a draft outline for this programme will be circulated to ILO, other specialized agencies, the regional economic commissions and to UNESOB. After consultation with these organizations, UNIDO plans to prepare the final outline which will be circulated to respective Governments for comments prior to submission to the Board for consideration.

Ref: ID/B/41, resolution 8 (II)

Training of industrial administrators in industrial development

261. This training programme was conducted in Bangkok by the Asian Institute of Economic Development and Planning with the co-operation of the Government of the Netherlands. No direct UNIDO contribution was involved.

Ref: ID/B/20/Rev.1, para.163

Manpower development for industrialization

262. Studies on manpower development for industrialization in New Zealand, the United Arab Republic and the United Republic of Tanzania were prepared for internal reproduction. Further studies in this field were cancelled in 1968.

Ref: ID/B/20/Rev.1, para.164-165

Study on correspondence methods

263. After the discussion on this subject in the second session of the Industrial Development Board and subsequent internal studies, it has been decided to delete this study from the Work Programme of UNIDO for the present.

Ref: ID/B/20/Rev.1/Add.1, para.165(a)

Item 10 (cont'd)

Establishment of industrial training institutions

264. Because of shortage of staff, the preliminary studies of the project had to be postponed.

Ref: ID/B/10/Rev.1/Ann.1, para.10(a)

Role of the United Nations in training national technical personnel for accelerated industrialization of the developing countries

265. UNIDO was assigned the primary role in preparing a report on the role of the United Nations in training national technical personnel for accelerated industrialization of developing countries which the Secretary General was requested to submit to the twenty-third session of the General Assembly (General Assembly resolution 2259 (XXII)). It was not possible to submit the report to the General Assembly since only a limited number of replies were received from Member States with comments and suggestions on the report of the Secretary General on the training of national technical personnel. Reminders and guidelines have been sent to Governments by UNIDO, to expedite the receipt of these comments and a consultant has been contracted to start preparing the report, now scheduled to be submitted to the twenty-fourth session of the General Assembly.

Cost: US\$2,000

Ref: ID/B/10; General Assembly Document A/11/2

Publications

266. The following studies have been prepared for reproduction:

"Training manual for engineers and technicians in the textile industry" (in editing, to be published in early 1969).

Cost: US\$4,700

Ref: ID/B/20/Rev.1, para.166

"Policies and problems of industrial training in developing countries" (in preparation for internal reproduction and limited distribution in 1969).

Ref: ID/B/20/Rev.1, para.166

Group 11 Special Problems and Institutions for Small-Scale Industry
including Industrial Estates

267. In accordance with the resolutions adopted by the Industrial Development Board at its second session, the UNIDO secretariat endeavoured to orient its activities in the field of small-scale industry increasingly towards operational and promotional projects and towards closer co-operation, in all types of projects, with regional economic commissions and offices, specialized agencies and other organizations, both national and international.

Field activities

268. As in preceding years, Africa accounted for one half of the total number of technical co-operation projects in the field of small-scale industry. More than half of the projects in African countries were concerned with formulation and implementation of policies and programmes for the promotion of small-scale industries, with strong emphasis on the development of new entrepreneurship. In many cases, missions concerned with over-all policies and programmes advised on the establishment of industrial estates, so that the actual number of operations in the latter field is somewhat higher than statistics would seem to indicate.

269. Due to the fact that the number of small industrial enterprises in Africa was very limited, only one operation pertaining to the stimulation of entrepreneurship was carried out in that region. With the development of small industries in that region the number of projects in this field will undoubtedly grow. Highest priority in most African countries and in some countries of other regions should be given to the establishment of national promotional and servicing centres for small-scale industry. In the absence of such centres, plans for industrial estates and for provision of financial facilities may remain ineffective. For this reason, a joint UNIDO/ILO programme to establish or strengthen industrial extension agencies in developing countries is included in UNIDO's work programme for 1969 and the subsequent years.

270. Of the five UNDP/SF projects in this field in Africa, three are concerned with industrial estates and small industry development programmes.

Group 11 (cont'd)

In the two other projects, which are of broader scope, an industrial estate expert is included in the United Nations team. It would be desirable to provide for similar arrangements in other projects; proposals to that effect are included in the 1969 and 1970 work programmes.

271. Only one technical assistance mission was specifically concerned with the establishment of a common service facility for small-scale industries. However, common service facilities are included in all industrial estate projects assisted under United Nations programmes.

Special recruitment and training programmes for experts from industrial countries

272. With a view to increasing the availability of small industry experts from developed countries for operations under UNDP/TA in developing countries, discussions were carried out with the authorities and organizations concerned including national committees in Belgium, Spain and the United Kingdom. There was general agreement that a system of secondment of engineers, economists and business executives of large-scale industries, ministries and other public agencies, private engineering and management consultant groups etc. might offer a valuable source of expertise for United Nations and other technical co-operation programmes in many fields of industrial development, including small-scale industry. Experts seconded from these sources for operations in the field of small-scale industry should, however, undergo special training, which should be organized by national agencies, with the co-operation of UNIDO. The main conclusion of the consultations was that, eventually, industrial countries should establish or strengthen national agencies for small industry development, particularly for the relatively less developed areas of these countries, and that such national agencies could become the best source of expertise for small industry operations in the developing countries. The staff of these agencies would benefit most of all from the special training courses and might be seconded to serve under United Nations programmes.

Ref: ID/B/20/Rev.1/Add.1, para.1/1(b)

Group 11 (cont'd)

273. Consultations also took place with French authorities concerning the seconding of staff to serve under United Nations technical co-operation programmes in the field of industrial development, especially small-scale industry, and the organization of training programmes for French-speaking experts.

Ref: ID/B/20/Rev.1/Add.1, para.111(b)

274. The following is a listing of the field activities of Group 11 during 1968.

		<u>UNDP/SF</u>		
<u>AFRICA</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Uganda	Small Industries Development Programme and Establishment of an Industrial Estate, Kampala (UGA-7)	4/20		1,861,395
United Arab Republic	Institute of Small Industries, Giza (Phase II) (UAR-66)	1/8		40,000
<u>ASIA/PAC EAST</u>				
Iran	Establishment of an Industrial Estate, Ahwaz (IRA-11)	6/67	2/9	3,850,400
<u>EUROPE/MIDDLE EAST</u>				
Turkey	Small Industries Development Programme (TUR-25)	4/24	2/12	2,202,800

		<u>UNDP/TA</u>		
<u>AFRICA</u>				
Burundi	Adviser on Small-scale Industries (304-67)	1/12		22,000
Rwanda	Development and Expansion of Small-scale Industries (217-63)	1/12		22,000
Senegal	Formulation and Implementation of a Development Policy for Small Industries (180-65)	1/12		22,000
Uganda	Development of Small-scale Industries (44-65)	1/12		13,250

Group II (cont'd)

INDP/IA (cont'd)

<u>THE AMERICAS</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Brazil	Development of Industrial Estates (27-59)	1/10		1,000
Dominican Republic	Development of Small and Medium-scale Industries (194-60)	1/10		21,000
Netherlands Antilles	Development of Small-scale Industries (100-65)	1/11		20,000
 <u>ASIA/FAR EAST</u>				
Korea (Rep. of)	Location of Small-scale Industry (60/57)	1/12		22,000
Laos	Development of Small-scale Industry (60-61)	1/6		11,000
Malaysia	Setting up of a Handicraft Centre (19-66)	1/12		21,000
Viet-Nam (Rep. of)	Development of Industrial Estates (232-67)	1/12		23,100

Regular Programme

AFRICA

Central African Republic	Elaboration of Types of Small-scale Industry (ID-999)	1/7		13,300
Congo (Brazzaville)	Development of Small-scale Industry (ID-955)	1/4½	1/7½	11,400
Congo (Dem. Rep. of)	Development of Small-scale Industry (ID-1064)	1/12		22,000
Gabon	Development of Small and Medium-scale Industries (ID-834)	1/8		15,200
Kenya	Management of Industrial Estate, Training Programmes (IX-536)	1/12		15,000
Morocco	Feasibility of a Pilot Industrial Estate (ID-82)	1/2		3,800
Nigeria	Development of Industrial Estates (ID-548)	2/9		17,000
Senegal	Development of Small-scale Industries (ID-866)	1/6		11,400

Group 11 (cont'd)

Regular Programme (cont'd)

<u>THE AMERICAS</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Trinidad and Tobago	Development of Small-scale Industries (ID-860)	1/6		15,000
 <u>EUROPE/MIDDLE EAST</u>				
Yugoslavia	Fellowships in Small-scale Industries and Industrial Estates (ID-300)		3/8	3,200
 <u>SIS</u>				
<u>AFRICA</u>				
Cameroon	Establishment of a Pilot Industrial Estate (67/233)	1/6	1/12	27,600
Ethiopia	Managerial Organization of Industrial Undertakings (67/105)	1/6		14,000
Kenya	Setting up a Workshop in the Industrial Estate of Nairobi (67/123)	1/12		24,000
Madagascar	Development of Small-scale Industry and Establishing of Industrial Estates (67/149)	1/1 $\frac{1}{2}$		4,000
Mauritania	Development of Small-scale Industries (68/368)	1/3		6,200
Niger	Establishment of Pilot Industrial Estate (67/251)	1/2		5,000
Senegal	Transformation of Military Installations into an Industrial Estate (67/184)	1/12	2/12	32,000
Sudan	Transformation of Artisan Activities and the Stimulation of New Small-scale Industries (68/287)	2/6		15,000
Upper Volta	Establishment of a Pilot Industrial Estate (68/280)	1/2		5,000
Zambia	Establishment of Industries in Rural Areas (67/156)	1/6		14,000

Group 11 (cont'd)

SIS (cont'd)

<u>THE AMERICAS</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Argentina	Small Industry Extension Methods (68/252)	3/24		52,000
Brazil	Technical and Managerial Assistance to Small-scale Industries (67/226)	1/1		3,000
Brazil	Selecting Sites for Industrial Parks (68/312)	1/6		11,000
Ecuador	Planning of Industrial Estates (67/101)	1/6		14,000
El Salvador	Development of Small-scale Industries (68/271)	1/8		18,000
Jamaica	Design and Production of Handicrafts (67/153)	1/12		18,000
Jamaica	Furniture Production Methods and Techniques (68/256)	1/12		19,700
 <u>ASIA/PAC EAST</u>				
Laos	Development of Small-scale Industry (68/276)	1/6		11,000
Malaysia	Directing the Industrial Service Centre (68/300)	3/30		37,500
Philippines	Evaluation of Specific Investment Proposals related to Industrial Estate Project (67/253)	2/4		12,000
Thailand	Feasibility of Establishing an Industrial Estate (66/35)	2/12		30,000
Thailand	Small-scale Industries and Handicrafts Marketing (68/301)	1/6		11,000

Supporting activities

Group training programme on industrial estates,
Hyderabad, India

275. Preparations were completed in 1968 for holding a group training programme on industrial estates at the Small Industry Extension Training Institute, Hyderabad, India, in co-operation with the Government of India.

Group 11 (cont'd)

The programme, organized for twenty English-speaking participants, will be held for twelve weeks from January to March, 1969. The cost of the project will amount to US\$50,500, of which \$47,000 will be covered under the regular programme (fellowships) and US\$3,500 under the UNIDO travel budget.

Cost in 1968: None

Ref: ID/B/20/Rev.1, para.169

Expert Group Meeting on the Development of Small-scale Industries
in Arab Countries of the Middle East

276. This meeting, jointly organized by UNIDO and UNESOB, was held in Beirut from 11 to 16 November 1968. It was attended by twelve participants from six countries, by five consultants and experts and by staff members of ILO, FAO, UNESOB and UNIDO. The participants had before them twenty discussion papers and seven background papers prepared by ILO, FAO, UNESOB, UNIDO and consultants, and six country papers submitted by participants. The agenda included a review of policies, programmes, institutions and facilities for the development of small-scale industries; the future of the traditional sector in a modernizing economy; promotion of entrepreneurship; technical services for small-scale industries; financing of small-scale industry; and regional and international co-operation for the development of small-scale industries.

Cost: US\$4,000 from UNIDO budget;
4 man-months (staff)

Ref: ID/B/20/Rev.1/Add.1, para.1/1(a)

277. Among the twenty discussion papers submitted to the Expert Group, the following were especially prepared for the meetings:

ID/WG.17/2 "Situation, problems and prospects of small-scale industries in selected countries of the Middle East", by a consultant (1967)

ID/WG.17/3 "A comparative analysis of small-scale industries in Arab countries of the Middle East and in selected other countries", by UNIDO

ID/WG.17/4 "The future of the traditional sector in an industrializing economy", by UNIDO

ID/WG.17/5 "The future of rural industries in a modernizing economy", by FAO

Group 11 (cont'd)

- ID/WG.17/14 "Extension service and development finance for small industry. An international comparative analysis", by UNIDO
- ID/WG.17/15 "Hire-purchase schemes for the modernization of small-scale industries", by UNIDO
- ID/WG.17/16 "A proposal for the establishment of a regional centre for industrial development in the Middle East with special reference to the development of small-scale industries", by UNESOB
- ID/WG.17/17 "Small-scale industry and the Arab Common Market", by a consultant

The report of the Expert Group and some of the papers prepared for the meeting will be published in 1969.

Costs in 1968: None; country papers supplied by participants Ref: ID/B/20/Rev.1/Add.1, para.111(a)

Subcontracting

278. Preparations (including writing of reports) were made for the organization of two meetings on subcontracting in 1969. One, of global scope, will be organized by UNIDO in co-operation with OECD, with the participation of ECAFE; the other, of regional scope, will be organized by ECAFE in co-operation with UNIDO.

Cost: 3 man-months (staff)

279. A questionnaire on subcontracting was prepared and sent to industries, Governments and experts in developing and industrial countries. The replies will be analysed in a report to be prepared for the UNIDO and ECAFE meetings on subcontracting and will be taken into account in mapping out a programme to promote subcontracting, to be undertaken in 1970.

280. The following studies were prepared for the UNIDO and ECAFE meetings:

"The subcontracting exchange" (a techno-economic study)

Cost: US\$1,500 from Consultant Funds Ref: ID/B/20/Rev.1, para.172(b)

"Interrelations between small and large industries"

Ref: ID/B/20/Rev.1, para.173(b)

Group II (cont'd)

Interregional Symposium on Financing of Small-scale Industries

281. The following three studies were prepared in 1968 for presentation to an Interregional Symposium on Financing of Small-scale Industries to be organized by UNIDO in 1969:

"Leasing societies for procurement of machinery and equipment and mutual co-operation societies for joint financing of small-scale industries: The experience of some European countries"

Cost: US\$3,000 from Consultant Funds

"Commercial bank financing of small-scale industries: Policies and measures"

Cost: US\$3,000 from Consultant Funds

"Public and semi-public financing of small-scale industries: A comparative analysis of institutions, policies and measures in Asian countries"

Cost: US\$3,150 from Consultant Funds Ref: ID/B/20/Rev.1, para.172(a)

Interregional Technical Meeting cum Study Tour on
Management of Small Business

282. A UNIDO staff member participated in the first Interregional Technical Meeting cum Study Tour on Management of Small Business, organized by ILO in Turin, Italy, in September to October 1968.

Techno-economic studies on small-scale industries

283. In addition to the techno-economic study in subcontracting (see para.280) mentioned above, the following study was prepared in 1968:

"Small-scale manufacturing No.2: Sewing machines"

This is the second study in a series on the contribution of small-scale industries to the production of selected consumers and producers goods.

Cost: US\$5,000 from Consultant Funds Ref: ID/B/20/Rev.1, para.172(b)

Other studies and research

284. The UNIDO secretariat undertook in 1968 the preparation of a programme of action to be carried out, on a continuing basis, by UNIDO and ILO to

Group 11 (cont'd)

create new industrial extension centres and to strengthen existing ones. A secretariat paper and a questionnaire aimed at identifying the needs of different countries in respect of industrial extension services were prepared in 1968, and, after review by ILO, will be dispatched early in 1969 to different authorities in the developing countries.

285. In order to follow up a recommendation of the International Symposium on Industrial Development (ID/B/21, Annex 1, Small-scale Industry), inquiries were addressed to the IBRD (including IDA and IFC), the African Development Bank, the Asian Development Bank and the Inter-American Development Bank on the measures whereby these institutions could increase their support for financing industrial estates and for channelling funds towards national credit agencies for extending loans to small-scale industries. Replies were received from all these institutions and further consultations with their officials are expected to take place in 1969, on the occasion of the Interregional Symposium on Financing of Small-scale Industry.

286. In addition to the papers prepared in connexion with the various projects mentioned above, the following studies were undertaken during 1968:

"Small-scale industries in centrally planned economies"
(Poland)

Cost: US\$2,000 from Consultant Funds Ref: ID/B/20/Rev.1, para.172(c)

"Common service facilities for small-scale industries"
(tool room)

Cost: None (staff study) Ref: ID/B/20/Rev.1, para.172(d)

"Specialized industrial estates" (functional industrial estate)

Cost: None (staff study) Ref: ID/B/20/Rev.1, para.172(e)

Publications

287. The following publication was issued in 1968 in English:

ID/4 "Industrial estates in Europe and the Middle East"

The French and Spanish versions will be published in 1969.

Cost (English): US\$5,000

Group 11 (cont'd)

288. The following documents were submitted in 1968 for publication in 1969:

"Small-scale manufacturing No.1. Bicycles: A case study of the Indian experience"

Ref: ID/B/10/Rev.1, para.172(b)

"Technical services and facilities for small-scale industries"

Ref: ID/B/20/Rev.1, para.173(c)

"Small-scale industry in Latin America"

Ref: ID/B/20/Rev.1, para.173(a)

289. Submission for publication of the following reports and studies had to be deferred to 1969 due to shortage of staff:

"Promotion of small-scale industry in the developing countries"

Ref: ID/B/20/Rev.1/Add.1, page 41

"Small-scale industry - its place in the industrial framework"

Ref: ID/B/20/Rev.1, para.173(d)

INDUSTRIAL POLICIES AND PROGRAMMING DIVISION

Group 12 Industrial Programming and Projects

Field activities

290. In 1968 technical assistance was directed to aiding the developing countries in three broad work areas. These were: developing and strengthening newly established centres for industrial studies; relating more closely the development of the industrial sector to over-all economic planning and programming; and expanding the expertise of the developing countries regarding project formulation, evaluation and implementation.

291. The centres for industrial studies, established under UNDP/SP auspices, have begun to fill the institutional gaps in many countries with regard to technical investigations of local industrial potentialities and identification of sound project possibilities. They helped to support the programmes of technical assistance in sectoral programming and to bring into closer harmony the development of the industry sector with broader over-all plans. In

Group 12 (cont'd)

In addition, the centres rendered guidance and assistance to the technical assistance missions to the developing countries regarding project implementation, pre-investment surveys, industrial planning and programming strategies and regional development problems.

292. The problems of the paucity of soundly conceived projects in the developing countries and of essential data support for them have received considerable attention. Technical assistance programmes in project formulation and evaluation, in which guidance was given to field experts and training to local professional staff, have been carried out in an expanding number of countries. The emphasis was on the choice, preparation and submission of viable projects which would attract investor interest.

293. Among the technical assistance missions in this area was an advisory mission to one country regarding the establishment of a centralized project evaluation service; the mission subsequently made a number of recommendations for action to the Government. Another technical assistance mission was an exploratory mission, the purpose of which was to assess the needs for an industrialization survey and the preparation of the industry component of the next five-year economic plan.

294. The following is a listing of the field activities of Group 12 during 1968.

		<u>UNDP/SP</u>		
		Experts	Fellows	Cost
		<u>m/m</u>	<u>m/m</u>	<u>US\$</u>
<u>AFRICA</u>				
Tunisia	National Centre for Industrial Studies, Tunis (TUN-15)	5/44		1,601,700
United Republic of Tanzania	Industrial Studies and Development Centre, Dar-es-Salaam (TAN-10)	6/71	4/24	696,034
The Maghreb Countries	Centre of Industrial Studies for the Maghreb (REG-72)	5/60		2,424,900
<u>THE AMERICAS</u>				
Mexico	Resources Survey of the State of Oaxaca (MEX-10)	1/6		16,000

Group 12 (cont'd)

UNDP/SF (cont'd)

<u>ASIA/FAR EAST</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Iran	Research Centre for Industrial and Trade Development (IRA-16)	3/36	6/12	2,618,000

EUROPE/MIDDLE EAST

Jordan	Centre for Industrial Development Amman (JOR-13)	5/60	4/24	1,668,026
Saudi Arabia	Industrial Studies and Development Centre, Riyadh (SA-14)	8/60		2,634,500

UNDP/TA

AFRICA

Dahomey	Feasibility Studies on Projects in the Development Plan (177-65)	1/12		22,000
Madagascar	Advice on Problems of Industrial Development (1-64)	1/16½		28,000
Mali	Evaluation of Proposed Specific Industrial Projects (6-66)	1/13½		15,000
Nigeria	Evaluation of Feasibility Studies for Manufacturing Industries and Project Implementation (10-61)	1/12		23,100
Rwanda	Industrial Project Formulation, Evaluation and Implementation (217-63)	1/12		22,000
Somalia	Industrial Programmer and Industrial Cost Accountant (214-67)	2/12		25,000
Sudan	Preparation of Programme for the Industrial Sector (225-61)	1/12		22,000
Togo	Industrial Development Programming (199-67)	2/15		29,100

THE AMERICAS

Argentina	Study of Resource Potentials for Industrial Development (111-57)	1/3		5,670
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Group 12 (cont'd)

UNEP/FAO/WHO/IAEA

THE AMERICAS (cont'd)

		Experts m/m	Fellows m/m	Cost US\$
Colombia	Evaluation Selection and Execution of Industrial Projects (131-51)	1/12		23,000
Colombia	Project Evaluation and Implementation (135-57)	1/4		10,000
Ecuador	Preparation of an Industrial Development Plan (51-60)	1/12		26,400
Honduras	Industrial Planning and Project Evaluation (24-61)	1/12		22,000
Mexico	Industrial Planning (190-65)	1/6		11,000
Nicaragua	Evaluation of Feasibility Studies for Manufacturing Industries and Project Implementation (181-57)	1/12		23,100
Regional	Industrial Policies and Programmes related to the Economic Integration of Central America (3-68)	2/24		39,000
Regional	Regional Industrial Development with ECLA (322-67)	1/18		27,050

ASIA/FAR EAST

Afghanistan	Feasibility Studies on the Establishment of Industries (IX-33)	1/12		18,000
Afghanistan	Feasibility Studies for Specific Industries (155-63)	2/6		10,100
Cambodia	Inventories of available natural resources and Utilization of Production Facilities (4-60)	1/6		11,000
Indonesia	Preparation of Pre-Investment Studies for State Enterprises (43-57)	1/18		32,400
Indonesia	Industrial Classification Survey and Programming Data (43-57)	1/18		32,400
Iran	Evaluating Programmes of Industrial Sector (220/57)	1/14		27,000
Malaysia	Feasibility Studies of Industrial Projects (19-66)	1/6		28,050

Group 12 (cont'd)

UNDP/FA (cont'd)

<u>ASIA/FAR EAST (cont'd)</u>		<u>Experts</u> <u>m/n.</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Malaysia	Adviser to the Economic Development Board (264-61)	1/12		22,000
Malaysia	Economic Research and Project Evaluation (318-67)	1/12		18,500
Nepal	Evaluation of Surveys in Various Industrial Fields (83-65)	1/12		23,100
Pakistan	Review of Industrial Policy, and Appraisal of Industrial Development Programmes (73-57)	3/46		79,500
Pakistan	Technical and Financial Aspects of Proposed Projects (73-57)	1/18		30,600
Singapore	Review of Methodology for Evaluation of New Industrial Projects (264-61)	1/12		19,700

EUROPE/MIDDLE EAST

Cyprus	Programme Evaluation (XBO-451)	1/2		12,000
Iraq	Preparing Feasibility Studies for Various Industries (168-39)	1/12		22,000

Regular Programme

AFRICA

Algeria	Project Evaluation in Connexion with the Economic Development Plan (ID-582)	1/12		22,000
Cameroon	Feasibility Studies on Projects for the Development Plan (ID-340)	1/8		14,900
Dahomey	Industrial Policy, Project Evaluation (ID-868)	1/12		21,400
Liberia	Industrial Planning and Project Evaluation (ID-971)	1/6		15,000
Madagascar	Evaluation of Industrial Projects (5000-68)	1/6		11,400
Niger	Industrial Programming and Project Evaluation (ID-362)	1/7		13,300
Somalia	Project Formulation, Evaluation and Implementation (ID-777)	1/6		11,400

Group 12 (cont'd)

		<u>Regular Programme</u>	<u>Special</u>	
		<u>Reports</u>	<u>Personnel</u>	<u>Cost</u>
		<u>n/m</u>	<u>n/m</u>	<u>US\$</u>
<u>THE AMERICAS</u>				
Regional	Formulation of Industrial Policies and Programmes (ID-1102)	1/1		10,000

EUROPE/MIDDLE EAST

Saudi Arabia	Fellowship in Industrial Development (ID-896)	1/6		4,000
Regional	Regional Industrial Adviser Attached to the Economic Regional Commission (ID-582)	1/12		28,000

SIS

AFRICA

Congo (Dem. Rep. of)	Organising a Project Evaluation Team to Deal with Industrial and Capital Investment Projects (68/213)	2/1		2,400
Dahomey and Togo	Survey of Industrial Development Potentialities (69/199)	4/8		20,000
Ethiopia	Survey of the Manufacturing Industry (67/70)	2/24		48,500
Mali	Survey of State-financed Industrial Enterprises (67/161)	3/44		84,000

THE AMERICAS

Brazil	Corporate Financial Planning (67/238)	1/12		24,000
Haiti	Industrial Programming and Project Planning (68/284)	3/4½		12,000
Mexico	Evaluation of Manufacturing Projects (67/132)	1/12		21,000

ASIA/PAC EAST

Iran	Industrial Sector Programming (68/371)	1/10 days		1,000
Iran	Economic Evaluation of an Aluminium Reduction Plant (68/410)	5/4		10,500

Group 12 (cont'd)

SIS (cont'd)

<u>ASIA/FAR EAST (cont'd)</u>		Experts m/m	Fellows m/m	Cost US\$
Malaysia	Project Identification, Formulation and Development (68/300)	1/6		12,000
Malaysia	Industrial Marketing and Feasibility Studies (68/300)	1/6		1,500
Philippines	Establishing a Working System for Market Studies (67/254)	1/3		1,000
Philippines	Preparation of Investments Priorities Plans (67/254)	1/12		25,000

EUROPE/MIDDLE EAST

Iraq	Industrial Planning and Development (68/275)	1/2 weeks		6,000
Romania	Promotion of Certain Projects under the SIS Programme (68/317)	3/12 days		800

Funds-in-Trust

THE AMERICAS

Ecuador	Funds-in-Trust Evaluation of Industrial Projects (51-60)	1/10		11,200
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Supporting activities

Industrial programming data

Comparative study on industrial programming data (technical studies on data bank techniques for industrial programming)

295. A study reviewing current data bank techniques in industrial corporate planning and market research was prepared as a supporting document for the first session of the International Working Party on Industrial Programming Data, which met in Vienna in November 1968. This study constitutes part of the feasibility study concerning the establishment of data-bank type operations for subregional industrial development programming, in particular the

Group 12 (cont'd)

initiation and up-dating of a comprehensive list of both existing and proposed industrial plants in the developing countries. The list will be used as basic information material for industrial survey and programming.

Cost: US\$3,000 from Consultant Funds Ref: ID/B/20/Rev.1, para.187

Pre-sessional field studies for the operational framework envisaged by the International Working Party on Industrial Programming Data

296. Prior to the holding of the International Working Party on Industrial Programming Data in Vienna in November 1968, two missions were sent, one to the East African region and the other to the Central American region, to investigate the technical and institutional feasibility of the operationally-oriented framework being proposed for the Working Party, as well as the feasibility of several work proposals connected with the agenda of the Working Party. The missions, carried out by the expert component of the Working Party's standing task force, were instrumental in locating the key personnel working in the fields of industrial planning, statistics, project promotion and evaluation, and in establishing working contact with the persons who would be particularly active in the specific projects to be discussed at the first session.

Cost: US\$10,000 from Swedish grant Ref: ID/B/20/Rev.1/Add.1, para.189(b)

International Working Party on Industrial Programming Data

297. The first session of the International Working Party was held in Vienna from 18 to 27 November 1968 as an introductory session to subsequent regional working sessions planned for 1969. Participation included representatives from ECA, ECAFE and UNESCO; several representatives from the Central American and East African subregional institutions; a few representatives of planning organisations in selected developing countries; and a few expert consultants.

298. Special emphasis was placed on the formulation of action programmes aimed at improving industrial programming data systems of common relevance

to the industrialization process in specific subregional country groups. The major studies presented in this report to be carried out in various countries and areas are on a regional or sub-regional basis. Among the projects were the "Profiles of manufacturing establishments", which UNIDO had taken the initiative in developing, new proposals such as "Profiles of pre-investment industrial projects", "Industry file system for subregional country groups" and "Time profiles of industrial project implementation". The major findings and recommendations of the first session will form the basis of presentations at subsequent regional working sessions regarding complete projects to be carried out by specific institutions in the developing countries.

Cost of meeting: US\$10,000 from regular budget Ref: ID/B/20/Rev.1, para.175

Profiles of Manufacturing Establishments

297. "Profiles of Manufacturing Establishments", Vol.II(ID/Ser.E/5) was published in 1967, Vol.I(ID/Ser.E/4) having appeared in 1967. New ad hoc working teams have been organized in Austria, Ethiopia, the Federal Republic of Germany, Mexico, Uganda, the United Republic of Tanzania and Zambia for the compilation of additional Profiles from industrial establishments in these countries; arrangements are being completed also with an Iranian team. The results, as received, are being organized for Profiles Vol.III and Vol.IV (1969 publication).

300. These two volumes (III and IV) represent the second phase of the project; certain modifications have been effected with respect to the extent of information to be compiled and also to the method of selecting candidate establishments. For the future extension of the project, an additional Profiles series - "Profiles of pre-investment industrial projects", based on an analytical collation of pre-investment feasibility studies on industrial projects - is being considered for 1969 to 1970 in co-operation with ECLA and the Inter-American Development Bank under working arrangements being established by the International Working Party on Industrial Programming Data.

Group 1 (cont'd)

301. A Report of "Structure of manufacturing industries, 1960-1966" has been prepared with a view to providing a comparative analysis of this important activity. This report includes an analysis of various parameters relating to essential requirements, price levels, production, product-mix variations, capacity utilization etc. in various industries. It also contains the comments of industrial experts on the individual practices of work in Vol.I and Vol.II, with special regard to the listing of the equipment, manning table and raw material input-mix. The original UNIDO appropriation for this project was US\$20,000 of which US\$2,000 were utilized for the participation of UNIDO in an ECOSOC mission in the African subregions, September to November 1968.

Cost: US\$18,000 from UNIDO regular
budget
US\$15,000 from Swedish grant

Ref: ID/B/20/Rev.1, para.181

Structure of material inputs in manufacturing industries and interindustry relations

302. Detailed input-output tables and their supporting statistics from Finland, Japan and the United States were re-assembled for comparison in 1966. The analyses of the re-assembled data, initiated in 1967, are intended to provide a detailed technical framework for a data-bank type approach to the inter-industry data. Such a framework would have immediate practical use for the formulation of industrial development programmes and for the evaluation of industrial projects. This attempt thus constitutes a follow-up on the discussions and recommendations put forward in the earlier publication "International comparisons of inter-industry data" (ID/Ser.E/2). For this purpose, the analyses covered: comparison of the product-mix of each identified productive sector; comparison of input coefficients at the 190 x 190, 100 x 100 and 106 x 106 levels; an evaluation of major coefficients and bloc-diagonality; and an evaluation of the effects of cross-country transplantation of technical coefficients. The results of the completed analyses were drafted in 1968 and will be ready for publication (ID/Ser.E/6) in 1969.

Cost in 1968: United Nations
Computing Centre
Services

Ref: ID/B/20/Rev.1, para.182

Group 12 (cont'd)

Industrial planning, programming and projects

Survey of industrial plans and programmes

303. The purpose of this survey is to evaluate a series of programmes in the developing countries from the point of view of their methodology and performance. Work during 1968 consisted of reviewing technical studies which were commissioned in 1967 and of finalizing the arrangements for setting up study groups in the five countries selected for the initial phase of the survey, namely Hungary, Iran, Israel, Mexico and Yugoslavia. In each area work is being carried out in close collaboration with the appropriate regional economic commissions. These five country studies will be used to establish the guidelines for field missions on industrial planning and programming which, beginning in 1969, will become a regular part of UNIDO's field operations. As new data are developed through these field missions, an appraisal in depth of the industrial development programme of each developing country will be disseminated in the form of a special study series entitled "Industrial programming - country experience" (from 1970 on).

Costs: US\$17,000 from Consultant Funds Ref: ID/B/20/Rev.1, para.183

Sectoral planning and programming studies

304. This project involves the preparation of sectoral planning studies of industry in order to provide information to planners and programmers concerning the data and techniques used for industrial programming at the sectoral or industry level. Work in 1968 included the evaluation of draft studies commissioned in 1967 concerning the iron and steel sector and submission of the re-worked drafts to the consultant for further comments and improvements.

305. The "Iron and steel study" deals with the following aspects of programming in this sector: raw materials, iron manufactured articles, steel manufactured articles, rolling mill products, integrated and non-integrated steel mills and future trends.

Ref: ID/B/20/Rev.1, para.188 and 189

Group 12 (cont'd)

Industrial programming manual

306. This manual will provide a source of basic reference material for training courses, workshops and seminars in industrial programming and will also be used as an operational guidebook for technical assistance experts in the field. Draft chapters commissioned in 1967 were completed and evaluated during 1968 and the material has been prepared for internal reproduction. The commissioning of the unfinished chapters has been completed, and all chapters are expected to be completed in 1969.

Cost: US\$5,500 from Consultant Funds Ref: ID/B/20/Rev.1, para.190

Training courses on industrial development in collaboration with the
United Nations Development Planning Institutes

307. A training course, which was to be held in Africa in 1968 for a four to six weeks period, was postponed to 1969 because of organizational problems. The training programme was to offer an intensive series of courses on the pertinent factors of, and on methods of organization for, industrial development.

Ref: ID/B/20/Rev.1, para.180

Industrial project implementation programming,
co-ordination and control

308. This study, which will be completed in 1969, deals with the identification of project components and their sequential relationships, interactions, time durations and costs.

309. Two related studies, completed in 1968, concerned the organization for implementation and follow-up at the sectoral and project level and an empirical investigation of the problems encountered in the implementation of industrial projects.

310. Work was also undertaken on the preparation of a manual to assist the developing countries in identifying and possibly eliminating the costly delays which occur when project implementation is improperly scheduled. It is planned to publish the manual in a series of subject-by-subject monographs, and three of these monographs will be published in 1969.

Cost: US\$10,150 from Consultant Funds Ref: ID/B/20/Rev.1, para.177
ID/B/20/Rev.1/Add.I, para.189
(a and b)

Group 12 (cont'd)

Industrial project formulation and evaluation

311. Selected studies presented at the International Symposium on Industrial Project Evaluation held from 11 to 29 October 1968 in Prague, Czechoslovakia were published in 1968 as Volume I of the Industrial Planning and Programming Series (ID/Ser.H/1). Volume II of this Series entitled "Economics of project formulation and evaluation" was also completed during the year and has been submitted for publication. This study focusses upon the national cost-benefit methodology as applied to the industrial project programming in the developing countries.

312. Work on Volume III, a manual on project formulation and evaluation, is approaching its final stages. It is expected to be completed and ready for publication in 1969. This manual will present step-by-step procedures in the evaluation of projects from the point of view of national cost-benefit analysis. It should fill a long felt need for guidance in this work area.

313. Of three advisory missions scheduled for 1968 on industrial project formulation and evaluation, the objectives of which were to evaluate specific industrial projects and to train local personnel in the areas of project formulation and evaluation, one was carried out in Iran for four weeks in December 1968 and the others have been postponed to 1969 due to organisational problems. This advisory mission dealt with the evaluation of aluminium reduction facilities and associated carbon electrode production facilities. Associated with this project evaluation, a programme was carried out for the training of 30 members of the Ministry of Economy and the National Bank in the techniques of national economic profitability analysis.

Costs: US\$25,000 from Consultant Funds Ref: ID/B/20/Rev.1, para.176
ID/B/20/Rev.1/Add.1, para.189(a)

Industrial project implementation in Sudan

314. This study, based on actual case studies, analyses the problems of industrial project implementation currently encountered in Sudan, and their economic impact on the net worth of investment. It forms part of a broader study entitled "Evaluation and dissemination of experience gained in industrial project implementation" to be undertaken in 1969.

Costs: US\$1,500 from Consultant Funds Ref: ID/B/20/Rev.1/Add.1, para.189(a)

Group 12 (cont'd)

Regional planning and industrial location

Interregional Seminar on Industrial Location
and Regional Development

315. This Seminar, organized by the UNIDO secretariat in co-operation with the Government of the Byelorussian Soviet Socialist Republic, the host country, was held in Minsk from 14 to 26 August 1968. A total of 96 experts attended the Seminar among whom were participants from 21 developing countries, who were officials directly concerned with regional planning work in their own country and representatives of the United Nations regional economic commissions and of the United Nations Research Institute on Social Development. The comprehensive documentation prepared for the Seminar consisted of nineteen discussion papers and approximately 30 background and country studies. Eight international experts on industrial location and regional development acted as discussion leaders on the four topics presented for discussion: The general problem of industrial location and regional development; industrial location factors; industrial location planning and regional planning; and instruments of industrial location policy.

316. The objectives of the Seminar were to evaluate industry location from the standpoint of regional development in the developing countries and to provide guidance for the operational activities of UNIDO in the field of industrial programming and planning.

Costs: US\$80,000 from UNDP/TA

Refs: ID/B/20/Rev.1, para.178 and 179

Operational guide to regional industrial planning and supporting
studies on industrial location

317. The operational guide is intended to provide technical assistance experts and regional planners with basic reference information concerning the planning of industrial projects on a regional basis and to offer guidance on the analysis of criteria affecting industrial location. The work carried out in 1968 included the commissioning of four empirical studies concerning regional location problems, the mapping out and selection of the specific components of the guide, and the preparation of a tentative outline on each. The guide is scheduled to be submitted for publication in 1970.

Costs: US\$4,500 from Consultant Funds

Refs: ID/B/20/Rev.1, para.185 to 187

Group 12 (cont'd)

Co-ordination of UNIDO activities in the field
of regional planning and location

318. UNIDO representatives attended the International Symposium on Spatial Planning of the Metropolitan Regions, organized by the Yugoslav Institute of Economics, in Zagreb from 25 to 29 March 1968. The subjects discussed were: regional planning within the over-all system of planning; methods of regional and urban planning; and the preparation of information for making regional and urban plans. A short report on the activities of UNIDO in this particular field was submitted to the Symposium and discussions were held as to additional ways of co-operation between UNIDO and national institutes.

Cost: US\$140

Ref: ID/B/20/, para.185

Working Party on Socio-economic Factors Influencing
the Location of New Industries

319. UNIDO participated in the Working Party on Socio-economic Factors Influencing the Location of New Industries which was held in Belgrade from 16 to 18 September 1968 by the European Co-ordination Centre for Research and Documentation in Social Sciences. Discussions of the Working Party were directed to the practical application of modern techniques in the field of regional analysis, and to the need for expanding programmes for the collection and compilation of data bearing on industrial location. The report and recommendations of the UNIDO Seminar in Minsk were also submitted to the working party for its information and appraisal.

Cost: US\$150

Ref: ID/B/20, para.186-187

Contribution to the Second Development Decade Projections
and policies: Long-term projections of industrial
outputs, employment, exports and imports

320. A task force was organized during 1968 in response to the request of the Committee for Development Planning for participation by UNIDO in the preparation of a preliminary framework of international development strategy for the 1970s. The staff of UNIDO engaged in the field of industrial planning and programming took the responsibility in this over-all UNIDO task force

Group 12 (cont'd)

for making a special statistical study on the trends and structure of industrial development in the developing countries and regions, and for preparing a tentative projection of industrial outputs, employment and exports and imports for the period 1970-1980. This study, submitted to the Committee for Development Planning at the end of 1968, was based on an econometric analysis of statistical information on manufacturing industries currently available from the United Nations Statistical Office.

321. The projection tools developed through this study serve also to update the "Study of industrial growth" (1963.II.B.2), which was prepared several years ago by the CID (now UNIDO) and which was in need of substantial revision to cover both the demand and supply side of the industrial structure. The variables projected are: value added and employment by ISIC 2 to 3 digit manufacturing groups; industrial commodity imports and export trends classified by ISIC 2-digit industry groups; and production of and demand for some 60 selected major industrial commodities. The major predetermined variables relate to the broad expenditure categories of Gross Domestic Product, the latter serving as the link between the UNIDO and the United Nations CDPFP projection models.

322. This work was undertaken and completed as a special project in co-operation with the United Nations Computing Centre at New York.

Ref: ID/E/20/Rev.1/Add.I, para.221

Group 13 Industrial Policies and Industrial Financing

Field activities

323. The main areas of technical assistance in the developing countries in 1968 which this Group had responsibility related to formation and development of a Centre for Industrial Studies and Promotion; the strengthening of development institutions and bank organizations concerned with the promotion and financing of industrial projects; the assessment and improvement of fiscal incentive policies; and industrial investment promotion.

Group 13 (cont'd)

324. The newly established Special Fund Centre for Industrial Studies and Promotion has been guided not only in its organization but also in its plan of action and orientation to make it as effective as possible. Industrial investment promotion received considerable attention, and the expanding emphasis on the importance of promoting person-to-person contacts in the implementation of industrial projects prompted the development of an accelerated programme of assistance in 1968 to field experts and to the developing countries. The various aspects of this work included guidance with regard to establishing adequate and effective local industrial investment promotion organizations and assistance in the formulation of investment project opportunities and in the training of essential expert staff.

325. The following is a listing of the field activities of Group 13 during 1968.

UNDE/SF

<u>AFRICA</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Ivory Coast	Centre for Industrial Studies and Promotion (IVC-13)			797,100
Regional	Formulation of Credit Strategy of Development Bank, Industrial Development (REG-43)	1/5		9,750

UNDP/TA

<u>AFRICA</u>			
Zambia	Assistance to the Industrial Development Corporation (139-65)	1/12	22,000
<u>THE AMERICAS</u>			
Honduras	Formulation, Evaluation and Co-ordination of National Industrial Programme (24-61)	1/12	23,000
Nicaragua	Fiscal Incentives and Industrial Development Policies (181-57)	1/12	23,100
Paraguay	Industrial Development, Emphasizing Balance of Payment Implications (189-57)	1/17	21,000

Group 13 (cont'd)

UNDP/TA (cont'd)

<u>ASIA/FAR EAST</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Fiji	Establishment and Operation of the Industrial Department of the Development Bank (150-67)	1/8		15,400
Singapore	Operation of Economic Development Board (264-61)	1/2		19,700

EUROPE/MIDDLE EAST

Southern Yemen	Formulation of Industrial Development Policy (212-67)	1/6		11,000
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Regular Programme

EUROPE/MIDDLE EAST

Cyprus	Industrial Development Policy (ID-503)	1/6		11,000
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SIS

AFRICA

Cameroon	Industrial Financing and Evaluation of Projects (67/165)	1/12		24,000
Rwanda	Establishment of an Industrial Promotion Service (68/331)	1/1		3,000
Tunisia	Promoting Foreign Investment (67/224)	1/3 weeks		2,500

ASIA/FAR EAST

Iran	Identification of Sources of Finance for Specific Industrial Projects (68/356)	2/1		850
Malaysia	Promotion of Industrial Investment (68/300)	1/6		15,000
Philippines	Implementing the Investment Incentives Act (67/254)	1/12		25,000

EUROPE/MIDDLE EAST

Gulf States	Review of Industrial Development Policies (68/397)	2/2 weeks		2,000
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Funds-in-Trust

EUROPE/MIDDLE EAST

Kuwait	Industrial Development Policy (XBO-215)	1/10		20,011
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Group 13 (cont'd)

Supporting activities

Industrial policies

Comparative studies and analysis of country experiences
in the field of industrial policies

326. These studies, covering twelve countries, were initiated in 1968 and will continue in 1969. They will be used for the training programme on the formulation and implementation of industrial policies and will be published as reference material for the use both of officials of developing countries and of United Nations field experts.

Costs: US\$6,000

Ref: ID/B/20/Rev.1, para.192

Preliminary studies of policies and measures to further
regional co-operation in industrial development

327. These studies complement the research work being carried out in the general field of industrial policies and stress the need for developing appropriate policies to further regional co-operation in industrial development. The scope and coverage for these investigations have been developed in 1968 and their planning and execution are being carried out in close co-operation with the regional economic commissions and with UNESCO; completion is planned for 1969. The investigations will be used for the training programme on the formulation and implementation of industrial policies and will be published as reference material for the use both of officials of developing countries and of United Nations field experts.

Costs: US\$3,000

Ref: ID/B/20/Rev.1, para.192

Meeting on incentive policies for industrial development

328. This meeting was envisaged in the 1968 Work Programme for experts in fiscal incentives but it was re-scheduled for 1969 and its scope was expanded to include various other types of incentive policies. In the course of preparation for this meeting, it was also felt that the material developed could be put to better and fuller use if it were used for a seminar to which

Group 13 (cont'd)

officials directly concerned with the formulation and implementation of industrial policies in developing countries could be invited. The 1969 seminar, therefore, will be the first of a series that is to be organized on these subjects within the field of industrial policies. Scheduled to be held at UNIDO headquarters in Vienna in March 1969, the seminar will consider the background leading to the formulation of appropriate policies and measures, review the various types of incentive measures used, discuss criteria for the selection of appropriate incentive measures and consider the practical problems involved in implementing the measures chosen.

Cost: US\$31,000

Ref: ID/B/20/Rev.1, para.196

Financing of industry

- Workshops on financial planning for industrial enterprises
- I. RCD countries (Iran, Pakistan, Turkey)
 - II. Kenya, Malawi, Uganda, United Republic of Tanzania and Zambia

329. The first of this series of workshops for the RCD countries (Iran, Pakistan and Turkey) was held in Karachi under the sponsorship of the Pakistan Government from 5 to 30 August 1968. The workshop was attended by 30 participants from the RCD countries and a team of six experts assisted in the instructional activities of the programme. The workshop examined, inter alia, the proper and effective utilization of available resources at the enterprise level, the use of tools and techniques in this field and their adjustment to the needs of specific enterprises.

330. A second workshop, originally scheduled for October 1968, is to be held in January 1969 in Dar-es-Salaam. Participants are expected from Kenya, Malawi, Uganda, the United Republic of Tanzania and Zambia, drawn from industrial enterprises (public and private), planning organizations, development and investment banks and from other financial institutions in those countries. In addition to the regular programme, case studies will be made of industrial enterprises within the region, with a view of assessing their financial planning techniques and problems and demonstrating the significance of the course through these specific case studies.

Cost: US\$25,000

Ref: ID/B/20/Rev.1, para.195
ID/B/20/Rev.1/Add.1, para.197(a)

Group 13 (cont'd)

Financial aspects of manufacturing enterprises
in the public sector

331. This seminar regarding public sector enterprises, originally planned for 1968, is to be held in Rome early in 1969 with the co-operation of IRI (Italy). While the seminar is intended for the developing countries and will focus attention on their problems and their experiences with public enterprises, the experiences of the developed countries, particularly centrally planned economies, will also be examined.

332. Governments in developing countries, even those with substantial public sectors, often lack experience to cope with the financial problems of public enterprises. An exchange of relevant information and experience, therefore, would be of considerable help to them. This is particularly true of the financing as well as of the price and profit policies which have a direct bearing on the financing of public enterprises.

Costs: US\$25,000

Ref: ID/B/20/Rev.1, para.195 and 198

Model forms for financial planning of industrial enterprises

333. This study will develop teaching material for workshops on financial planning. The substance of the material being prepared includes various tools and techniques of analysis in diagrammatic form. Work was initiated in 1968 and will be continued in 1969; publication is expected by 1970.

Costs: US\$4,500 from Consultant Funds Ref: ID/B/20/Rev.1, para.195 and 198

Preparation of model statutes and related basic material
for the formation, adaptation and operation of
industrial financial institutions

334. This study is aimed at the compilation of model statutes, regulations and procedures for the establishment and guidance of industrial financial institutions in the developing countries, and at enabling them to carry out effectively the promotion of industrial development in the countries and areas of their location. It is expected that these models will be completed in 1969 for publication in manual form in 1970.

Costs: US\$4,500 from Consultant Funds Ref: ID/B/20/Rev.1, para.198

Group 13 (cont'd)

Guide on external sources of industrial financing

335. The purpose of this project is to compile and disseminate to the developing countries information on sources of financing for industrial projects. This material will be prepared in the form of a guide which will give concise and comparative practical information on the various sources of financing, the nature of their individual operations and the terms and conditions under which each organization makes its loans. In 1968 a considerable amount of information was collected, a model format of presentation was drafted and data were solicited from banks and other sources of financing. It is planned to publish the first issue of the guide in 1969.

Ref: ID/B/20/Rev.1, para.194

Case studies of domestic-foreign joint ventures in the field of manufacturing

336. This study, scheduled originally for completion in late 1968, has been delayed and is now scheduled for completion in 1969. It is being prepared in co-operation with the Columbia University Law School. The study seeks to analyse actual cases of industrial joint ventures between foreign and domestic enterprises, whether private, public or mixed. It examines the various fields of industry in which joint ventures have been launched; the partnership arrangements for each type of industry; the contribution of patents, technical and managerial know-how; training of local personnel; profit sharing and marketing arrangements etc. Together with other investigations, it will serve as a basis for the elaboration of prototypes of joint venture agreements which in turn will give guidance to the developing countries regarding this important instrument of industrial development.

Costs: US\$5,000

Ref: ID/B/20/Rev.1, para.194
ID/B/20/Rev.1/Add.1, para.199(a)

Promotion of industries through World Food Programme

337. UNIDO is examining the possibilities of utilizing financing derived from food assistance programmes to generate local resources for selected

Industrial projects

A programme of work has been prepared, with the collaboration of WFP, for application in a few selected countries.

Ref: ID/B/20/Rev.1, para.164

Investment promotion

basic technical material for the establishment or improvement of investment promotion centres

338. The purpose of this project, to be completed in 1969, is to provide guidance to the developing countries regarding the establishment of improvement of investment promotion centres. Such centres are recognized as important instruments for encouraging investment and know-how for specific industrial projects, and their success is directly related to their ability and capacity to compile and utilize factual data on industrial opportunities and to assist potential investors with regard to local requirements and conditions. Studies have been initiated to develop model acts of incorporation, model organizations and a scheme of the structure and scope of investment promotion agencies for the developing countries. Material developed for this project was also used at the Meeting on Investment Promotion Services, held in Vienna from 23 to 26 September 1968.

Ref: ID/B/20/Rev.1, para.193, 194
and 197

Training programme on industrial investment
promotion techniques (New York)

339. The first UNIDO training programme on Industrial Investment Promotion Techniques was held in New York from 15 March to 7 June 1968 in co-operation with UNITAR. Officials from eighteen developing countries participated in the programme which provided many top experts in the field as instructors, including 75 representatives from five universities, nine private and official banks, six international corporations and all the major international development agencies. A series of similar programmes is to be carried out in 1969 and 1970. Each programme consists of two parts: a group of lectures given by high level experts in investment promotion; and a planned schedule of visits to selected sources of investment and financing of industrial

Group 13 (cont'd)

development in the developing countries, with a view to providing appropriate officials on industrial investment promotion.

Cost: US\$25,000

Ref: ID/B/20/Rev.1/Add.I, para.19(b)

Investment promotion training programmes for Spanish-speaking countries, and for French-speaking countries

340. These programmes are planned as a follow up of the training programme held in New York from 15 March to 7 June which was attended by participants from English-speaking countries only. The programmes are being organized for officials from Spanish-speaking developing countries and from French-speaking developing countries mainly African. While modelled after the New York meeting, these programmes will be adjusted to the needs of the countries invited. The selected sources of finance to be visited as part of the programme will be European (East and West). These programmes are planned for early 1969 and will run for a nine-week period each.

Costs: US\$55,000 for Spanish-speaking countries (part of this will be borne by OTC and the Inter-American Development Bank) Ref: ID/B/20/Rev.1/Add.I, para.19(b)
US\$40,000 for French-speaking countries

Meeting on Investment Promotion Services

341. Considerable emphasis was given to this activity by the Industrial Development Board at its first and second sessions. In keeping with this mandate, UNIDO has developed a broad programme for the promotion of external financing of industrial investment in the developing countries. The main points of this programme are:

- To assist in establishing or improving appropriate institutions for the promotion and financing of industrial investment;
- To train nationals in techniques used in the promotion of industrial investment;
- To assist in the preparation of bankable project reports;
- To provide investment promotion advisers;
- To assist the developing countries at the operational level.

Group 13 (cont'd)

342. As part of this programme, a Meeting, with emphasis on the factors of industrial investment promotion at the project level, was held in Vienna from 23 to 26 September 1968, sponsored by UNIDO. Participating were 50 representatives from developing countries and from institutions of investment and financing in capital exporting countries. Originally conceived in the Work Programme of 1968 solely for the Investment Promotion Centres in Europe this Meeting was broadened by virtue of the interest in the programme to include a wider scope of representation aimed at developing a dialogue on specific industrial investment opportunities.

343. The Meeting developed a series of contacts and encouraged a dialogue between interested representatives from both developed and developing countries. This dialogue concerned specific proposals emanating from either the developed or the developing country representatives for the promotion of external financing at the level of a single industrial project or a group of projects.

344. In the plenary sessions of the Meeting, the following subjects were discussed: investment promotion machinery and techniques of investment promotion; an approach to promoting and financing individual industrial projects; the establishment of a portfolio of project reports on investment opportunities in the developing countries, compilation of data on the local facilities concerned with external investment, and the usefulness of an exchange of information between delegates from developing and developed countries bearing on the promotion of industrial investment; and the role and assistance of UNIDO.

345. Ad hoc meetings between promoters of specific industrial projects in the developing countries and prospective investors were organized as an integral part of the meeting programme so as to permit discussion of specific projects and proposals between mutually interested parties.

Cost: US\$11,000 from Meeting Funds Ref: ID/E/20/Rev.1, para.197

Group 13 (cont'd)

Other activities

346. In addition the following activities were carried out in this area in 1968:

Conference on Industry and Finance, held in Addis Ababa from 25 to 27 March under ECA sponsorship, as a follow-up to a similar conference held in 1967 to discuss the establishment of regional and subregional investment promotion centres. UNIDO staff attended this meeting.

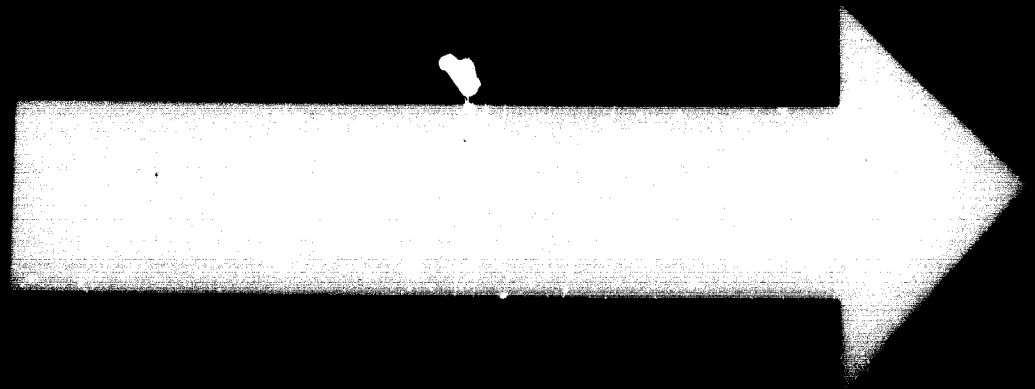
A mission to Sudan to review the technical assistance provided to this country in the field of industrial financing and investment promotion. Various projects are now being developed as a result of this mission, which was carried out in March 1968.

A mission in August 1968 to Iran to carry out a programme of promoting investment in specific industrial projects in the country. The mission discussed the implementation of this programme with the authorities in Iran.

A mission discussed the areas of co-operation between UNIDO and OECD in October 1968 in Paris. An exploratory mission visited Abu Dhabi, Bahrain, Dubai and Qatar in October/November 1968 to assist them in the formulation of a system of policies for industrial development.

A mission to the Ivory Coast in November 1968 examined the implementation aspects of the UNDP/SF project, Centre d'Etudes et de Promotion Industrielles.

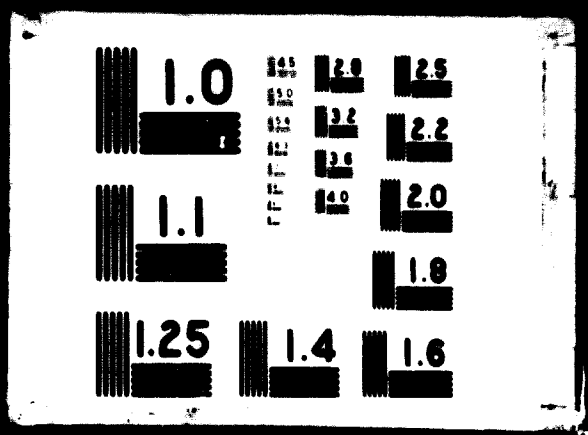
UNIDO contributed to a seminar held in Zagreb (October to November 1968) as part of the training programme on export promotion, as well as to the Seminar on the Public Sector held in Tunis (December 1968) organized in co-operation with ECA.



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Group 14 - Promotion and Exports of Manufactures and Semi-manufactures

Field activities

34. Under this group of activities, technical assistance was rendered in co-operation with the ECTAD/GATT International Trade Centre (ITC) to the developing countries in the identification and stimulation of production of manufactured goods for export and in related work areas. The assistance included guidance regarding production and marketing of specific products for which an export potential has been identified and the establishment of export promotion centres.

348. The following is a listing of the field activities of Group 14 during 1968.

		UNDP/TA		
<u>THE AMERICAS</u>		<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
Argentina	Promotion of Exports of Manufactured Goods (111-5)	5/18		34,020
Dominican Republic	Preparation of Market Studies (9000-68)	1/12		15,000
		<u>SIS</u>		
<u>ASIA/FAR EAST</u>				
China	Survey of Agricultural Implements (6 /116)	1/3		6,500
China	Ascertaining the Potential for Expansion of Exports (6 /116)	3/9		19,500
Singapore	Establishment of an Export Promotion Centre (6/239)	1/1		15,000
<u>EUROPE/MIDDLE EAST</u>				
Israel	Increasing Production of Metalworking Industries (6 /52)	1/1		2,000

Group 14 (cont'd)

Supporting activities

Training Course for the Development of Industrial Exports

349. This is a joint programme, initiated on 1 July 1968 by UNIDO and the World Trade Organization (GATT). It was designed to provide the most effective approach to training - commercial counsellors, foreign trade ministry officials and other government representatives from the developing countries - with regard to export promotion techniques and export marketing practices. The course was prepared early in 1968 and covered a range of specific subjects centered on the area of export production and export marketing. The training course itself was held in Zagreb from 28 October to 6 November 1968.

Cost: US\$25,000 from UNIDO regular budget Ref: ID/B/20/Rev.1, para.207

Expert Working Group Meeting on the Incentives for the Development of Industrial Exports

350. Originally, two meetings were planned for 1968 with regard to the examination of institutional aspects of export promotion and the extent to which a greater utilization could be made of export marketing organizations in the promotion of exports. It was agreed, however, to hold a single meeting in 1968 in co-operation with the ITC (UNCTAD/GATT). At this meeting, held from 11 to 16 November in Rome, the application and effectiveness of incentives to the exportation of manufactured products from the developing countries were discussed. The purpose of the meeting was to establish a basis of agreement with regard to the type and usefulness of the institutional framework in export promotion in order that future technical assistance in this area could be utilized more effectively.

Cost: US\$11,000 from UNIDO regular budget Ref: ID/B/20/Rev.1, para.207

Joint explorer missions regarding promotion of export oriented industries

351. While several missions were contemplated as a result of joint co-operation between UNIDO/UNDP, UNCTAD and the regional economic commissions,

Group 14 (cont'd)

agreement was reached to carry out a mission in the ECAFE region as a first priority. The purposes of the mission were to determine in consultation with the Governments of the region, the nature and scope of technical assistance required for stimulating the development and/or the establishment of export oriented industries and for promoting export marketing. Following briefing meetings in Vienna and Geneva in early October, the mission departed for the field and visited Indonesia, Malaysia, Pakistan, the Philippines, Singapore and Thailand. The report of the mission was finalized at the end of 1968 and was scheduled to be released shortly thereafter.

Cost: US\$5,000 from UNIDO regular budget plus similar costs by UNDP and UNCTAD Ref: ID/B/20/Rev.1, para.208

Expert group on utilization of excess capacity by manufacturing for export

352. Work on this project has continued since 1966. It will be concluded by the meeting of an expert group in Brazil in the first quarter of 1969. The meeting, scheduled for 1968, was postponed for organizational reasons. A series of six case studies was undertaken in 1968 to examine the problem of utilization of excess capacity in relation to specific manufacturing areas so as to shed light on the extent of the existence of excess capacity and the prospects for utilizing excess capacities in general, but principally in connexion with the development of export-oriented production.

Cost: US\$5,500 from UNIDO regular budget Ref: ID/B/20/Rev.1, para.209(a) and 210(e)

Development of metalworking industries as potential export industries

353. In 1966 several exploratory studies were begun regarding a methodology through which metalworking industries could be utilized as a foundation for potential export industries. As a result of the findings of these studies, completed in 1966, country studies in Hungary and Israel were undertaken in 1968 to examine the applicability of this methodology in these countries. An SIS technical assistance mission was sent to Israel to recommend practical measures for developing the country's metalworking industries into export

Group 14 (cont'd)

industries. On the basis of the results of these investigations, which were expected to be available by the end of 1968, similar technical assistance projects are envisaged for 1969 and 1970. In the long run, the material developed under this project will be useful in the programming of industrial development in the developing countries.

Cost: US\$15,100 from UNIDO regular budget Ref: ID/B/20/Rev.1, para. 210(a)

**Expert Group Meeting on Metalworking as Potential Export Industry
in Developing Countries**

354. In the expectation that the Hungary and Israel papers on metalworking industries as potential export industries would be available by mid-1968, tentative plans were made for the holding of an expert group meeting to discuss the findings of these studies and to review other pertinent technical material. Due to delays in the completion of these studies, the meeting has been tentatively re-scheduled for early 1969.

Ref: ID/B/20/Rev.1, para. 210(b)
and 210(a)

Industrial co-operation in promotion of industrial exports

355. This project was initiated to implement the recommendations of the First UNCTAD in 1964 with regard to the promotion of industrial exports. The Conference stated that there was a wide area of opportunity for greater industrial co-operation between developed and developing countries on the basis of complementarity through manufacture in the developing countries of components for machinery and equipment produced in the developed countries, and that to that effect specific arrangement between interested parties in the countries concerned should be explored. Such arrangements would establish a basis for the promotion of exports of these manufacturers from the developing countries on a long term basis. In 1967 and 1968 eight country studies were commissioned to examine specific aspects of this possible area of co-operation. Upon their completion an expert meeting is envisaged for 1969 to discuss the findings of these studies and to consider the manner in which UNIDO/UNCTAD could utilize them for the benefit of the developing countries.

Ref: ID/B/20/Rev.1, para. 210(b)

Group 14 (cont'd)

is—payment of credits through industrial exports from the developed countries.

49. This project was initiated in 1961 to examine the possible alternative forms of payment arrangements that might be utilized by the developing countries with regard to importation of capital goods essential for their industrial development. The progress of work during 1962 included the review of two consultant studies prepared in 1961 concerning this problem and a determination of the practices in foreign trade that might be applicable taking into account their possible advantages and disadvantages. Additional empirical data were also collected in 1962 and co-operation in this project with UNCTAD was established.

Ref: ID/B/20/Rev.1, para.210(f)

Protection of infant industries in the developing countries

357. This project was undertaken at specific government request to examine generally the practices of the developing countries regarding protection of infant industries. The investigation included a review of surveys and studies already completed by other organizations regarding industry protection, and particularly of their assessment as to the success of infant industry protection regulations in certain developing countries in promoting industrial development. Two technical papers were completed which provide additional data, one on the theoretical aspects and policies of protecting infant industries, the other on the experience of several selected developing countries in industry protection.

Ref: ID/B/20/Rev.1, para.210(h)

359. The Industrial Development Group, which is a permanent body for technical assistance, is also responsible for the collection, interpretation and dissemination of data on industrial development in developing institutions.

359. The preparation of UNIDO Annual Industrial Survey, which is included within the responsibilities of this Group, is a major data requirement. The collection of data which in large part must be compiled by the developing countries themselves. This is true also with regard to the data concerning production for the manufacturing sector during the Second Development Decade. This Group, therefore, undertook during the year a long-range programme aimed at developing these data requirements through country missions to help recipient countries in establishing or expanding their own machinery for carrying out industrial surveys. The resulting data would then be available for the use both of government policy-makers as well as of the secretariat of UNIDO.

World Industrial Development Survey 1962

360. The world industrial development survey is envisaged as an annual publication of UNIDO, and the issue for 1962 was scheduled for completion by the end of the year. This Survey reviews the main trends and developments in industry and related fields in the developing countries, with special emphasis on the manufacturing industry. It discusses conditions of demand and supply, manpower, natural resources, infrastructure, developments in import-substitution and export promotion, regional co-operation and industrial finance. The Survey was prepared by UNIDO staff with the assistance of consultants.
Cost: US\$22,690 from Consultant Funds Ref: ID/B/20/Rev.1, para.215

14/ Work under this Group is being carried out by the Industrial Policies and Programming Division and by the Industrial Technology Division

Group 15 (cont'd)

Projection studies regarding the Second Development Decade

361. The Survey Section has been actively engaged in carrying out preparatory work regarding data on industrial development and on industrial development prospects required in connexion with the preparation of the studies on the Second Development Decade. This work entails projections of output of manufacturing commodities up to 1980. It is being carried out in co-ordination with other units in UNIDO and the CDPDP at United Nations Headquarters following the recommendations of the Development Planning Committee. Outside consultants assisted in this task. UNIDO also participated in two field missions, one to East Africa and one to West Africa, initiated by CDPDP and ECA, to develop further data for this assignment. The first phase of UNIDO's work regarding the industrial sector was completed at the end of 1968.

Cost: US\$8,850 from Consultant Funds Ref: ID/B/20/Rev.1, para.221

Country industrial development studies

362. A number of studies of the status of industrial development and the supporting institutional structure in a selected number of countries had been originally planned for 1968 to serve both as a source of long-term data requirements for the industrial survey and as a basis for the policy guidance of government officials. However, it was decided that this would be at best only a limited approach to a systematic compilation of data intended to serve both the developing countries and the UNIDO secretariat, and that a more effective approach would be to render assistance to the developing countries to develop their own capacities for carrying out this programme. Consequently, the orientation of the initial programme was changed. In 1968 and at the request of many developing countries, a list of which is given below, a number of industrial survey missions has been planned. These missions aim at aiding the countries to survey and study their industrial structure and to pinpoint investment opportunities as well as to train counterparts so that work may continue after the departure of these missions. The countries which have requested such service are: Bolivia, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Kenya, Laos, Somalia, Uganda and Upper Volta.

Group 15 (cont'd)

Other countries including Gambia, Nicaragua and the Sudan showed interest and are under active consideration. The East African Development Bank also requested assistance in this area of work and its request is under active consideration. Most of the preparatory work for these missions has been completed and it is hoped, when the approval of UNDP is obtained, that these missions will proceed to the field as early as possible.

Ref: ID/B/20/Rev.1/Add.I, para.26

Techno-economic data relating to industrial sectors

363. The activities carried out in 1968 under this heading were, to a certain extent, a continuation of the sectoral techno economic studies which had been undertaken by UNIDO for the first time in preparation of the Athens Symposium. The sectoral surveys in depth are linked to the collection and analyses of empirical data relevant to sectoral forecasts for the Second Development Decade.

Sectoral surveys in depth

364. In keeping with the work programme adopted by the Industrial Development Board (ID/B/41, para.252), collection and analyses of techno-economic data in the form of sectoral surveys in depth were initiated by UNIDO in 1968 in the fields of iron and steel, non-ferrous metals and pharmaceuticals. The most important task of the project was the selection and meaningful analysis of relevant data from the massive information available. The data selected will be analysed and interpreted in 1969 and the final report will highlight major issues and recommend priorities for sectoral projects.

365. In the preparation of the surveys, UNIDO relied upon the services of such institutions as the Information Institute of the Iron and Steel Industry, the Non-ferrous Metal Industry of the USSR, the Stanford Research Institute, California, USA, and the International Federation of Pharmaceutical Manufacturers Associations in Zurich, Switzerland. Information given by the regional economic commissions and by specialized agencies, such as, for instance, WHO regarding the pharmaceutical industries, was also extensively utilized.

Group 1 (cont'd)

366. These surveys will also be used to prepare expert meetings to be held by UNIDO in 1969. Accordingly, a part of the "Non-ferrous metals survey" will be presented to the Expert Group Meeting on Lead and Zinc Industries to be held in 1969 (ID/B/36, para.78), and the "Pharmaceutical industries survey" will be presented to the Expert Group Meeting on the Establishment of Pharmaceutical Industries in Developing Countries (ID/B/36, para.79).

367. Data were collected and analyzed in 1968 regarding the activities of the United Nations in the iron and steel industry between 1963 and 1968. The findings were presented to the Second Iron and Steel Symposium held in Moscow from 19 September to 9 October 1968, entitled "Review of the activity of the United Nations in iron and steel industry in developing countries" (ID/WG.11/66).

Cost of iron and steel survey: 8,350 roubles (financed from Soviet voluntary contribution)

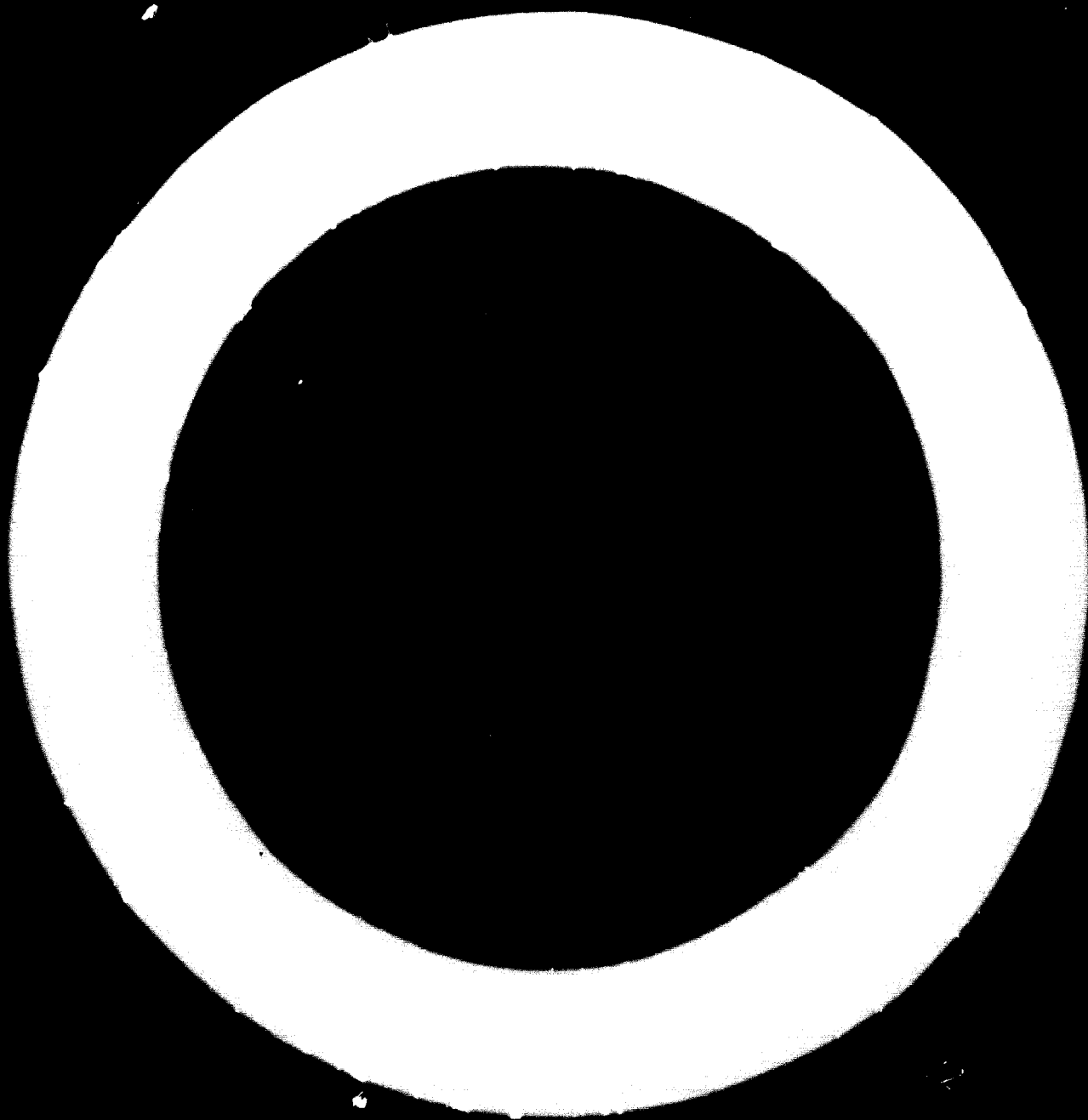
Cost of non-ferrous metals survey: 10,400 roubles (financed from Soviet voluntary contribution)

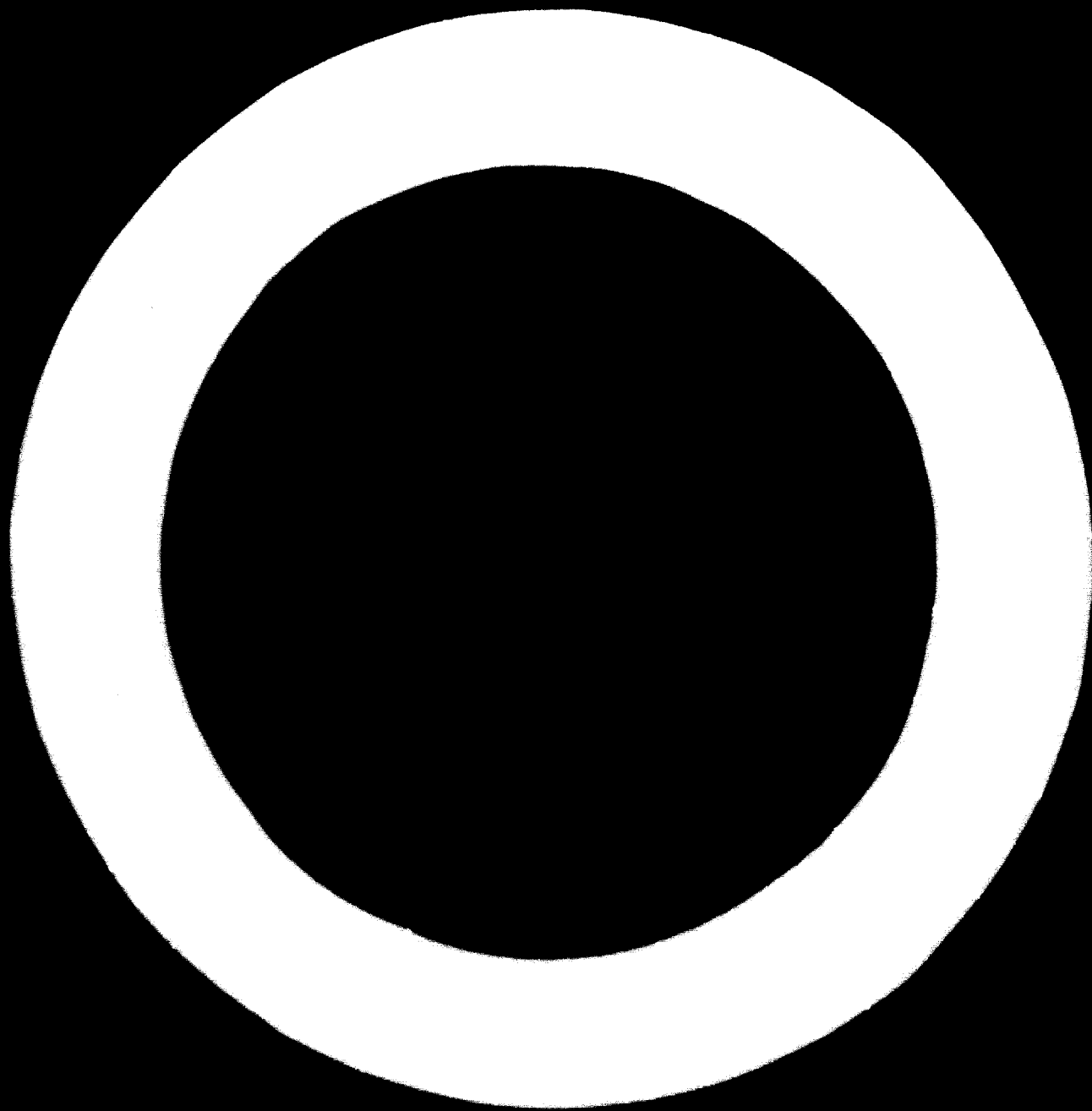
Cost of pharmaceutical industry survey (with case studies): US\$17,000 (to be supplied by the pharmaceutical industry - no UNIDO funds were used in 1968)

Collection and analysis of data relevant to
sectoral forecasts for 1970/1980

368. As was mentioned above, and in keeping with the interest of the Industrial Development Board (ID/B/41, para.244), the collection of the techno-economic data regarding industrial sectors was also oriented towards the requirements of the preparatory work for the Second Development Decade. Parallel with the macro-economic projections carried out by UNIDO in 1968, work was initiated on sectoral (branch) forecasts, using an empirical approach on the basis of information available from various sources, including publications, direct industry sources, planning data and industrial projects. The projects undertaken in 1968 cover steel, non-ferrous metals, textiles and chemical industries.

Cost: US\$10,000 (actual cost unknown yet) Ref: ID/B/20/Rev.1, para.218 and 219





ANNEX I

ADMINISTRATIVE ACTIVITIES OF UNIDO IN 1968

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Recruitment of project personnel

9. The recruitment and appointment of experts to serve with UNIDO Technical Co-operation Projects in developing countries continued to be handled by the Technical Assistance Recruitment Service (TARS) of the United Nations Office of Personnel, acting upon requests received from UNIDO, and in consultation with the UNIDO substantive divisions through the Division of Technical Co-operation. UNIDO personnel services are devoting particular attention to assuring that requests from experts received from developing countries under the SIS Programme are complied with as quickly as possible. The physical distance and consequent difficulties of working contacts between UNIDO and the Technical Assistance Recruiting Service at New York Headquarters resulting from the transfer of UNIDO to Vienna have caused some inconveniences but these are being solved gradually.

10. Three measures have been instituted for improvement:

- A TARS Unit has been established in UNIDO which will take over, stage by stage, the recruitment and appointment of UNIDO experts outside the Western Hemisphere, for which area TARS headquarters will continue to be responsible. Preparations were made to issue job descriptions direct from Vienna, as from 1 January 1969, for all UNIDO technical assistance posts; concurrently, work commenced on the establishment in Vienna of a roster of candidates for UNIDO expert posts. This roster is to be drawn up according to the results of a study of priority fields based on the analysis of government requests by field of activity; also, improved organizational arrangements and operational procedures have been formulated;
- The possibilities have been explored of concluding contractual arrangements with industrial enterprises and institutions for the provision of expertise to UNIDO/SIS projects. It is expected that by the end of 1968, a number of firms will be participating in this arrangement;
- Arrangements were made on several occasions for UNIDO substantive officers to visit national authorities responsible on behalf of the United Nations for the recruitment of experts in order to explain the special needs of UNIDO and prospect for, or interview, candidates for particular posts. Wherever possible, such visits were organized as joint UNIDO/TARS recruitment missions.

Other personnel activities

11. UNIDO and the IAEA had worked together since autumn 1967 to formulate a common insurance policy in order to obtain the benefits of larger group coverage and to lay the basis for joint administration in this sector at their future permanent headquarters site. Following intensive examination and discussions of

tenders received, agreement was reached on a scheme acceptable to both UNIDO and the IAEA, and the two organizations accordingly concluded parallel contracts. A new group health insurance scheme came into effect 1 August 1968. In addition to the basic medical and dental scheme, provision has been made for a supplemental insurance designed to complement the Austrian statutory medical insurance and for a disability insurance plan. Provision was also made for all UNIDO staff to participate in the Headquarters group life insurance scheme and an enrolment campaign was started late in 1968.

12. A second health clinic for UNIDO was opened in "Annex B" in the spring of 1968 to serve the staff working in the prefabricated buildings. This clinic and the one in the Felderhaus operate under the supervision of the UNIDO/IAEA joint physician.

13. The Staff Welfare and Housing Unit was busy throughout the year in helping newly arrived staff members and their families to find accommodation and settle down. Language classes, organized in conjunction with the IAEA, were extended, and from autumn 1968 covered five languages (English, French, Spanish, Russian and German) at three levels (beginners, intermediate and advanced). A number of clubs and recreational activity groups were founded, and the staff was supplied regularly with information on cultural and sporting facilities.

14. In October 1967, a survey of the cost-of-living for international officials in Vienna was conducted by the ILO Statistical Office in Geneva. The survey was approved by the Expert Committee on Post Adjustment, which met in Geneva in April 1968, and Vienna was placed in Class 1 with effect 1 January 1968. This change resulted in an increase of approximately 4.5 per cent of salary costs for Professional staff. Another survey was held in October 1968 after consultation between UNIDO, the IAEA, the ILO Statistical Office and the Office of the Controller at United Nations Headquarters. Results of this survey will be presented to the Expert Committee at its next meeting, which will be held in Vienna early in 1969.

15. Action was taken in March 1968 to implement in UNIDO, with the approval of the Controller's Office at Headquarters, the upward revision of the local salary schedule for General Service and Manual Worker staff that had been approved by the IAEA Board of Governors at its February Session. This increase had retroactive effect as from 1 January 1968.

25. In line with the proposed interrupted schedule of meetings of programme-formulating bodies in the economic, social and human rights fields, the preparation of the budget estimates for 1970 and of the planning estimates for 1971, called for in General Assembly resolution 2370 (XXII), was advanced into the last two months of 1968 to permit the submission of the financial implications of UNIDO's proposed work programme to the third session of the Board before the budget estimates of the Secretary-General are considered by the Advisory Committee on Administrative and Budgetary Questions. The preparation of the estimates for 1970 and the planning estimates for 1971 were completed by the end of 1968.

26. In addition to the organization and execution of the current work of the Budget Section, continuous contact and co-ordination were maintained with the Office of the Controller, with the aim of achieving maximum uniformity of policies and procedures.

Technical Programmes Financial Management Section

27. On 1 January 1968, the responsibility for budgetary and financial controls of Technical Co-operation projects was also transferred from the Office of Technical Co-operation in New York to the Technical Programmes Financial Management Section in Vienna. During the year, this Section has gradually expanded and improved its area of control and reporting to provide the management of the Technical Co-operation Division with the financial and statistical information it needs to exercise its managerial and co-ordination functions over projects in the field.

28. In addition to responsibility for budgetary and financial control and reporting, this Section is also responsible for the initiation of personnel actions and verification of entitlements for all project personnel in the field, and acts as administrative liaison between the field and all divisions within UNIDO on such matters as travel, salary allowance, leave etc.

29. In the interest of refining procedures and of ensuring a higher degree of working efficiency, close co-operation was established with United Nations Headquarters, particularly with the Technical Assistance Recruitment Service and the European Office concerning the various aspects of the Section's work.

Finance Section

30. The Finance Section activities expanded in the course of the year in proportion to the increasing staff and financial resources available. In the period from January to October 1968, the Section processed inter alia a total of 1,276 Journal Vouchers and 5,300 Payment Vouchers, as well as a total of 5,124 salary changes and 534 separations.

31. In close co-operation with Administrative Management, work was begun on a manual outlining procedures to be followed in the various units of UNIDO with regard to financial matters and with appropriate references to financial matters and to the Financial and Staff Rules.

32. A detailed analysis of the data-processing needs of this Section was undertaken with a view to integrating these needs with the over-all requirements of UNIDO. This matter is still under study.

Other financial activities

33. Two United Nations staff members from New York were assigned to Vienna, for a total of four weeks, to assist the Section in the formulation of requirements for the provision of speedier and more detailed records that are needed to support the budgetary and control functions of the Budget Section and Technical Programmes Financial Management Section.

34. To facilitate verification of UNIDO accounts, the United Nations Internal Audit Service has outposted an auditor to Vienna.

Conference Services

35. The Conference Services continued their efforts throughout 1968 to build up a highly qualified and specialized staff. However, at the year's end there were still a number of key vacancies that hampered efficient operations, particularly in the language and editorial areas. In order to make up for the shortage of staff as well as to meet peak work load requirements, it was necessary to hire a considerable number of short-term staff and to resort to the borrowing of staff members from the United Nations in Geneva. In addition, ad hoc arrangements had to be made with outside translation firms and editors.

36. The past year witnessed the development of progressively closer relations between the substantive divisions and the Editorial Unit. This has facilitated

35. production and securing of final scripts. A study was also made in preparation of an attempt to help both writers and editors in improving the editorial quality of UNIDO publications.

37. The reproduction of documents for UNIDO and for a number of United Nations conferences held in Vienna was carried out by the Documents Section either through its own duplicating facilities or under the common service arrangements with the IAEA. In the light of the experience with these arrangements, which continued to be very satisfactory, preliminary steps towards a more formal common service agreement were initiated. Recruitment for the Printing and Presentation Unit was carried out in step with the gradually increasing momentum of publication and with the delivery of composition equipment, and was completed by September, at which time the normal level of production was attained. Liaison with regard to the presentation, printing and distribution of sales publications was established with the units concerned at New York and Geneva.

38. In addition to servicing the second session of the Industrial Development Board and other UNIDO conferences, meetings, working groups and seminars, Conference Services were engaged in preparatory and administrative arrangements for the following United Nations conferences held in Vienna in 1968:

United Nations Conference on the Law of Treaties:
26 March - 24 May 1968;

Governing Council of UNDP: 11-28 June 1968;

United Nations Conference on the Exploration and Peaceful
Uses of Outer Space: 14-27 August 1968;

United Nations International Conference on Road Signs and
Signals: 7 October - 11 November 1968.

The assistance given to these conferences ranged from actual on-the-spot preparation and management to servicing the meetings in co-operation with, and on behalf of, United Nations Headquarters in New York and the European Office in Geneva.

39. It should also be noted that the agreement with the IAEA, entered into in 1967, for the common interpretation services, became operative during 1968.

General Services

40. During 1968 General Services concentrated on further implementation and refinement of services to UNIDO in its field of operations including purchasing, transport, travel, communications, records and mail distribution. Rapid growth in the size of UNIDO made necessary a major expansion in the area of General Services. The occupation of the first two prefabricated office buildings during 1968 involved planning the utilization of office space in collaboration with the Office of Headquarters Planning and Administrative Management, the provision of office equipment and facilities, the installation of control systems and procedures, the creation of various types of repair and maintenance workshops, and contracting for cleaning and utility services including the take-over from the City of Vienna for such services in the Felderhaus. The selection of staff to implement the new and expanding services presented special problems which were met during the year. The fact that the major part of the staff was located in two separate temporary headquarters, i.e. the Felderhaus and the prefabricated buildings, necessitated the installation of food services at both points. The facilities provided include a restaurant, a snack bar and a bar in the prefabricated buildings and a cafeteria and bar in the Felderhaus. The food services have been planned on a self-financing basis.

41. During the year the UNIDO Commissary was put into full operation, subject to provisional regulations agreed with the Staff Association and approved by New York Headquarters. During the year the Government of Austria undertook a construction programme which has provided UNIDO with adequate office and storage space. A Board of Management was created comprising representatives of the staff and the administration to assist the Director of Administration, Conferences and General Services, in the operation of the Commissary.

42. The expansion of UNIDO during 1968 resulted in considerable growth in the communications and records areas. An expert team from the Office of General Services, United Nations Headquarters, visited UNIDO and assisted in the installation of efficient operational procedures and methods.

43. The common services agreement with the IAEA in the administrative procurement area was continued, as well as the utilization of common storage facilities in the Hofburg; these joint services have proven to be quite satisfactory.

44. Other facilities were provided to the staff, including newspaper and bookstands. The Government of Austria and the United Nations also agreed on the

sale of United Nations postage stamps on UNIDO premises to the public for philatelic purposes. Sales began in November and have proven to be very popular with the Austrian public. The cost of sales of United Nations postage stamps is also planned on a self-financing basis.

45. In connexion with the expansion of the temporary headquarters premises in 1968, considerable work has been carried out during the last half of 1968 in collaboration with the Office of Headquarters Planning and Administrative Management in planning the requirements for furniture, office machinery, equipment and other general services, including transportation between buildings, flow of mail, creation of registries etc., in order to occupy the buildings immediately after construction is completed.

Technical Equipment Procurement and Contracting Office

46. On 1 May 1968, the Technical Equipment Procurement and Contracting Office (TEPCO) was established in the Division of Administration, Conference and General Services, with functional responsibility for the procurement of technical equipment and supplies, for contracting professional services for field programmes, for maintaining records of project equipment and supplies and for handling the sale and disposal of technical equipment in the field. The staff presently comprises three Professional officers, two Field Service officers on secondment, and supporting General Service personnel, a total of nine persons. To assist TEPCO in the discharge of its responsibilities and to meet other requirements of UNIDO, an Advisory Panel on Contracts for Services and a Committee on Contracts have been formed at UNIDO headquarters in accordance with United Nations Financial Rules and Regulations. The principal activities of TEPCO are:

Procurement of equipment - Agreement having been reached that United Nations Purchase and Transportation Services would conclude action on UNIDO requisitions presently in process, TEPCO commenced the execution of new requisitions for technical equipment received and approved as from 1 May 1968;

Contracting for services - As agreed with the United Nations Office of General Services, contractual services for UNIDO projects continued to be handled by the Purchase and Transportation Services in New York, until this responsibility is taken over by TEPCO on about 1 January 1969. Notwithstanding the general arrangements, TEPCO has already initiated action on a number of urgent programmes, including contracts with industry and consulting firms for short-term expert advisory services and for preliminary studies on the repair and maintenance of industrial equipment in the developing countries;

Field requisition control and inventory records - The responsibilities for the processing of requisitions, for expediting delivery, and for the maintenance of inventory records for all UNIDO field project equipment has now been centralized in TEPCO. Arrangements are being made for the first complete physical inventory of all UNIDO field project equipment as of 31 December 1967. Current practices of the specialized agencies in this area are being studied with a view to developing a system best suited to UNIDO's future requirements.

47. As 1968 drew to a close, TEPCO's efforts were concentrated on the organization of staff and on procedures to handle in Vienna both sub-contracting for new JNDP/SF projects and new types of contractual services to assist UNIDO in its task of providing expert advisory services to governments and industry in developing areas.

Office of Headquarters Planning and Administrative Management

48. In conjunction with the establishment of the headquarters of UNIDO in Vienna, the Government of Austria agreed to construct a permanent headquarters building. The terms of this agreement were set forth in the letter of 23 February 1967 to the Executive Director of UNIDO from the Permanent Representative of Austria to the United Nations, the text of which was communicated to the Industrial Development Board in document ID/B/6 of 12 March 1967.

49. In the light of the substantial financial commitment undertaken by the Austrian Government for the construction of a United Nations Centre (which would include buildings for UNIDO, the IAEA, common services and, subsequently, an international conference centre), and bearing in mind that the construction of the permanent headquarters building for UNIDO would be based on requirements and specifications to be provided by the United Nations^{1/} involving extensive and constant inter-agency liaison and co-ordination, the Secretary-General decided that formal organizational arrangements should be made:

- (a) To provide for the co-ordinated planning of the permanent headquarters in consultation with the Austrian Government and the IAEA, including specifically the determination of the needs of UNIDO in terms of space, facilities and functional lay-outs;
- (b) To ensure, on behalf of the United Nations, that the special requirements of UNIDO are met and that the technical specifications established by UNIDO are adhered to;
- (c) To provide the continuity of direction for the establishment of the temporary headquarters, including the increasing number of common services with the IAEA.

49. In order to ensure the operation on a proper footing from the outset, a contract was awarded to the firm of architects and engineers headed by the Austrian Government for the design and construction of the permanent office building. In connection with the preparation of a general statement of requirements to be put out for the architectural competition issued in November 1967, the Executive Director established an Office of Headquarters Planning and Administrative Management in the Office of the Director of Administration, Conference and General Services as of July 1968.

50. The functions of this new unit are:

- To plan and master temporary headquarters through 1971;
- To allocate space and to establish administrative services and facilities in the temporary headquarters buildings of UNIDO;
- To arrange for the provision of common services by the IAEA during UNIDO's occupancy of the temporary headquarters;
- To co-ordinate the permanent headquarters planning and construction, including the establishment of the future common services, with the IAEA;
- To prepare basic space requirements for office accommodation, conference facilities and related services in the permanent headquarters in Vienna, in consultation with representatives of the Austrian Government, the IAEA and United Nations Headquarters in New York;
- To provide, on a more permanent basis, administrative management services including management surveys and periodic organization and methods studies, general administrative planning, establishment of procedures, and reviews of functional and staffing arrangements.

Temporary headquarters

52. Details of the various locations of temporary headquarters were outlined in the report of 1967 activities (ID/B/22, Annex I). The following information, therefore, supplements or revises that which appeared in the report for 1967 and reflects the situation as of 12 November 1968.

53. The Felderhaus presently accommodates 425 staff members, a number which exceeds considerably the normal occupancy of approximately 300 persons. A new air-conditioned conference room with facilities for simultaneous interpretation was completed in October 1968 which will accommodate 40 to 50 participants for small conferences, workshops etc., and approximately 75 persons for lectures. The restaurant and self-service cafeteria for the exclusive use of UNIDO were completed during November 1968 as an extension of the commercially

operated restaurant in the ground floor of the Felderhaus, which can accommodate some 120 persons at one sitting, with a lounge and a smaller lounge.

54. In the Rathaus (Townhall) new mobile shelving, floor-to-ceiling systems, mobile shelving on tracks and covering a surface of 12,000 m² of shelving systems of documents were completed in December 1968. These systems free up an area of some 120 m² previously used.

55. An extension of the Commissary, which provides an additional area of an additional 265 m² of storage space, was completed in November 1968. While the additional storage area may not contain all of the Commissary's stocks, it will nevertheless provide some relief in the congested areas.

56. Annexes A and B, the two prefabricated structures, amounted to 27 partitions, which is almost at the planned maximum capacity. Some office space had to be reassigned to the restaurant/cafeteria operation, thus reducing the space available for offices. There are approximately ten vacant offices in the prefabricated buildings which, at the end of November 1968, will be allocated to relieve some of the congestion in the Felderhaus.

57. In the Hofburg a sub-basement below the present supply areas was renovated and modified to meet UNIDO's requirements for additional service areas and for accommodating the normal expansion of the reproduction and distribution facilities including an area for bulk paper storage. This project, which provided an additional 333 m² of badly needed space, was completed at the end of December 1968. In the interim period, temporary storage facilities comprising 444.5 m² had been made available in a commercial building (FORUM) near Annexes A and B and were vacated at the end of December 1968.

58. A recapitulation of all the office and related space (including service areas) in the temporary headquarters buildings of UNIDO, and of the occupancy status as of 12 November 1968 is given in tabular form below.

Space and Occupancy in
Temporary Headquarters Buildings

	Total usable space (net m ²)	Office space (net m ²)	Service areas (net m ²)	<u>Occupancy (no. persons)^{a/}</u>			<u>Reserve space</u>	
				Office space	Services	Total	Units	m ²
Helderbau	5446.25	4188.15	1247.30	34	8	42	3	81.75
Annex A	1355.0	1435.75	313.27	141	28	169	-	-
Annex B	1927.35	1314.43	608.12	85	21	103	10	204.29
Hofburg	915.50	178.80	786.70	3	7	10	-	-
Katharin	120.0	-	120.0	-	-	-	-	-
Commissary	557.1	-	557.1	-	-	7	-	-
Forum ^{b/}	444.5	-	444.5	-	-	-	1	250.0
Total	11162.10	6982.53	4179.57	573	141	714	14	537.04

^{a/} Includes authorized and extra-budgetary posts, consultants, temporary staff, IAEA personnel and commercial affiliates (Bank, Thos. Cooks, cleaning contractors etc.).

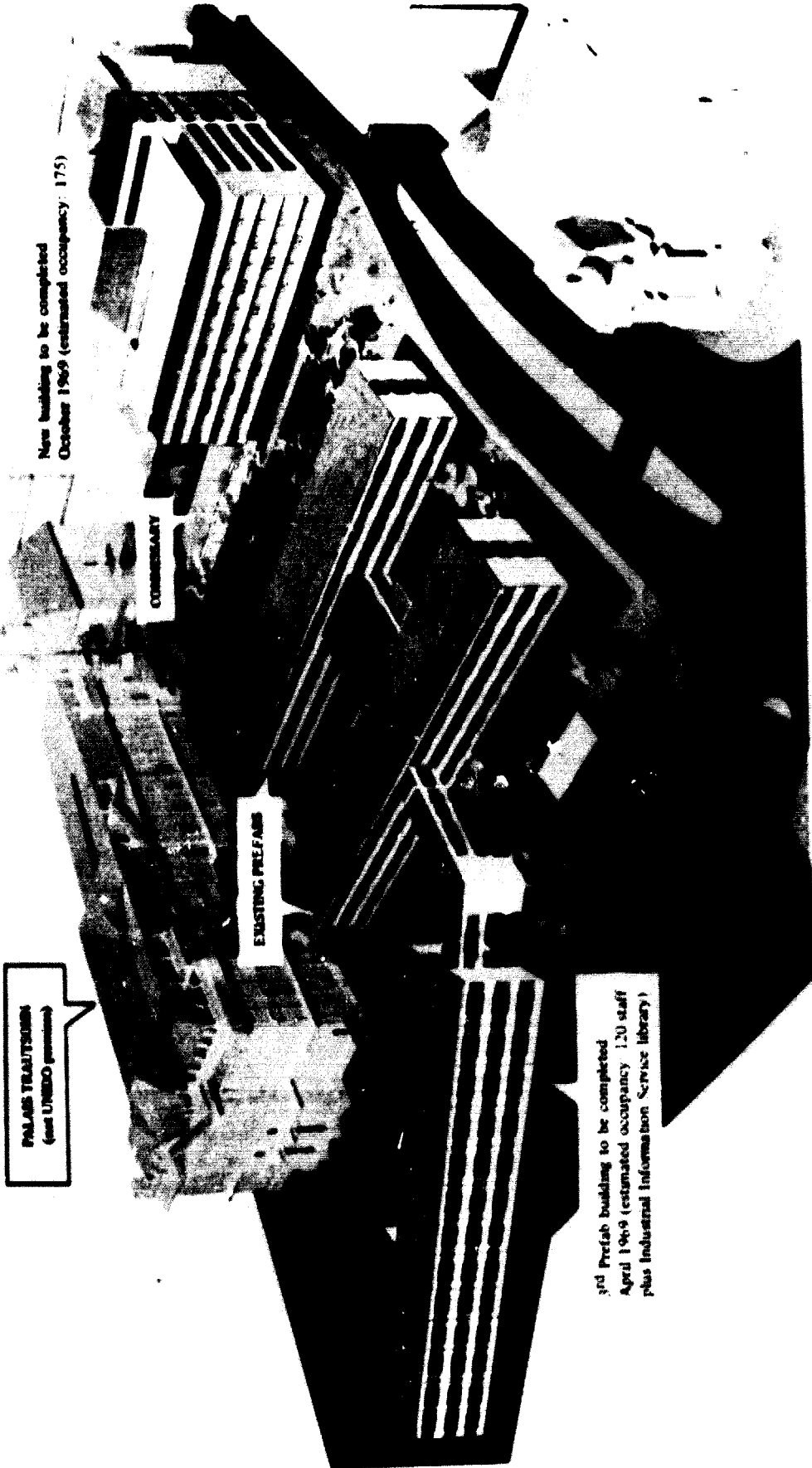
^{b/} Temporary storage area - vacated 31 December 1968.

59. During the period 1969 to 1970 additional premises will be required. As the continuing shortage of office and related space threatens to become even more critical in the next few months, when additional staff has been recruited, the Government of Austria and the City of Vienna have approved the construction of two additional buildings in the immediate vicinity of the existing Annexes A and B. One of these structures, which was referred to under "Organizational Matters" in the report for 1967^{2/}, is to be a six-storey building with ground floor and two basements, for eventual use as a students' hostel but which, in the interim, will be adapted to UNIDO's requirements. The structure will provide a total of 4019.3 m² of net usable space (gross 6011.05 m²), of which 2699.65 m² will be office and related space and 1319.60 m² service and storage areas in the basements. This building is presently under construction and is due for completion in October 1969. The maximum occupancy of this building is estimated at 175.

60. The second structure is to be a three-storey prefabricated building with full basement, designed on the order of the two existing Annexes. Construction of this building commenced in November 1968 and is due for completion in April 1969. The structure will consist of 2152.9 m² total usable space (gross 2977.2 m²), of which 1486.7 m² will be office space and 667.2 m² service areas.

^{2/} ID/B/34, p.10.

Additional premises for 1969



60. The new building will be designed to accommodate the library of the International Secretariat and Institute for Environment. The maximum occupancy of this structure is estimated at 120.

61. With the addition of these two new buildings (an artist's design is attached reflecting both the existing and new facilities), provision will have been made for a maximum occupancy in all premises of approximately 1000 persons which, on the basis of the estimated normal growth of UNIDO, should accommodate the Organization through 1972 and, possibly, until the permanent headquarters is built in 1973.

62. To provide some further measure of relief during the critical period between December 1968 and April 1969, when the prefabricated structure will be completed, the Government of Austria has made available a number of offices in the conference sector of the Hofburg which accommodate 20 persons.

Permanent headquarters

63. In July 1968, Secretary-General U Thant visited the Donaupark site where the Government of Austria and the City of Vienna plan to construct the permanent headquarters of UNIDO and the IAEA and the International Conference Centre in Vienna (an aerial view is attached). In addition to these facilities, which are expected to be completed in 1973, there will be provision for a housing project, hotels, recreation and commercial facilities, as well as reserve areas for expansion and accommodations for other international organizations.

64. On 29 October 1968 the Government of Austria formally approved the international architectural competition for the design of the project and the competition was mounted in early November 1968. The competition will be conducted in accordance with the rules of the International Union of Architects (UIA) and will run through 30 April 1969. An appropriation of 2,300,000 Austrian Schillings (approximately \$90,000) has been approved as awards for the prize-winning designs.

65. An international jury has been selected to judge the designs; it will be composed of the following members and alternates:

Members

Josef Kratich
Ministry of Construction,
Austria

Alternates

Henry H. Cadbury Brown
Architect, United Kingdom

Site of the Permanent Headquarters for UNIDO / IAEA and International Conference Centre

(DONAIPARK)



Members:

Jiri Novotny
Architect, CSSR

Ferdinand Schuster
Architect, Austria

Anton Seda
Stadtbauamtsdirektion,
Vienna, Austria

Haikki Siren
Architect, Finland

Sir Basil Spence
Architect, United Kingdom

Pierre Vago
Architect, France

Alternates:

Alberto Casanovi
Architect, Switzerland

Ernst Heins
Architect, City of Vienna,
Austria

Helmuth Henrich
Architect, Federal Republic
of Germany

Czeslaw Koteln
Architect, Poland

Karl Raimund Lorenz
Architect, Austria

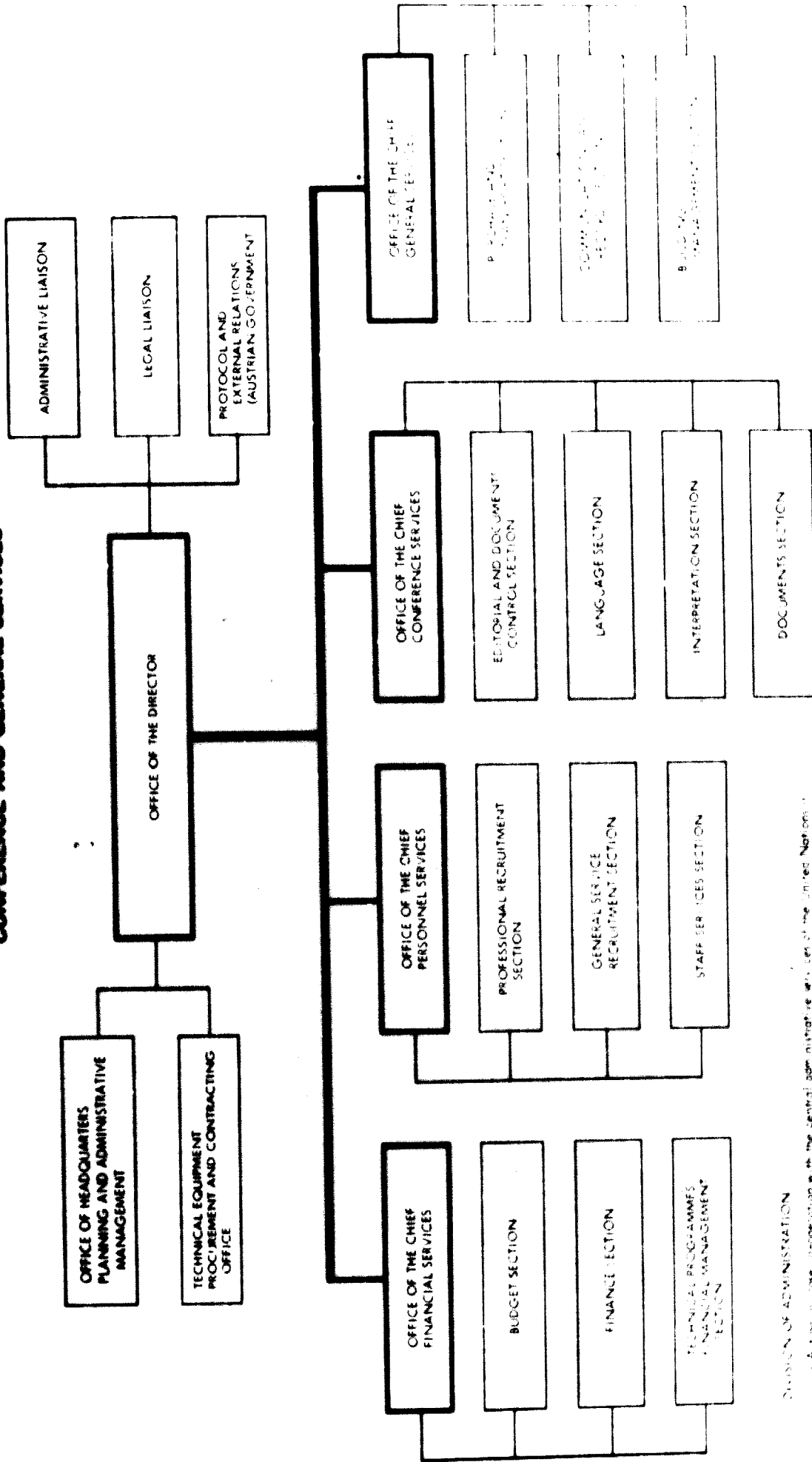
Wihelm Schoebl
Architect, Ministry of
Construction, Austria

Administrative management

66. The electronic data processing needs of UNIDO are being ascertained and co-ordinated in order to establish the relative advantages and problems that would arise from: the use of commercial service bureaux; the utilization by UNIDO of computers located within other agencies; or separate computer installation. UNIDO participated in meetings of the Computer Users' Committee of CCAQ and intends to approach the problem of electronic data processing within the outline established at these meetings. In particular, UNIDO is considering ways and means of fully utilizing the trained and experienced computer personnel already available in the IAEA and the possible development of joint programmes for recruitment and training of staff.

67. Other activities included assistance in establishing various secretariat committees, boards and panels and in preparing administrative issuances. The common services arrangements with the IAEA are constantly under review in the light of changing circumstances and the rapid growth of administrative services in UNIDO. Various surveys of personnel utilization, procedures etc. are planned for 1969. The preparation of a finance manual, outlining the functions and procedures of the Finance Section, is also under way.

DIVISION OF ADMINISTRATION CONFERENCE AND GENERAL SERVICES



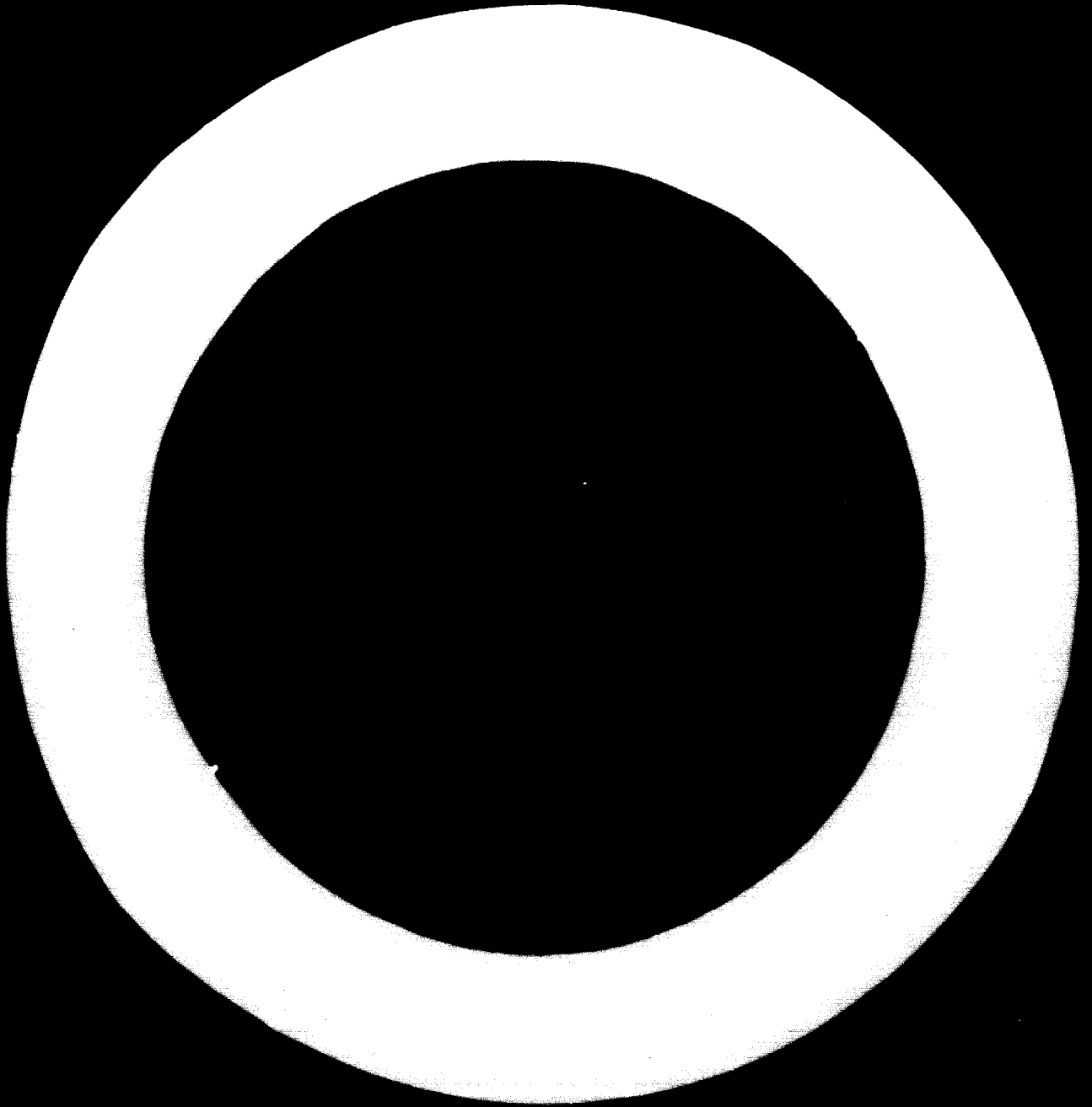
DIVISION OF ADMINISTRATION

Administrative cooperation with the central administrative services of the United Nations is required for personnel, budgetary and financial administration of UN/DC.

The division is responsible for providing conference services for UN/DC meetings.

The division is also responsible for the following: registration, reproduction and distribution of UN/DC official records, publications and publications.

The division is also responsible for general services including the management of UN/DC buildings and the management of planning for the permanent headquarters building in Vienna.



ANNEX II

REPORT ON PUBLIC INFORMATION SERVICES

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Information

1. The Public Information Service of UNIDO works to contribute to the promotion of industrial development through the effective use of mass communications media. It is not only an agent for the dissemination of general information on the work of UNIDO, but is also an essential instrument in fostering economic growth in both developed and developing countries.

2. In the developed countries, the principal aim of information activities has been to increase understanding of, and support for, multilateral action in the industrial field. In the developing countries, public information endeavours to foster a wider knowledge of the complex development process and of the need for public involvement in it.

3. As an integral part of the development process, communication techniques and materials are being used increasingly to improve the climate for development by creating, among the local communities directly affected by a project, acceptance of the economic and social changes often involved. This requires a multi-directional approach, aimed at Governments, business groups and opinion-makers as well as at the general public and specific communities.

Staff Liaison

4. By acting as a link between staff members at UNIDO headquarters at the New York Liaison Office and experts and advisers in the field, the Public Information Service aims to foster a sense of identity and of involvement in a common cause and to ensure a steady flow of material on the world-wide activities of UNIDO for use in the preparation of information programmes.

Mass communications media

5. A major portion of the work of the Public Information Service consists in providing coverage of the day-to-day activities of UNIDO to the traditional mass media - press, radio, television and film. This work involves:

- Preparing press releases, including the distribution of copies of all at their meetings and at other appropriate occasions;
- Issuing summaries of meetings and work;
- Reporting on field projects and related activities in Member States;
- Arranging press conferences or informal briefings with key editors or journalists, individually or in groups;
- Recording radio interviews with delegates or experts on the job and at headquarters;
- Conducting television interviews;
- Obtaining film and photo coverage of major events and projects;
- Participating in national or international exhibitions, e.g. the Vienna International Fair or the Osaka World's Fair;
- Answering general inquiries on all aspects of the work of UNIDO;
- Stimulating, encouraging and assisting in the production of programmes on UNIDO by government or private information agencies in Member States.

6. The material used in the various means outlined above is channelled to information outlets in Member States, and is also given widespread distribution through articles, features, news broadcasts, documentaries, films and filmstrips prepared at UN Headquarters in a number of languages and disseminated through the world-wide network of UN information centres and services.

Educational institutions

7. Another function of the Public Information Service of UNIDO is to promote interest in the Organization and support for its activities among schools, universities, research centres and other educational institutions. This is done by encouraging teaching about the United Nations; providing speakers and background material for panel discussions; sponsoring special projects such as school broadcasts and essay competitions; assisting students to prepare theses on subjects related to the work of UNIDO; arranging visits and briefings for student and teacher groups; and preparing articles on UNIDO for basic reference works, e.g. yearbooks and encyclopaedias.

Non-governmental organizations

8. The Public Information Service attempts to increase the scope and impact of its work by enlisting the co-operation of opinion-forming and policy-making bodies such as parliamentarians, civic and community groups, religious bodies, professional societies and student organizations.

The business community

9. A special effort is being made to secure the active participation of members of the business and industrial community in the work of UNIDO. The Public Information Service assists in the preparation of material on specific industrial problems and sectors for specialized trade periodicals or publications devoted to development problems. Briefings and interviews on questions of special interest to members of this community are also arranged on request.

Liaison with Member Governments

10. The Public Information Service supplements the function of the external liaison section by answering queries from official sources for general information on current and projected programmes and activities of UNIDO. It also prepares and circulates summaries of debates on UNIDO in the Economic and Social Council, in the General Assembly and in the annual pledging conference.

Publications and special projects

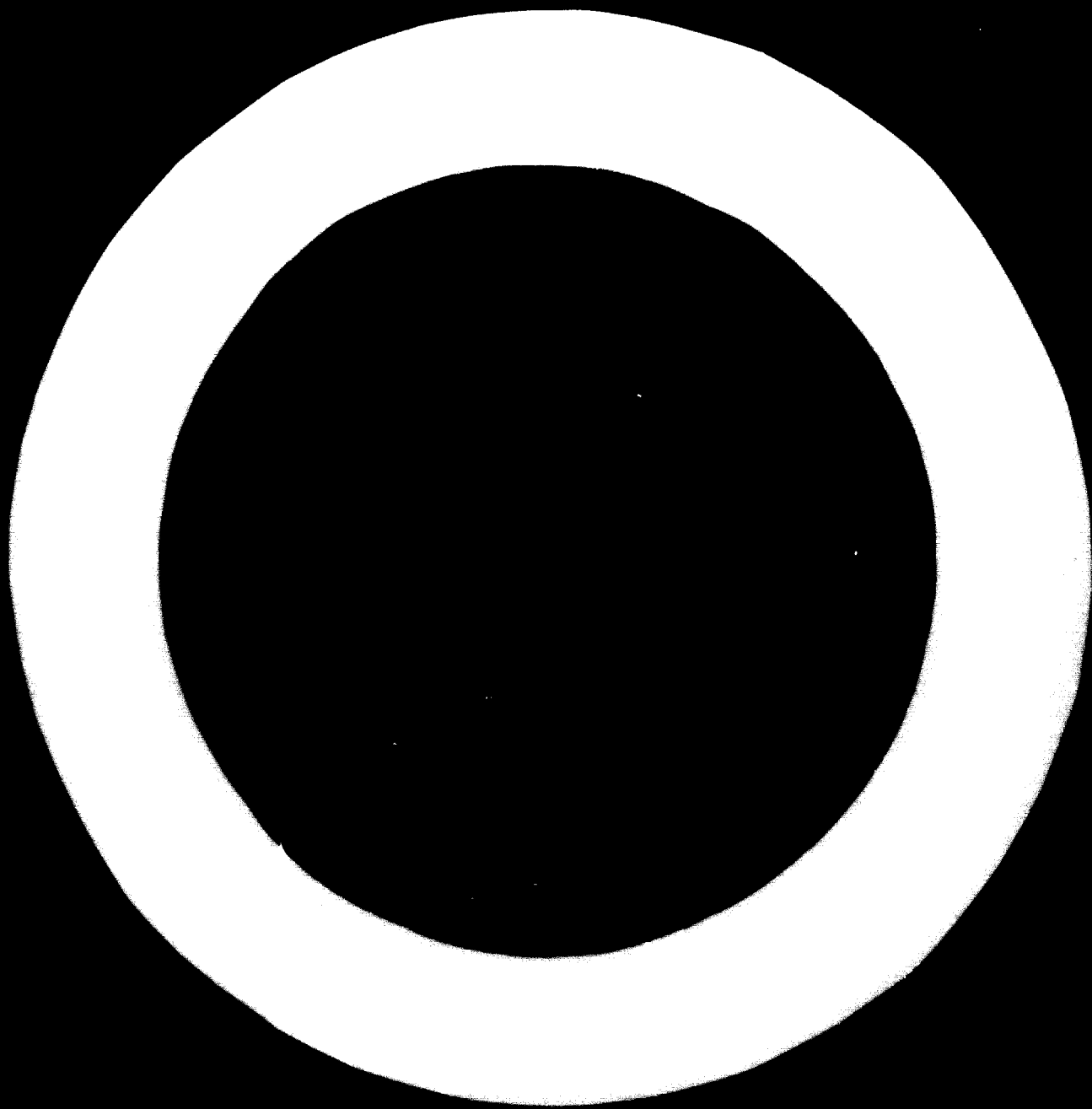
11. The Public Information Service has started work on the preparation of brochures, posters, display kits and on a wide selection of other audio-visual material and documentation on the structure and activities of UNIDO. In addition to making the work of UNIDO better known in Member States, the Public Information Service hopes to enable the Organization to contribute more effectively to special projects and observances such as the International Year for Human Rights and the 1970 Osaka World's Fair, involving all members of the UN family.

Development support activities

12. In addition to, and totally distinct from, its effort to obtain greater public understanding and support for the work of UNIDO, the Public Information Service endeavours to function as an instrument of the development process itself. It works in close co-operation with the United Nations Development Programme and the Technical Co-operation Division in using information techniques and materials to increase the effectiveness and acceptability of a project at the local level, among the community the project is designed to serve. Projects of this type are under way or have already been completed in East Africa and Latin America.

Assistance to other United Nations activities in Vienna

13. In the absence of a United Nations Information Centre in Vienna, and in view of the increasing number of UN conferences now being held here, the UNIDO Public Information Service often acts as an outposted arm of the Office of Public Information. In 1968 assistance was given in the servicing of several UN meetings as well as in connexion with special projects. In liaison with the Austrian authorities and information media, the Public Information Service rendered its services on matters pertaining to the public information activities of the United Nations.



ANNEX III

REPORT ON THE ACTIVITIES OF THE NEW YORK LIAISON OFFICE

November 1967 - October 1968

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Introduction

1. Subsequent to the transfer of UNIDO headquarters to Vienna, the New York Liaison Office was established with a small staff on 1 November 1967 to carry out essential liaison functions at United Nations Headquarters. These functions involve primarily (a) coverage on behalf of UNIDO of intergovernmental meetings held throughout the year at United Nations Headquarters and liaison with delegations from Member Governments attending the meetings; (b) liaison and co-ordination with different units of the Secretariat of the United Nations and affiliated organizations such as UNDP, UNITAR etc., and the maintenance of the necessary contacts with other international organizations and agencies located in Canada and the United States; (c) liaison with industries, research organizations and similar agencies on matters related to the programmes of UNIDO.^{1/}

2. The New York Liaison Office also carried out ad hoc tasks and in some cases, individual projects as and when required for effective implementation. However, ultimate responsibility for these activities remains centred in the appropriate units at UNIDO headquarters in Vienna. On the whole, the work of the New York Liaison Office is fully subordinated to the requirements of UNIDO headquarters, and the tasks that it undertakes represent ancillary functions intended to service most effectively current UNIDO activities and programmes.

Coverage of United Nations meetings

3. As a UNIDO presence at United Nations Headquarters, the New York Liaison Office was instrumental in providing continuing coverage of official meetings and in keeping the Executive Director and the secretariat at UNIDO headquarters informed of relevant developments. Among the specific instances of activities linked to this function were the following:

- (a) At each session of the General Assembly, follow-up was provided on all matters of direct concern to UNIDO as well as on questions of general policy, particularly in the development field. Those views reflected in official statements at the General Assembly which were of special importance for UNIDO were compiled and circulated to the professional staff in Vienna. Specific consultations with government representatives were carried out, as required, in connexion with matters directly concerning UNIDO.

^{1/} The functions of the Office, including these three areas, were formally set out by the Secretary-General in ST/SGB/131/Amend.9 dated 27 October 1967.

- (b) The New York Liaison Office carried out the preparatory and organizational work for the first UNIDO Policy Conference scheduled to be held on 1 December 1968 at United Nations Headquarters.
- (c) Meetings of other United Nations bodies, during the period included, in addition to the 22nd and 23rd sessions of the General Assembly, the following: UNDP Governing Council (fifth session); ACC Sub-Committee on Marine Science and Technology (February and March 1968); Advisory Committee on Science and Technology (ninth session); ACC Sub-Committee on Development Decade (third and fifth meetings); United Nations Statistical Commission (fifteenth session); Preparatory Committee for the ACC (57th and 60th sessions); Committee on Programme and Co-ordination (second session, June 1968). General coverage was also provided on a routine basis for the Spring session of the ECOSOC and its resumed sessions.

Inter-secretariat liaison on operational activities

4. In addition to day-to-day consultations with the UNDP secretariat on current matters, staff of the New York Liaison Office are involved in a variety of ad hoc operational activities as directed from UNIDO headquarters. They also participated on behalf of UNIDO in inter-secretariat activities dealing with various aspects of co-ordination of the operational programmes, including the semi-annual meetings of the Inter-agency Consultative Board for the UNDP Programme and the UN Global Meeting of Resident Representatives held in Hot Springs, Virginia.
5. The New York Liaison Office contributed to the recruitment of experts for field assignments through daily contact with the United Nations Technical Assistance Recruitment Service. On the average, interviews of candidates for technical co-operation assignments have numbered more than 25 per month. Specialists who visit United Nations Headquarters are frequently referred to Vienna for follow-up action with a view of associating them with UNIDO's field activities.
6. Inquiries on operational activities from Member Governments through their permanent delegations in New York are handled on a daily basis. In many cases such consultations have contributed to speeding up action in respect to specific projects or to clarifying the nature of requests submitted by Governments. In exceptional cases, such as unavailability of a UNDP representative or a lack of other suitable channels, the New York Liaison Office has to provide operational liaison with the Government via the Permanent Delegation at United Nations Headquarters.

7. In addition, because of special circumstances attending government requests, it has been necessary to delegate to the New York Liaison Office responsibility for implementation of industrial projects such as was the case in connexion with a request from the Government of Peru for assistance in the iron-ore industry. Two experts were provided on an urgent basis to carry out the survey requested by the Government and to make recommendations for improvement in the various aspects of this industry. In respect of certain large operational projects, staff of the New York Office provided the substantive backstopping in connexion with contractual work done by consulting firms and with drawing up specifications for procurement of equipment under the established United Nations procedures.

Liaison in connexion with other activities

8. Day to day liaison, covering a variety of relations between UNIDO and United Nations Headquarters, was provided with different units of the Secretariat including consultations with the Secretary-General's Office related to such matters as the annual reports of the Secretary-General; statements and reports requiring reference to UNIDO's activities; and matters concerning harmonization of activities within the United Nations systems as a whole. Contacts with various sectors of the Department of Economic and Social Affairs related mostly to the co-ordination of substantive areas of work and co-operative undertakings such as the reports on social aspects of industrialization, housing and building materials, science and technology, as well as matters concerning industrial investments, patents and fiscal measures.

9. The New York Liaison Office has also been instrumental in establishing continuing arrangements with the United Nations Statistical Office to ensure adequate statistical data for the surveys conducted at UNIDO headquarters.

Liaison with the IBRD, IMF and the IDB

10. The New York Liaison Office is called frequently to undertake consultations with the secretariats of the International Bank for Reconstruction and Development (IBRD), the International Monetary Fund (IMF) and the Inter-American Development Bank (IDB). It also represented UNIDO at the UN/IBRD consultative meetings held in January and April 1966 concerning the co-ordination of operational activities. The Director of the Office represented UNIDO at the annual meeting of the IBRD and IMF held in Washington in September

109. He also participated in a meeting on industrial development in Latin America, organized by the Inter-American Development Bank with a view to increasing the flow of capital resources towards industry.

11. The New York Liaison Office has been host to several groups of trainees from developing countries, sponsored by the ILO, IBRD or IDB, for briefing on the activities of UNIDO and other United Nations organizations.

Liaison and contacts for programme implementation

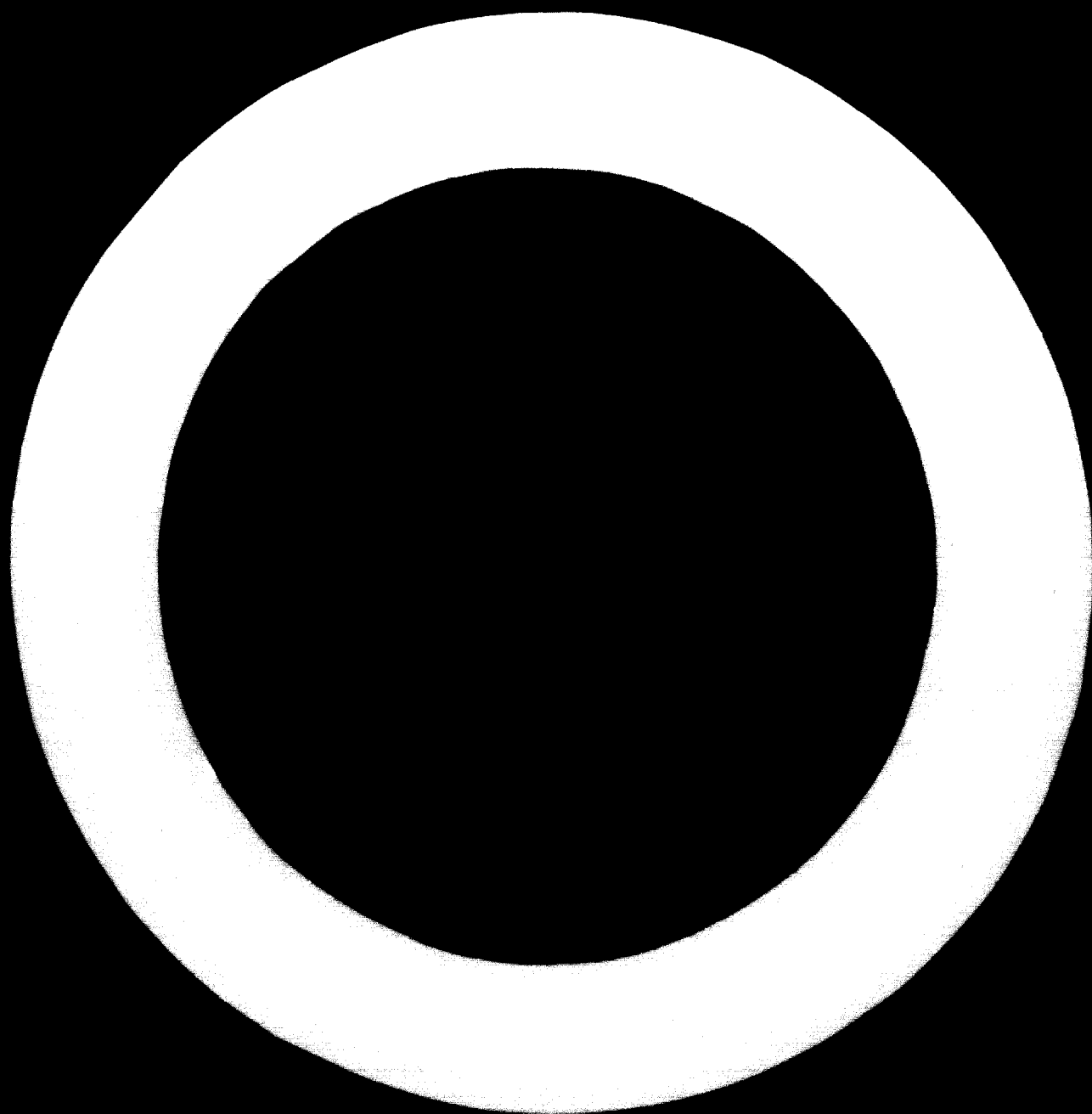
12. In connexion with the need to mobilize outside resources for the implementation of UNIDO's programmes, the New York Liaison Office has made efforts to build up contacts with institutions and organizations actively engaged in the industrial development field. One aspect of this work is related to the gathering of information which may be useful to the headquarters staff of UNIDO and, particularly, to the Industrial Information Service established in Vienna. To that effect, consultations were carried out with a number of organizations specializing in the handling of industrial information of various types. No less than 40 associations and professional organizations ranging from advanced research institutes to management organizations have been contacted to obtain on a regular basis their publications and to initiate a continuing relationship for obtaining data useful to UNIDO.

13. Contacts have also been established on an ad hoc basis with a number of universities, professional associations and institutes of technology for the mutual exchange of information. These contacts have contributed to the availability of technical data and to professional participation at seminars and expert group meetings organized by UNIDO.

Ad hoc activities

14. The New York Liaison Office, though normally concerned only with liaison functions, is entrusted occasionally with more direct responsibility for certain projects where the nature of the work or the involvement by other organizations requires more extensive execution in its geographical location. An example of such activities was the UNIDO/UNITAR Training Programme in Industrial Investment Promotion. The Programme, which was organized jointly by UNIDO and UNITAR, brought together participants from Barbados, Brazil, Cyprus, Ghana, Iran, Iraq, Israel, Jamaica, the Republic of Korea, Nepal, Pakistan, Philippines, Singapore, Sudan, Thailand, Trinidad and Tobago, the United Arab Republic and Zambia.

attended at least one meeting as the Vice-Chairman of the War. (1940-1945);
the 1946 Annual Meeting of the Institute of Mining, Metallurgical and Chemical
Engineers; the Tripartite Chemical Engineering Conference in Montreal, 1948;
and the International Conference on the Application of Electrochemistry, 1950,
sponsored by the University of Pittsburgh in October 1950.



ANNEX IV

DETAILED LIST OF FIELD ACTIVITIES BY
PROGRAMME AND REGIONS

General remarks

Annex IV lists all field projects which have been under implementation in 1968 by programmes (sources of financing) as well as by regions and countries. Following the title of each project there is a summary description of the purpose of the project. Further, an indication is given of the status of implementation.

In order to keep the document within a manageable size and yet maintain a perspective of the field activities carried out in 1968, the information on implementation is given in very brief terms such as "expert under recruitment", "candidatures submitted to the Government", "expert in the field", "mission completed".

The first two expressions used are indicative of main steps involved in the recruitment of the expert. When the indication of the "expert in the field" is given, this implies that he is carrying out the purpose shown against each project and, in the case of longer missions, is submitting periodic reports on his activities to UNIDO for backstopping and current progress evaluation by UNIDO. The term "mission completed" indicates that the expert has carried out his tasks according to the purpose of the project and that a final report has been, or is being, presented to the Government through UNIDO.

In cases where the above classification is insufficient to describe the status of the project, a more detailed description has been given.

All cost figures given are estimates made at the time the project was established.

The reports on the implementation of the various field activities state the progress made up to 30 September 1968.

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UNDP SPECIAL FUND

AFRICA

Algeria

Industrial and Marketing Surveys on Petroleum Derivatives and Natural Gas (ALG-7)

Purpose: To assist the Government in making feasibility studies on local utilization of petroleum derivatives and natural gas, and on the export of natural gas. Through these studies it is hoped that the country's agricultural, mineral and industrial resources can be developed to their fullest within the framework of the national economic development plan. The UN has supplied a team of experts, and subcontracts have been awarded to consultants for the elaboration of specific aspects of the project (transportation and blueprints for the petrochemical complex).

Implementation: The plan of operations was signed on 8 December 1965; the project became operational on 15 April 1966 and was completed in February 1968. It is expected to be extended into Phase II.

Approved: January 1965
Duration: 2 years

UNDP
Gov't
Total

867,300
353,266
1,220,566

Centre for Industrial and Technological Studies (ALG-18)

Purpose: To establish an organization to evaluate industrial feasibility studies and to advise on projects to be carried out under the national development programme. These projects include studies on petrochemicals, fertilizers, food processing and water desalination plants, metalworking industries and on the liquefaction, utilization and transport of natural gas.

3/18

Implementation: The draft plan of operation has been submitted to UNDP for comments. The project manager originally proposed for recruitment was not released by his Government. Formal confirmation of the acceptance of the new candidate is now pending. Job descriptions for the two other permanent posts and for two short-term consultants have been circulated.

Approved: January 1968
Duration: 3 years

UNDP
Gov't
Total

870,700
629,000
1,499,700

UNDP/SPECIAL FUND

AFRICA (cont'd)

Ivory Coast

Experts	Fellows	Cost
m/m	m/m	US\$

Centre for Industrial Studies and Promotion (IVCO-17)

Purpose: To assist the Government of the Ivory Coast in establishing in Abidjan a Centre for Industrial Studies and Promotion to provide services urgently needed for the promotion and acceleration of industrial development and to help attract domestic and foreign investment.

Implementation: The draft job description of the project manager and of the plan of operation have been completed and sent to the Government. A UNIDO mission will be sent to the Ivory Coast in October 1968 to finalize the plan of operation.

Approved: June 1968
Duration: 3 years

UNDP
• Gov't
Total

479,100
318,000
797,100

Rwanda

Pilot Plant for Industrialization and Pyrethrum Production, Mukingo (RWA-3)

7/41	6/36
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Purpose: To assist the Government in the establishment and initial operation of a pilot plant for pyrethrum production, with a capacity of 200 tons of extract per annum. The UNDP/SF will provide equipment for the pilot plant, including modern machinery required for drying, grinding and the complete solvent extraction of the flowers and for refining and processing the product. In preparation for the operational stage, a market survey was made by a consultant, and various specialized firms were invited to submit data concerning plant size and costs of installation. In conjunction with the proposed processing operations, the Government is undertaking a programme for intensified production of pyrethrum flowers. Funds are included for a specific agricultural development study in order to promote the productivity of small-scale growers. Since October 1966, the European Economic Community has taken steps to assist in the expansion of the production of pyrethrum.

Implementation: The project manager and the industrial economist have been recruited. Negotiations between the Government and the resident representative on the first amendment to the plan of operation are underway. Specifications were mailed to potential bidders on 9 August 1968.

Approved: January 1966
Duration: 3 years

UNDP
Gov't
Total

1,486,500
1,280,300
2,766,800

UNDP SPECIAL FUND

AFRICA (cont'd)

Sudan

Industrial Research Institute, Khartoum (SUD-1)

Purpose: To promote industrial development through the application of industrial research and technology adapted to the country's conditions and resources. This involves the establishment of a local source of practical information to provide assistance, professional advice and counsel on processes, standards and efficient techniques of industrial production and management technology.

Implementation: A short-term consultant on sugar technology has completed his assignment. An industrial cost accountant, an analytical chemist and a mechanical testing engineer have begun their assignments, and a chemical engineer has been appointed and will soon arrive in the field. A cardboard manufacturing consultant will make a return visit at the end of October for a period of about five weeks. The delivery of equipment proceeds according to schedule.

Approved: June 1963
Duration: 5 years

UNDP
Gov't
Total

754,100
1,404,939
2,159,039

Tunisia

National Centre for Industrial Studies (TUN-15)

Purpose: To assist in the establishment and initial operation of a National Centre for Industrial Development for Tunisia. The functions of the Centre will be to advise the Government on industrial programmes and policies, to undertake technical and economic studies of specific industrial projects and to prepare feasibility studies.

Implementation: The plan of operation was signed on 8 August 1968. The contract of the project manager has been approved for renewal by the Government, and an industrial documentation expert is in the field. A marketing expert will report for duty on 12 October 1968. Candidates for all other posts have been selected by the Government and they are being recruited by the Technical Assistance Recruitment Service.

Approved: June 1966
Duration: 5 years

UNDP
Gov't
Total

771,700
830,000
1,601,700

5/44

NOB/SPECIAL FUND

AFRICA (cont'd)

United Republic of Tanzania (cont'd)

Experts	Fellow	Total
Exp.	Fell.	\$

Industrial Studies and Development Centre, Dar-es-Salaam (IAN-16) (cont'd)

Implementation: All posts of experts are filled. All counterparts have academic degrees in their special fields. The training on the job is satisfactory. The Government has submitted a request for Phase II of the Project. The Centre has participated in the work on the Second five-year Plan. Many feasibility studies, market studies and surveys have been undertaken, either upon request by the Government, by development and financing institutions, by private investors or at the Centre's own initiative.

Approved: January 1965	UNDP	526,300
Duration: 3 years	Gov't	<u>169,734</u>
	Total	696,034

The Maghreb Countries (Algeria, Libya, Morocco and Tunisia)

Centre of Industrial Studies for the Maghreb (PI-77)

Purpose: To assist in the establishment and setting in operation of a Centre of Industrial Studies for the Maghreb countries. The main function of this Centre is to prepare, at the request of the four countries concerned, general industrialization surveys. The work programme of the Centre for 1968 was approved in January and includes the following studies: water desalination, manufacture of fertilizers, production of pharmaceutical products, exploitation of esparto grass and organization of training for specialized labour.

5/60

Implementation: The plan of operation was signed on 30 October 1967. The project was appointed and authorized to commence operation on 13 February 1968. Expert posts are under current recruitment. Several candidates were submitted to the Government and arrangements are being made for the placement of those who were accepted.

Approved: January 1966	UNDP	1,454,900
Duration: 5 years	Gov't	<u>1,040,000</u>
	Total	2,494,900

Regional

UNIDO participation in SF project executed by UN:

Formulation of Credit Strategy of Development Bank, Industrial Development (RFG-43)

UNIDO participation: An industrial development adviser to assist the African Development Bank in the formulation of its credit strategy in relation to industrial development programmes in member countries.

1/5

9,750

Implementation: The expert is in the field.

UNDP/SPECIAL FUND

THE AMERICAS

Experts: 1/17/68 1/1/68
1/1/68 1/1/68

Bolivia

Experimental Production Plant for Asbestos Processing (01-10)

Purpose: To establish a pilot plant for experimental production of asbestos. The plant will promote the development of the asbestos and related industries in Bolivia.

Implementation: The Government accepted a project manager who began his assignment on 1 July 1968. The plan of operation is under consideration by UNDP.

Approved: January 1968
Duration: 2 years

UNDP	527,000
Gov't	257,000
Total	<u>784,000</u>

Colombia

Institute for Technological Research, Bogotá. (Phase II) (COI-30)

Purpose: To expand the facilities of Colombia's Institute for Technological Research at Bogota for more effective assistance to the country's industries. The Institute provides assistance in the development of operating techniques for improved utilization of raw materials and equipment and offers technical advice through consultation, seminars and publications. Industries covered include the processing of agricultural, metallurgical, mechanical and chemical products.

8/17 4/27

Implementation: The project manager of Phase I continues to manage the project in Phase II. Experts in each of the following fields are in the field: canning, slaughter houses, fruit and eggs, metallurgical industries and two in mechanical industries. Candidates for coal and coke experts have been submitted to the Government.

Approved: January 1968
Duration: 4 years

UNDP	780,700
Gov't	983,000
Total	<u>1,763,700</u>

Mexico

UNIDO participation in SF project executed by FAO:

Resource Surveys of the State of Oaxaca (MEX-10)

UNIDO participation: An industrial development adviser to assist in the definition of the objectives and goals of the development of the State of Oaxaca.

1/6

16,000

Implementation: The expert is in the field.

Project Title

Project Description

Estimated Total Cost
Estimated Local Cost
Estimated Foreign Cost

Summary: To integrate the Central American regional economic and technical studies to identify and promote projects of mutual interest. The Institute has assisted private and public industries in the five countries (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua) with evaluations of industrial projects involving plant expansion, processes and installations, product quality and standards and market studies. The Institute has also established a programme for identification and selection of research for the training of young Central American professionals in specified techniques by means of practical work for industrial projects of interest for the region.

Implementation: Extends until the end of the period of the project.

Approved: May 1966
Duration: 3 years

US\$ 100,000
US\$ 20,000
US\$ 80,000

US\$ 100,000
US\$ 20,000
US\$ 80,000

Project Title

Central American Research Institute for Industry, 1967-1968 (1967-1968)

Project: To integrate the Central American regional economic and technical studies to identify and promote projects of mutual interest. The Institute has assisted private and public industries in the five countries (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua) with evaluations of industrial projects involving plant expansion, processes and installations, product quality and standards and market studies. The Institute has also established a programme for identification and selection of research for the training of young Central American professionals in specified techniques by means of practical work for industrial projects of interest for the region.

Implementation: IICA has, located in Guatemala, and serves to the five Central American countries, technical assistance and training. The extension of the present project for the period 1967-1968 is proposed to allow IICA and ICF to continue to provide technical assistance. The project management is entrusted to the Central American Research Institute until December 1968. After that date, technical assistance to the further assistance to be provided by IICA will be provided until December 1968.

Approved: June 1966
Duration: 3 years

US\$ 100,000
US\$ 20,000
Total

US\$ 100,000
US\$ 20,000
US\$ 80,000

Industrial Development

Proposal: To encourage and facilitate the development of small and medium-scale industry by assisting the Government in establishing an Industrial Estate Authority and by providing for the design, construction and operation of a demonstration school in Akwa, Akwa.

Implementation: The project has been approved although there has been a delay in signing the plan of operations which is expected to be signed before the end of 1966.

Approved: January 1966
Duration: 5 years

100
100.0
100.0

100.0
100.0
100.0

Establishment of an Industrial Estate, Akwa, 1966

Proposal: To encourage and facilitate the development of small and medium-scale industry by assisting the Government in establishing an Industrial Estate Authority and by providing for the design, construction and operation of a demonstration school in Akwa, Akwa.

Implementation: All expenditures to the effect of the following have been awarded.

Approved: June 1966
Duration: 5 years

100
100.0
100.0

100.0
100.0
100.0

Research Centre for Industrial and Trade Development, 1966

Proposal: To strengthen the Government's Research Centre for Industrial and Trade Development, which was established by the Ministry of Economy for the formulation of industrial plans; the preparation of investment priorities; the preparation and evaluation of industrial projects; the preparation and evaluation of research proposals; and the formulation of industrial and trade policies.

Implementation: Expenditure of 100,000 has been awarded.

Approved: August 1966
Duration: 1 year

100
100.0
100.0

100.0
100.0
100.0

UNDP/SPECIAL FUNDS

A.I.A. FAK I.A.S.I. (cont'd)

Pakistan

Experts m/m	Fellows m/m	Cost US\$
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Pre-investment studies for the Promotion of the Fertilizer and Petrochemical Industries (PAK-6)

Purpose: To assist the Government in developing the fertilizer and petrochemical industries and to promote the use of fertilizer and petrochemical end products. The pre-investment studies are designed to assist the Government in its negotiations with financial institutions to obtain investments. FAO is participating in this project.

8/64	6/60	
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Implementation: Two of the eight expert posts remain to be filled, as the Government has not approved the candidates submitted, and as additional candidates are not available. The services of consultant firms are being considered.

Approved: June 1965	UNDP	1,580,800
Duration: 3 years	Gov't	<u>935,111</u>
	Total	2,515,911

Singapore

UNIDO participation in SF project executed by ILO:

Foundry Demonstration and Service Unit (SIN-7)

UNIDO participation: Assistance in surveying problems and requirements of the metal industry and providing technical services to existing establishments and preparation of feasibility studies for new ones.

4/60*		109,500
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Implementation: Working arrangements for UNIDO's participation are being discussed with ILO.

Thailand

Technological Research Institute (THA-16)

Purpose: To assist the Government to develop its principal research agency, the Applied Scientific Research Corporation. The work of the Institute is divided into four categories: industrial chemistry, based on the utilization of agricultural and other plant products, as well as solar energy and industrial effluent control; minerals and metals; materials of construction; and fibres and textiles.

4/36	1/6	
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Implementation: Approved by the Governing Council in January 1964, the project became operational in November 1964. All posts are filled except that of the textile engineer (1/12 m/m) which is expected to be filled by 1 December 1968.

Approved: January 1964	UNDP	846,300
Duration: 5 years	Gov't	<u>2,167,000</u>
	Total	3,013,300

UNDP/SPECIAL FUND

EUROPE/MIDDLE EAST

Israel

Israel Industrial Research Centre (ISR-11)

Purpose: To promote the application of the findings of pure research to industrial production as a means of accelerating industrial development. The work of the Centre is devoted to food technology, plastics, textiles, fibres and some aspects of inorganic and organic chemistry, primarily significant for potential export industries.

Implementation: Experts have been placed or recruited for ten of the fifteen expert posts scheduled for 1968. Experts completing their missions have made recommendations for relevant applied research programmes and arrangements necessary for the Centre's active assistance to industry. Five Israeli fellows have returned to their positions in the Centre. Approximately half of the equipment has now been provided and is in use.

Approved: January 1964
Duration: 5 years

UNDP	12/76	12/48	1,267,100
Gov't			<u>9,055,333</u>
Total			10,322,433

Jordan

Centre for Industrial Development, Amman (JOR-13)

Purpose: To assist the Government of Jordan in establishing a Centre for Industrial Development whose functions are: to prepare surveys of the industrial structure; to advise and assist the Jordan Development Board in the formulation of industrial plans; to conduct feasibility studies; to formulate and evaluate industrial projects; and to establish standards and quality control of products. A portion of the project is subcontracted to ILO.

Implementation: All experts have been recruited or placed. Nominations for two of the three selected fellowships have been received. The first equipment requisitions have been received. Assistance has been rendered through advice on economic policy counsel to industry, and the evaluation of licence applications. Specific studies on fertilizers and ceramics are under preparation at the Centre. Well over half of the counterpart staff has been recruited.

Approved: January 1967
Duration: 4 years

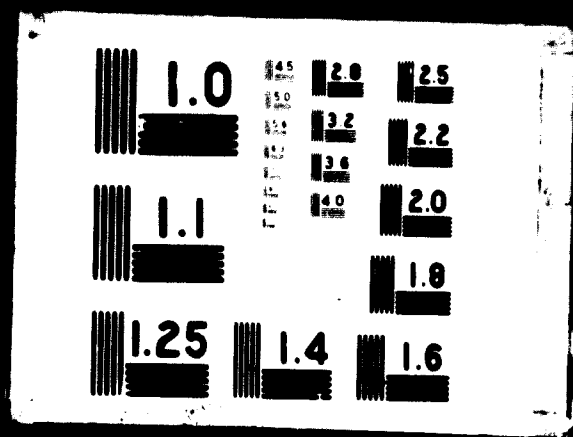
UNDP	5/60	4/24	1,153,100
Gov't			<u>534,926</u>
Total			1,688,026



31.7.74

5 OF 7

4094



UNEP/PICTAL/1/1

EXPERIMENTAL (1968)

Turkey

UNEP	Gov't	Total
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Industrial Studies and Development Centre, Tuzlucoba (19-14)

Purpose: To assist in the establishment and initial operation of an Industrial Studies and Development Centre whose functions are: to advise the responsible authorities on industrial policies and programming; to assist in carrying out or commissioning industrial feasibility studies; to advise on the establishing of new industries, as well as on the financing and implementation of such industries; to assist in the planning and establishment of industrial estates and their management and operation; and to assist in the establishment and initial operation of a small industrial estate.

Implementation: Of eight expert posts scheduled for 1968, four are filled; candidates have been accepted for three others and one remains under active recruitment.

Approved: June 1965
Duration: 3 years

UNEP	8/00	634,500
Gov't		<u>2,000,000</u>
Total		2,634,500

Turkey

Small Industries Development Programme (19-15)

Purpose: To establish a small industries development programme in Ankara and a demonstration industrial estate at Tuzlantep with a view to promoting the development through training and demonstration. UNDP is co-operating with ILO in this project.

Implementation: The draft plan of operation was approved by UNDP with only minor changes and the final draft is now under discussion with the Government. Three candidatures have been submitted to the Government for the post of project manager. Candidatures for the posts of industrial economist and industrial engineer (industrial estate planning) have been submitted to the Government.

Approved: January 1968
Duration: 3 years

UNEP	4.4	271	962,800
Gov't			<u>1,240,000</u>
Total			2,202,800

In-plant Training Centre for Engineers, Kirikkale (19-16)

Purpose: To assist the Government of Turkey in establishing an in-plant training centre for engineers. The specific objective is: to provide on-the-job training facilities for engineers fresh from university in order to enable them to acquire the practical knowledge and skills required at plant and factory processes; and to re-train the operation staff, particularly in the maintenance of machinery, of process-engineers.

Implementation: The draft plan of operation, submitted with the Government in April, is under discussion with the Government and the project is being prepared for implementation. The Government has agreed to provide the site and the necessary infrastructure.

Approved: August 1968
Duration: 3 years

UNEP	1.2	75	240,000
Gov't			<u>1,200,000</u>
Total			1,440,000

TECHNICAL ASSISTANCE

AFRICA

Expert's Title \$

\$

Uganda

Adviser on Small-scale Industries (404-67)

Purpose: To advise on small-scale industries related to industrial estates.

1/1

1,000

Implementation: The expert is expected to arrive in the field in October 1968.

Dahomey

Feasibility Studies on Projects in the Development Plan (177-6)

Purpose: An industrial engineer, attached to Government, is to prepare feasibility studies on projects considered for the Economic and Social Development Plan.

1/1

20,000

Implementation: The expert is in the field.

Ethiopia

Establishment of a National Standards Institution (97-68)

Purpose: An industrial standardization expert is to aid in the establishment of a national standards institution for the preparation, publication and implementation of national standards and the centralization of standardization methods in Ethiopia.

1/1

20,000

Implementation: The expert is in the field.

Ghana

Establishment of Systematic Methods of Planning and Implementation of Production Targets (46-61)

Purpose: Four OPEX experts (industrial production, engineering development, industrial management planning, and financial control and planning) are to assist the State Enterprises Administration in the establishment of systematic methods of planning and in the implementation of production targets.

4/6

70,400

Implementation: The experts took up their assigned posts and started to analyse, in co-operation with the Ghana Industrial Milling Corporation, the possibility of improving the output of several industrial plants as well as the overall management of the State Enterprises. Positive results have already been obtained starting with the flour-milling factory in Kumasi and similar developments should be achieved in other plants. Co-operation carried out with the Government resulted in the development of a short-term assistance plan, a special action plan with 10 projects to be completed by 1969. (See also project (4-73), section 2, for the financial and technical and industrial services).

UNDP/TECHNICAL ASSISTANCE

AFRICA (cont'd)

	<u>Experts</u> <u>n/m</u>	<u>Fellows</u> <u>n/m</u>	<u>Cost</u> <u>US\$</u>
<u>Guinea</u>			
<u>Development of the Chemical Industry (149-61)</u>			
<u>Purpose:</u> An industrial chemist is to advise the Government on the development of the chemical industry within the Seven-year Plan.	1/12		22,000
<u>Implementation:</u> The expert is in the field.			
<u>Libya</u>			
<u>Planning and Organization of Chemical Research Programme (282-63)</u>			
<u>Purpose:</u> A senior research chemist is to advise and assist the Ministry of Industry in the planning and organization of its applied chemical research programme. The programme was originally started by an expert appointed under Funds-in-trust.	1/12		22,000
<u>Implementation:</u> Mission completed.			
<u>Organizing Specification and Standardization Section (X80-460)</u>			
<u>Purpose:</u> Under the direction of the Director of the Industrial Organization Department, Ministry of Industry, the expert (OPEX) is to organize the Specification and Standardization Section and to assume responsibility for it. He is also to advise the Ministry on all matters pertaining to standards and specifications.	1/12		23,100
<u>Implementation:</u> The expert is in the field.			
<u>Madagascar</u>			
<u>Advice on Problems of Industrial Development (1-64)</u>			
<u>Purpose:</u> An industrial economist is to continue to advise the Commissariat Général au Plan on problems of industrial development. He is assisted in his work by an associate-expert.	1/16½		28,000
<u>Implementation:</u> The expert is in the field.			
<u>Mali</u>			
<u>Evaluation of Proposed Specific Industrial Projects (6-66)</u>			
<u>Purpose:</u> An industrial economist, under an OPEX appointment, in the Ministry of Public Works, Communications and Energy is to prepare studies related to industrial projects, to evaluate proposals for specific industrial projects and to give advice on measures to promote investments.	1/13½		15,000
<u>Implementation:</u> The expert is in the field.			

INDP/TECHNICAL ASSISTANCE

AFRICA (cont'd)

Morocco

Textile Industry Development (471-57)

Purpose: A textile industry expert is to make an extensive survey of the technological and economic aspects of this industry and is to draft the main lines for a development policy for this industry.

1/11

Implementation: The expert is in the field.

Nigeria

Evaluation of Feasibility Studies for Manufacturing Industries and Project Implementation (10-61)

Purpose: An industrial economist is to assist the Mid-Western Development Corporation under the OPEX scheme in the evaluation of feasibility studies for manufacturing industries and is to advise on project implementation.

1/12 23,000

Implementation: The expert is under recruitment.

Directing the Federal Institute of Industrial Research (10-61)

Purpose: Subject to the approval of the Governing Body of the Federal Institute of Industrial Research and of the National Ministry of Industry, an officer is to define the Institute's policy, co-ordinate its work with related research programmes in other fields (i.e. agriculture) and plan and direct execution of research programmes. He will act in the capacity of director of the Institute (OPEX post).

1/24 34,800

Implementation: The expert is in the field.

Food Processing (10-61)

Purpose: A chemical engineer (food processing) (OPEX) is to be assigned to the Federal Institute of Industrial Research.

1/24 34,800

Implementation: Candidatures have been submitted to the Government.

Rwanda

Development and Expansion of Small-scale Industries (217-61)

Purpose: An industrial economist is to advise the Government on measures to be taken in the financial field and in the commercial organization (co-operation) and the extension field, with an aim to promoting the development and expansion of small-scale industries.

1/12 22,000

Implementation: The expert is in the field.

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TECHNICAL ASSISTANCE

THE AMERICAS

Argentina

Installation of High Speed Heavy Machinery (111-57)

Purpose: A mechanical engineer is to assist the National Directorate for Aircraft Construction and Repair (DINFA) for three months in training engineers and technicians in the installation of high speed heavy machinery. Another mechanical engineer is to assist in the preparation of drawings of layouts for the testing facilities of the DINFA and Official University laboratories (three months).

Implementation: Mission completed.

<u>Experts</u>	<u>Months</u>	<u>Cost</u>
1	3	5,670

Steel Products Marketing (111-57)

Purpose: A steel products marketing adviser is to study the market pattern of semi-finished and finished metal products with regard to marketing the production of the Altos Hornos plant at Zapla.

Implementation: Under recruitment.

1		5,400
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Steel Production and Rolling (111-57)

Purpose: A steel adviser (lamination), assigned to the Dirección General de Fabricaciones Militares, is to determine the steel production and rolling capacity of the Altos Hornos plant at Zapla in the province of Jujuy.

Implementation: Mission completed.

1/3		5,670
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Evaluating Resources of Non-ferrous Ore and Minerals (111-57)

Purpose: An adviser on non-ferrous metals is to assist the Federal Investment Council and the Dirección General de Fabricaciones Militares in evaluating economic resources of non-ferrous ore and minerals.

Implementation: Mission completed.

1/3		5,670
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Wool Technology Problems of Industrial Research (111-57)

Purpose: An expert is to advise the National Southern University on matters related to wool technology, especially on problems of industrial research such as the scouring process, storage (measures against deterioration), carbonization and analysis of fibres.

Implementation: Mission completed.

1/3		5,670
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Leather Processing (111-57)

Purpose: A leather technologist is to advise the Leather Research Centre of the National Institute of Leather Technology on leather processing.

Implementation: Mission completed.

1/6		11,340
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AGRICULTURAL MACHINERY

TECHNICAL AID - 1967

Argentina - 1967

Control of Chemical Process Operations Using Control Techniques (111-57)

Purpose: A specialist in process instrumentation, assigned to the Instituto Nacional de Tecnología Industrial (INTI) is to work on problems associated with the control of chemical process operations using process instrumentation techniques.

Implementation: The expert is in the field.

Establishment of a Laboratory of Applied Combustion (111-57)

Purpose: A combustion engineer is to assist the Instituto Nacional de Tecnología Industrial (INTI) in the establishment of a laboratory of applied research on combustion.

Implementation: In the field from 3 July 1967 to 2 January 1968.

Mission completed.

Weights and Measures Legislation (111-57)

Purpose: An adviser on weights and measures legislation is to assist the National Institute of Industrial Technology in reviewing existing laws and in drafting the necessary legislation and new regulations in order to widen the application of a law passed in 1863 establishing the metric system as compulsory in the country.

Implementation: Mission completed.

Study of Resource Potentials for Industrial Development (111-57)

Purpose: An industrial economist is to assist in conducting studies of the economic resource (natural and human) potentials for developing the northwestern region of Argentina.

Implementation: Mission completed.

Promotion of Exports of Manufactured Goods (111-57)

Purpose: A five-man team consisting of one co-ordinator and four experts in machine tools, agricultural machinery, processing of hides, and leather goods is to advise the Ministry of Foreign Trade and the National Development Council (CONADE) in the promotion of exports of manufactured goods produced in these industries.

Implementation: Under recruitment.

1/1 8

1/1 8

1/4 7,560

1/3 5,070

5/18 34,070

Industrial Planning and Development

Industrial Planning

Purpose:

Implementation:

Industrial Planning and Development (1957-58)

Purpose: An industrial planner, former consultant with industrial corporations, is to assist in institute reformation, in a study in evaluation, also for the execution of industrial projects.

1/1 10,000

Implementation: The expert is in the field.

Industrial Planning and Development (1957)

Purpose: An industrial consultant is to assist in institute reformation, in a study in evaluation and in the organization of the study and execution of industrial projects and is also to assist in project evaluation and in the study.

1/1 10,000

Implementation: The expert is in the field.

Development of Market Studies

Development of Market Studies (1958-59)

Purpose: An associate expert in marketing and sales organization, assigned to CORDE (Corporation of Public Enterprises) as part of a team of experts, is to assist in the preparation of market studies.

1/1 10,000

Implementation: Under recruitment.

Specifications for Raw Materials and Industrial Products (1958-59)

Purpose: To assess existing specifications or prepare new specifications for raw material and industrial products such as textiles, paper, cement, and to establish quality control.

1/1 10,000

Implementation: The expert is in the field.

UNDP/TECHNICAL ASSISTANCE

THE AMERICAS (cont'd)

Dominican Republic (cont'd)

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>1/yr</u>	<u>1/yr</u>	<u>US\$</u>

Organization of Laboratory and Inspection Services

Purpose: An associate expert (chemical engineer), one of a team of associate experts and Dominican counterparts, is to organize laboratory and inspection services in collaboration with Industrial Technics. His work will be supervised and co-ordinated by a senior industrial adviser.

1/1		15,000
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Implementation: An expert is being recruited and is expected to be in the field by November or December 1968.

Maintenance and Repair (X30-642)

Purpose: Two associate experts, a mechanical engineer and an industrial engineer, are to review and evaluate machinery and equipment with regard to the establishment of programmes of maintenance and repair. They are also to assist in the elaboration of systems of production planning and control and industrial cost accounting.

2/24		29,108
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Implementation: The experts are in the field.

Development of Small and Medium-scale Industries (194-613)

Purpose: An industrial adviser, assigned to the Industrial Development Corporation, is to promote general industrial development and to advise on small and medium-scale industries.

1/12		21,000
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Implementation: The expert is in the field.

Ecuador

Preparation of an Industrial Development Plan (51-60)

Purpose: An expert is to assist the Government in the preparation of an Industrial Development Plan and is to advise on industrial problems and projects.

1/12		25,800
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Implementation: The expert is in the field.

Haiti

Establishment of an Essential Oils Industry (8005-68)

Purpose: To assist the National Equipment Company of Haiti in establishing an essential oils industry for local consumption and in producing quantities competitive in cost and quality for the export market.

1/4		7,700
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Implementation: Under recruitment.

UNDP/TECHNICAL ASSISTANCE

THE AMERICAS (cont'd)

Honduras

Industrial Planning and Project Evaluation (24-61)

Purpose: An industrial economist is to assist the Government in industrial planning and project evaluation.

Experts	Months	Cost
1/1		11,000

Implementation: The expert is in the field.

Formulation, Evaluation and Co-ordination of National Industrial Programme (24-61)

Purpose: An industrial adviser, assigned to the General Secretariat of the National Economic Council, is to assist in the formulation, evaluation and co-ordination of the national industrial programme and investment policies.

1/1		11,000
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Implementation: The expert is in the field.

Jamaica

Leather Industry Improvement (8006-68)

Purpose: An expert in the leather industry is to undertake a survey of the leather industry and formulate proposals for its improvement and expansion including better utilization of raw materials and the application of new techniques.

1/1		24,100
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Implementation: The expert is expected to be in the field before the end of 1968.

Mexico

Pharmaceutical Industry (190-65/Rev.1)

Purpose: A pharmaceutical industry adviser is to be assigned to Nacional Financiera for a period of six months.

1/6		11,000
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Implementation: Under recruitment.

Industrial Planning (190-65)

Purpose: An expert on industrial planning is to assist the Nacional Financiera in solving problems related to the manufacturing industry.

1/6		11,000
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Implementation: The expert is in the field.

Netherlands Antilles

Development of Small-scale Industries (100-65)

Purpose: An industrial economist is to advise on the development of small-scale industries with emphasis on investigation of technical and economic possibilities.

1/11		11,000
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Implementation: The expert is in the field.

1973-74 Budget

1973-74 Budget

Industry

Industrial Development Fund - 1973-74

Purpose: An industrial development fund to assist the Government in the financing of industry, including the financing of the studies for manufacturing industries and projects.

Implementation: The experts in the field.

State Institutes and Industrial Development Policies - 1973-74

Purpose: To assist the Ministry of Economy in the financing of industrial development policies.

Implementation: The experts in the field.

Paraguay

Industrial Development, Integrating Balance of Payment Policies - 1973-74

Purpose: To assist the Minister of Industry and Commerce in preparing measures to promote industrial development aimed at the production of the manufacture industries, with particular emphasis on the balance of payment implications.

Implementation: The experts in the field.

Peru

Professors for Basic Researches - 1973-74

Purpose: To prepare a list of development projects and proposals for industries that are of interest to the national development plan, with regard to production of actual products or via financial or commercial products, for the purpose of the integration of industry.

Implementation: The expert group in different areas of the industry in the field of the Agency.

Contribution of Professions to the Development of Industry and Basic Researches - 1973-74

Purpose: To assist the Ministry of Industry and Commerce in preparing measures to promote industrial development aimed at the production of the manufacture industries, with particular emphasis on the balance of payment implications.

Implementation: The experts in the field.

Development of the Textile Industry (1951-52)

Development of the Textile Industry (1951-52)

	1951-52	1952-53	1953-54
			\$

Development of the Textile Industry (1951-52)

Purpose: An expert in textile technology and machinery is to advise the Government on the development of the textile industry, including the need to connected with the textile industry with the ocean and coastal shipping.

Implementation: The expert is to be assigned to the Government of India in October 1951.

Development of the Textile Industry (1951-52)

Purpose: An expert in textile technology and machinery is to advise the Government on the development of the textile industry, including the need to connected with the textile industry with the ocean and coastal shipping.

Implementation: The expert has been assigned and is expected to resume his duties in October 1951.

Textile

Development of the Textile Industry (1951-52)

Purpose: A textile expert is to advise the Government on the development of the textile industry in all its aspects.

Implementation: The expert is in the field as of August 1951. The Government is to decide about the balance of the assignment.

Installation of a Pilot Plant for Fine Products (1951-52)

Purpose: An expert in paper chemistry is to assist in the installation of a pilot plant for fine products at the University of Canada.

Implementation: Mission completed.

Increase of Metalworking Products (1951-52)

Purpose: An expert, working with the Direzione Generale de Disordini, is to assist in the implementation of the national plan, especially in the programme for the increase of metalworking products in areas having products goods.

Implementation: The expert is in the field.

UNDP/TECHNICAL ASSISTANCE

THE AMERICAS (cont'd)

Regional

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
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Industrial Policies and Programmes Related to the Economic Integration of Central America (3-64)

Purpose: Two experts, stationed in Guatemala, are to assist the five countries of Central America in industrial policies and programmes related to the economic integration.

2/24

30,000

Implementation: The experts are in the field.

Regional Industrial Development with ECLA (322-67)

Purpose: An industrial development adviser is to work in ECLA (Mexico) Headquarters, assigned to CAIP (Central American Integration Programme).

1/18

27,050

Implementation: The expert is in the field.

NOF TECHNICAL ASSISTANCE

ASIA/FAR EAST

Afghanistan

Planning and Co-ordination of Industrial Projects (1-63)

Purpose: An industrial engineer is to advise the Plans and Projects Department (Industrial Section) of the Ministry of Mines and Industries on the planning and co-ordination of industrial projects. He is to advise on feasibility studies for specific industries including factory planning, working out specification to suppliers, economic and technical evaluation of offers from suppliers, and follow up of project implementation.

1/12 4,000

Implementation: Mission completed.

Introduction and Implementation of the Metric System (155-63)

Purpose: A metric system expert is to assist the Ministry of Commerce in the introduction and implementation of the metric system in Afghanistan.

1/12 19,000

Implementation: The expert is in the field.

Feasibility Studies for Specific Industries (155-63)

Purpose: An industrial engineer is to advise the Planning and Projects Department (Industrial Section) of the Ministry of Mines and Industries on feasibility studies on specific industries, including factory planning.

2/6 10,100

Implementation: Mission completed.

Feasibility Studies on the Establishment of Industries (IX-33)

Purpose: As director of the Planning and Project Department, the OPEX expert is to conduct feasibility studies on the establishment of suitable industries, advise on the formulation of technical specifications in contracts of suppliers of plant and machinery, evaluate proposals and bids and provide advice to established industries.

1/12 18,000

Implementation: The expert is in the field.

Burma

Establishment of a Metrology Laboratory (1-57)

Purpose: A mechanical engineer, assigned to the Union of Burma Applied Research Institute, is to assist its standards department in setting up a metrology laboratory and in starting a training programme for its staff. He is also to assist in elaborating national standards on engineering subjects and in the designing of industrial equipment.

1/8 10,920

Implementation: Mission completed.

LMDF/TECHNICAL ASSISTANCE

ASIA/PAC EAST (cont'd)

<u>Project</u>	<u>Duration</u>	<u>Cost</u>
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Inventory of Available Natural Resources and Utilization of Productive Facilities (4-7)

Purpose: An industrial planning expert, in co-operation with the local authorities in charge of economic development, is to make inventories of available natural resources and to study the present utilization of production facilities.

		11,000
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Implementation: The expert is in the field.

Ceylon

Operation of Ceramic Plant (10-57)

Purpose: A ceramic engineer is to advise the Ceylon Ceramics Corporation on the operation of the plant.

1/80		37,000
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Implementation: The expert is in the field.

Operation of Textile Plant (10-4-2)

Purpose: A textile expert, attached to the Chairman of the National Textile Corporation in Colombo, is to advise on planning, erection of machinery, commissioning, achievement of production targets, production programmes, training and other technical matters.

1/12		22,000
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Implementation: Mission completed.

China, People's of

Corporate Planning, Technological Improvement and Training for Managers of Industrial Enterprises (310-67)

Purpose: 1. A management research expert, in co-operation with the China Productivity and Trade Centre (CPTC), is to conduct management research programmes by introducing and developing a comprehensive quantitative approach for various subjects such as corporate planning, forecasting, investment appraisal, personnel career planning, low-cost technological improvements and data processing.

3/12		25,000
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2. A management consultation expert, in co-operation with CPTC, is to conduct basic training programmes for managers of industrial enterprises, management consultants and professional staff members in CPTC, with emphasis on the application of quantitative techniques comprising such subjects as managerial economics and the application of statistical analysis and linear programming.

Implementation: 1. The expert is currently in the field until the end of 1968.

2. A management consultation expert is to be available to the Government in 1969.

Development of Machine Tools

Machine Tools (37-57)

Establishment of a Machine Tools Development Centre

Purpose: To establish the Government Machine Tools Development Centre for the development, production and distribution of machine tools in the Government of India.

Implementation: The expert is to arrive in the field in the month of...

India

Production of Machine Tools (37-57)

Purpose: A machine tool manufacturing expert is to advise on the introduction of more advanced methods in the production of machine tools.

Implementation: The expert is in the field.

Industry Investment Survey in Metallurgy (37-57)

Purpose: Five experts are to undertake an industry investment survey in the field of metallurgy.

Implementation: Mission undertaken and completed by a 3-man team; the unutilized man-months are being reprogrammed.

Steel Foundry Operation (37-57)

Purpose: A steel foundry expert is to advise the Mysore Iron and Steel Works on all matters related to foundry operation.

Implementation: Postponed at the request of the Government.

Dyeing and Finishing of Leather (37-57)

Purpose: An organic pigments and dyes expert is to guide and train a group of 25 of the scientists in the investigation in the field of dyeing and finishing of leather.

Implementation: The candidate has been accepted by Government and should commence his duties before the end of 1968.

Investigations in the Field of Polymers as Applied to Leather Industry (37-57)

Purpose: A polymer chemist is to advise on the investigation in the field of polymers as applied to leather industry.

Implementation: The candidate has been accepted by Government and should commence his duties before the end of 1968.

GENERAL TECHNICAL ASSISTANCE

ASIA/PACIFIC (43-57)

Experts Full-time Cost

Indonesia

Maintenance and Inventory System for Spare Parts (43-57)

Purpose: To develop a national maintenance and inventory system for spare parts.

1/6

10,800

Implementation: The expert is in the field.

Rubber Production Techniques (43-57)

Purpose: A rubber technology adviser is to assist in improving production techniques and the quality of finished products.

1/6

10,800

Implementation: The project is being reconsidered.

Production Problems and Quality Control of Textile Industry (43-57)

Purpose: To advise the director of the Indonesian Textile Research Centre on production problems and quality control methods.

1/6

10,800

Implementation: Mission completed.

Integration and Co-ordination of Industrial Research (43-57)

Purpose: To advise the Government on means of integrating and co-ordinating the research programme of industrial research institutions.

1/6

10,800

Implementation: The expert is in the field.

Design, Production Quality Control and Marketing of Straw Hats (43-57)

Purpose: An industrial marketing and design expert is to advise on design, production quality control and marketing of straw hats, principally for export. He is to survey potential export markets in Europe and the United States.

1/6

12,000

Implementation: Under recruitment.

Increasing Productivity in the Industrial Sector (43-57)

Purpose: A production engineer is to advise on ways and means of achieving maximum productivity in the industrial sector.

1/12

23,100

Implementation: The expert is in the field.

AND TECHNICAL ASSISTANTS

ASIA/FAR EAST (cont'd)

Indonesia (cont'd)

Preparation of Pre-investment Studies for State Enterprises (4-57)

Purpose: An industrial economist is to assist the Government in preparing pre-investment studies, in appraising capital expenditure programmes for industry, in advising on price policies for state enterprises and in formulating policy measures for better utilization of capacity.

Implementation: The expert is in the field.

1/18
32,400
\$

Industrial Classification Survey and Programming Data (43-57)

Purpose: An industrial classification and data processing expert is to organize an industrial classification survey and to develop the basis of programming data from industrial statistics and other sources.

Implementation: The expert is in the field.

1/18
32,400

Iran

Development of the Electronic Industry (220-57)

Purpose: An electronics expert, attached to the Industrial Research and Development Centre, is to examine the possibilities of further development of the electronic industry.

Implementation: Before approving the job description the Government wishes to await the arrival of the electrical engineer of the Special Fund assisted IRA-16.

1/6
11,400

Selection of Industries for Development Planning (220-57)

Purpose: A mechanical engineering expert is to select industries for development planning by the Industrial Development Research Centre.

Implementation: The expert is in the field; he is to be transferred to IRA-16 on 1 January 1969.

1/1
14,250

Development of Non-ferrous Metals Industries (220-57)

Purpose: To examine possibilities of further development of the non-ferrous metals industries.

Implementation: The expert is in the field.

1/6
11,400

UNDP/TECHNICAL ASSISTANCE

ASIA/EAST-EAST (1968)

(Iran - 1968)

Experts	Months	Cost
1/6	11	11,400

Development of Pharmaceutical Industry (220-57)

Purpose: To advise on the development of the pharmaceutical industry within the framework of the current Iran Development Plan, and to prepare studies on this industry for the next plan period starting in line with due consideration to Iran's commitments within the RCD (Regional Co-operation for Development) according to which Iran, Pakistan and Turkey are conducting country studies of selected industries.

1/1	11	11,400
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Implementation: Mission completed.

Development of Dyestuffs Industry (220-57)

Purpose: A chemical engineer is to carry out feasibility studies on the development of the dyestuffs industry.

1/6	11	11,400
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Implementation: Under recruitment.

Long-range Programme for the Food Processing Industries (220-57)

Purpose: A team of three experts is to prepare a long-range programme for the food processing industries in Iran.

3/18	34	34,650
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Implementation: The experts are to assume their duties in November 1968.

Food Industry Production Problems (220-57)

Purpose: An expert is to carry out a general study of the existing food industry with an aim to identifying production problems.

1/6	11	11,400
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Implementation: The expert is to assume his duties in October 1968.

Planning and Execution of a Programme of Standardization (220-57)

Purpose: A standards engineer is to guide and assist in the planning and execution of a programme of standardization at the national level with a view to ensuring co-ordinated development of industry and trade under the Five-Year-Plan.

1/12	23	23,100
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Implementation: Under recruitment.

Preparation and Implementation of National Standards (220-57)

Purpose: A mechanical engineer is to plan and guide the preparation and implementation of national standards in the field of machine tools, machine parts and machine components.

1/1	23	23,100
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Implementation: Under recruitment.

NON-TECHNICAL ASSISTANCE

ASIA/FAR EAST (cont'd)

(cont'd)

Preparation and Implementation of National Standards (60-57)

Purpose: A structural engineer is to plan and guide the preparation and implementation of national standards and codes of practice in the field of structural engineering and related fields such as building construction.

1/1 10,000

Implementation: Under recruitment.

Evaluating Programmes of the Industrial Sector (270-57)

Purpose: An expert is to evaluate available programmes and studies of the industrial branches and to investigate other possibilities of development in the industrial sector in accordance with the five-year plan. He is also to advise on policies and implementation of new lines of production and on the extension of existing industries.

1/14 2,000

Implementation: The expert is in the field.

Korea, Republic of

Location of Small-scale Industry (60-57)

Purpose: A physical planner (location of industry) post is to be established, replacing the metal forming and finishing post which was cancelled upon the request of the Government.

1/1 22,000

Implementation: Candidatures have been submitted to the Government for approval.

Laos

Development of Small-scale Industry (60-61)

Purpose: An expert is to continue the work of the expert assigned since October 1961 to the Ministry of Economic Affairs. He is to advise on matters related to the creation and development of small-scale industries.

1/6 10,000

Implementation: Mission completed.

Malaysia

Operation of Leather Tannery (19-66)

Purpose: A footwear manufacturing expert, assigned to the Majlis Amanah Rakyat (MARA - Trust Council for the Promotion of Indigenous Enterprises) is to assist the factory manufacturing branch of the leather tannery project.

1/12 21,000

Implementation: The expert is in the field.

UNDP/TECHNICAL ASSISTANCE

ASIA/FAR EAST (cont'd)

Malaysia (cont'd)

	<u>Experts</u> <u>m/n</u>	<u>Fellows</u> <u>m/n</u>	<u>Cost</u> <u>US\$</u>
<u>Improvement of Leather Products Industries (19-66)</u>			
<u>Purpose:</u> A hides and leather specialist on continued assignment to MARA is to advise on and assist with the technical, economic and organization measures necessary to mobilize, utilize and improve leather (hides and skins) and leather products industries in Malaysia.	1/12		21,000
<u>Implementation:</u> The expert is in the field.			
<u>Improvement of Leather Products Industries (19-66)</u>			
<u>Purpose:</u> An industrial engineer is to assist the Management and Advisory Services Division of MARA, a corporate body which carries out programmes for the promotion of indigenous enterprises.	1/12		21,000
<u>Implementation:</u> The expert is in the field.			
<u>Setting up a Handicraft Centre (19-66)</u>			
<u>Purpose:</u> To set up a Handicraft Centre and to establish a batik factory.	1/12		21,000
<u>Implementation:</u> The expert is in the field.			
<u>Feasibility Studies of Industrial Projects (19-66)</u>			
<u>Purpose:</u> A planning and evaluation expert is to carry out feasibility studies of industrial projects and to assess the effectiveness of measures for industrial promotion.	1/6		28,050
<u>Implementation:</u> The expert is in the field.			
<u>Adviser to the Economic Development Board (264-61)</u>			
<u>Purpose:</u> A deputy director of the Economic Development Board is to advise and assist in the operation of the Board.	1/12		22,000
<u>Implementation:</u> The expert is in the field.			
<u>Economic Research and Project Evaluation (318-67)</u>			
<u>Purpose:</u> An industrial economist assigned under the OPAS scheme, is to assist the Malaysia Industrial Development Finance Ltd. (MIDFL) in economic research and project evaluation.	1/12		18,500
<u>Implementation:</u> Under recruitment.			

UNDP/TECHNICAL ASSISTANCE

ASIA/FAR EAST (cont'd)

Mongolia

Production of Packaging Material (27-67)

Purpose: To advise on the different types of packaging and on technological processes and equipment for production of packaging material. 1/2 1,000

Implementation: The expert is to take up his duties in December 1966.

Improving Technological Processes for Leather (27-67)

Purpose: To advise the Ministry of Industry on improving technological processes to produce upper and sole leather. 1/2 1,400

Implementation: The expert is in the field.

Nepal

Survey for Building and Construction Materials (83-65)

Purpose: As a member of UNIDO's industrial feasibility survey team, the expert is to analyse the present demand for building and construction materials. He is to make feasibility studies on the manufacture of pre-fabricated concrete building and construction components, taking into account the production capacity of the cement plant to be established in the Kathmandu area. 1/2 1,850

Implementation: Mission completed.

Feasibility Studies of Cotton Textile Production (83-65)

Purpose: As a member of a five-man UNIDO industrial feasibility survey team, a textile expert is to analyse the domestic demand for cotton yarns and fabrics and make feasibility studies of domestic cotton textile production. 1/2 1,850

Implementation: Mission completed.

Industrial Feasibility Survey of Wood Products (83-65)

Purpose: A wood products expert, part of a five-man UNIDO team, is to make an industrial feasibility survey of Nepal. He is to make recommendations for the optimum utilization of the country's timber resources, especially in manufacturing industries, for local users and export. 1/2 1,850

Implementation: Mission completed.

Industrial Legislation (83-65)

Purpose: As a member of a UNIDO team, an industrial economist is to study the existing legislation on industries and to suggest changes, when necessary. He is also to suggest additional legislation measures to promote industrial development in the country. 1/2 1,000

Implementation: Mission completed.

UNDP/TECHNICAL ASSISTANCE

ASIA/FAR EAST (cont'd)

Nepal (cont'd)

Experts /m	Follows /m	Cost US\$
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Evaluation of Surveys in Various Industrial Fields (67-68)

Purpose: As leader of a five-man UNIDO industrial feasibility study team, an expert is to examine and evaluate available surveys in various industrial fields, and to make a survey of existing resources for the purpose of identifying specific industries which have development possibilities in Nepal.

1/11		23,100
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Implementation: Mission completed.

Pakistan

Expansion of Chemical Manufacturing Industries (73-57)

Purpose: To assist the Industrial Development Bank to identify technical problems and assist in evaluating applications for loans for the establishment or expansion of chemical manufacturing industries.

1/8½		13,700
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Implementation: The candidatures have been submitted to the Government.

Technical and Financial Aspects of Proposed Projects (73-57)

Purpose: To assist the Pakistan Industrial Credit and Investment Corporation in investigating the technical and financial aspects of proposed projects.

1/18		30,600
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Implementation: The expert is in the field.

Review of Industrial Policy and Appraisal of Industrial Development Programmes (73-57)

Purpose: A team of three industrial economists is to assist the Government in reviewing industrial policy, fixing priorities for development industries and preparing and appraising programmes of industrial development.

3/46		79,500
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Implementation: The experts are in the field.

Papua

Development of a Clothing and Textile Industry (816-67)

Purpose: An expert is to determine the possibility of encouraging and assisting the development of a clothing and textile industry, excluding cotton piece goods, in the territory.

1/9		17,000
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Implementation: The expert is expected to report for duty on 22 August 1968.

UNDP/TECHNICAL ASSISTANCE

ASIA/FAR EAST (cont'd)

<u>Experts</u>	<u>Follow-up</u>	<u>Cost</u>
<u>(1)</u>	<u>(2)</u>	<u>(3)</u>

Papua and New Guinea

Production of Building and Construction Materials (216-67)

Purpose: A building and construction material industry expert is to make an assessment of the prospects for the economic production of cement, glass, fibre cement, bricks, clay pipes and other building and construction materials.

1/3		1,000
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Implementation: The expert is in the field.

Philippines

Steel Industry Surveys (79-57)

Purpose: A steel foundry expert is to advise the Presidential Committee on the Steel Industry of the Philippines Government on the establishment and development of engineering industries. He is also to carry out surveys and investigations for the collection of basic data necessary for preparing project proposals to establish subsidiary engineering industries.

1/18	1/11	44,400
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Implementation: The expert is in the field.

Research in Industrial Microbiology (79-57)

Purpose: Under the Commissioner of the Biological Research Centre (BRC), National Institute of Science and Technology, and with the Acting Director of the Centre as his counterpart, an industrial fermentations expert is to survey the current set-up and problems of the BRC.

1/4		8,500
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Implementation: The expert is expected to assume his duties in November 1968.

Singapore

Manufacture of Building Hardware (26-66)

Purpose: A building hardware expert is to advise the Economic Development Board on the manufacture of building hardware.

1/3		5,500
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Implementation: The expert is in the field.

Industrial Research Facilities and their Improvement (203-67)

Purpose: A senior industrial research adviser, attached to the Economic Development Board, is to review industrial research facilities in Singapore and to recommend measures for their improvement. He is also to advise on the operation of the Industrial Research Unit of EDB with special reference to the expansion of its testing and other technical services.

1/3		17,000
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Implementation: The expert is in the field.

UNDP/TECHNICAL ASSISTANCE

ASIA/FAR EAST (cont'd)

Singapore (cont'd)

	<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
<u>Establishment of Bicycle Manufacturing Factory (264-61)</u>			
<u>Purpose:</u> An industrial economist is to develop light engineering industries with special emphasis on the establishment of a bicycle manufacturing factory.	1/12		19,700
<u>Implementation:</u> The expert is in the field.			

Review of Methodology for Evaluation of New Industrial Projects (264-61)

<u>Purpose:</u> A senior industrial economist, attached to the Economic Development Board, is to review and revise methodology for evaluating new industrial projects, so that the evaluations and ranking of desirability of such projects will reflect the over-all industrial policy goals of the Government.	1/12		19,700
<u>Implementation:</u> The expert is in the field.			

Operation of Economic Development Board (264-61)

<u>Purpose:</u> An industrial economist, assigned as Deputy Director of the Economic Development Board, under the OPAS scheme is to advise and assist in the operation of the Board.	1/12		19,700
<u>Implementation:</u> The expert is in the field.			

Thailand

Analysis and Appraisal of Applied Scientific Research (82-57)

<u>Purpose:</u> To advise the Economic Evaluation Group of the Applied Scientific Research Corp. of Thailand on the analysis and appraisal of applied scientific research results and projects with special reference to their potential industrial applications.	1/12		17,650
<u>Implementation:</u> The expert is in the field.			

Establishment and Implementation of Industrial Standards (82-57)

<u>Purpose:</u> An industrial standardization expert is to set standards for locally manufactured products, improve facilities for testing, controlling and certification, and institute a laboratory for repairing, building and calibrating of testing instruments and scientific apparatus.	1/12		17,650
<u>Implementation:</u> The expert is in the field.			

UNDP TECHNICAL ASSISTANCE

ASIA/FAR EAST (cont'd)

Viet-Nam, Republic of

<u>Experts</u>	<u>Fellow</u>	<u>Cost</u>
<u>a/m</u>	<u>a/m</u>	<u>\$/1</u>

Development of Industrial Estates (232-67)

Purpose: An expert in industrial zones is to advise the State Company for the Development of Industrial Zones (SONADEZI) of the Ministry of the National Economy on the development of industrial estates for the small-scale industries, including technical and marketing aids and credit facilities.

1/12

23,100

Implementation: Recruitment was suspended upon the request of the Government.

UNDP/TECHNICAL ASSISTANCE

EUROPE/MIDDLE EAST

	<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
<u>Bulgaria</u>			
<u>Fellowships in Hydraulics (236-67)</u>			
<u>Purpose:</u> Fellowships are to be awarded in the field of hydraulics.		4/21	7,500
<u>Automation of Ore Dressing (269-65)</u>			
<u>Purpose:</u> An expert in the automation of ore dressing (copper factory) is to assist in the formulation of ore automation cycles in the Medet Ore Dressing Factory.	1/2		4,200
<u>Implementation:</u> Under recruitment.			
<u>Coloured Coatings for Chromo Paper and Board (269-65)</u>			
<u>Purpose:</u> To advise on coloured coatings for chromo paper and board and on quality controls of raw materials and of finished products.	1/1		2,100
<u>Implementation:</u> A candidate accepted by the Government declined the offer of appointment at the last moment. The post is still under active recruitment.			
<u>Production of Unsaturated Polyester Resins (269-65)</u>			
<u>Purpose:</u> To advise on the production of unsaturated polyester resins and to make recommendations for improving the efficiency of resin manufacture.	1/2		4,200
<u>Implementation:</u> Mission completed.			
<u>Use of Modern Contact Glues in the Manufacture of Furniture (269-65)</u>			
<u>Purpose:</u> To advise the Furniture Research Institute and the State Furniture Factory on modern contact glues used in the commercial manufacture of furniture.	1/1		2,200
<u>Implementation:</u> The candidate has been accepted by Government and is expected to take up his post in March 1969.			
<u>Improvement of Design and Production in the Furniture Industry (269-65)</u>			
<u>Purpose:</u> A furniture industry expert (furniture design) is to improve design and production in the industry.	1/1		2,100
<u>Implementation:</u> Mission completed.			

UNDP/TECHNICAL ASSISTANCE

EUROPE/MIDDLE EAST (cont'd)

Cyprus

<u>Experts</u>	<u>Fellowships</u>	<u>Cost</u>
<u>m.m.</u>	<u>m.m.</u>	<u>\$</u>

Programme Evaluation (X80-451)

Purpose: An associate expert (industrial economist) is to continue his assignment (since 1965) to the industrial consultant to assist him in advising the Ministry of Commerce and Industry in programme evaluation for industrial development.

1/12		12,000
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Implementation: The expert is in the field.

Iraq

Preparing Feasibility Studies for Various Industries (168-39)

Purpose: An industrial economist is to assist and advise the Government in preparing feasibility studies for various industries.

1/12		22,000
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Implementation: The expert is in the field.

Israel

Coin Making Equipment (243-57)

Purpose: To train counterparts in preparing working dies for coins and in all metallurgical problems related to the use of coin making equipment.

1/3	1/4	8,700
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Implementation: The candidate has been accepted by the Government and is expected to take up his post in mid-December 1968.

Pharmacological Research (243-57)

Purpose: An industrial chemist is to assist in pharmacological research, train counterparts to carry out a large series of tests, and assist in the administrative organization of the Israel Pharmacological Institute.

1/12		22,100
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Implementation: Mission completed.

Fellowships in Fertilizer Industry (243-57)

Purpose: Fellowships are to be awarded in maintenance in the fertilizer industry and in phosphate fertilizers.

	1/6	5,200
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Implementation: The fellowships have been awarded.

Fellowships in Diamond Cutting (243-57)

Purpose: A fellowship is to be awarded in diamond cutting.

1/3		2,500
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Implementation: The fellowship has been awarded.

UNDP/TECHNICAL ASSISTANCE

EUROPE/MIDDLE EAST (cont'd)

	<u>Experts</u> m/m	<u>Fellows</u> m/m	<u>Cost</u> US\$
<u>Israel (cont'd)</u>			
<u>Training in the Fields of Graphic and Industrial Design (243-57)</u>			
<u>Purpose:</u> A graphic designer and an industrial designer are to advise the staff of a school of art, crafts and design on methods of training in the fields of graphic and industrial designs.	2/4	2/6	12,400
<u>Implementation:</u> The graphic designer has completed his two month assignment. The post of the industrial designer has been cancelled by the Government and alternate uses of the funds are being explored with the Government. Two fellowships have been awarded.			
<u>Lebanon</u>			
<u>Development of Engineering Industries (26-58)</u>			
<u>Purpose:</u> An industrial engineer (engineering industries) is to advise the Government on promising projects in engineering industries.	1/6		10,450
<u>Implementation:</u> The job description has been submitted to the Technical Assistance Recruitment Service and several candidates have been evaluated. The submission from the Technical Assistance Recruitment Service is awaited.			
<u>Poland</u>			
<u>Development of Pharmaceutical Industry (189-60)</u>			
<u>Purpose:</u> To assist in the development of the pharmaceutical industry.	1/1		1,800
<u>Implementation:</u> The job description has been submitted by the Government and referred to WHO for clarification as the expert's field of activities seems to pertain to the WHO programme.			
<u>Fellowships in Chemical Industries (276-65)</u>			
<u>Purpose:</u> Fellowships are to be awarded in the chemical industries.		37/146	55,400
<u>Romania</u>			
<u>Application of Modern Technology in the Construction Industry (134-64)</u>			
<u>Purpose:</u> To advise on the application of modern technology in the construction industry (mechanical and metallurgical) and in the production of steel and aluminium control of laminated products, tubular material etc.	1/1		1,800
<u>Implementation:</u> A candidate was accepted by the Government, but, because of ill-health the expert could not accept the offer of appointment and the post is still under recruitment. Another expert is expected to be recruited before the end of 1968.			

ADP/TECHNICAL ASSISTANCE

EUROPE/MIDDLE EAST (cont'd)

Southern Yemen

Formulation of Industrial Development Policy (21-67)

Purpose: To advise on the formulation of industrial development policy and the necessary legislation and measures to implement the Government's industrial programme.

1/1

11,000

Implementation: The expert is in the field.

Turkey

Gear Manufacturing Training and Management (277-57)

Purpose: An expert in gear manufacturing, assigned to the manager of the Gear Manufacturing Plant of MKEK is to assist in training technical personnel and management.

1/1

1,800

Implementation: Mission completed.

Establishment of a Forging Plant (277-57)

Purpose: A metalworking engineer (forging) assigned to the manager of the Gear Manufacturing Plant of MKEK, is to advise on the establishment of a new forging plant.

1/4

7,200

Implementation: Mission completed. A return visit is contemplated by the Government for 1969.

Development of Petrochemical Engineering (277-57)

Purpose: To assist in the development of chemical and petrochemical engineering.

1/12

21,600

Implementation: The expert is in the field.

Chemical and Petrochemical Engineering, Gear Manufacturing, Forging and Management (Training) (277-57)

Purpose: Two industrial economists are to provide management assistance for training in the fields of chemical and petrochemical engineering, gear manufacturing, forging and management. An industrial engineer (management) was appointed to the General Manager of MKEK to assist in training managerial personnel and in work for reorganizing the company.

3/22

56,850

Implementation: Industrial engineer completed his assignment. Industrial economists in the field.

UNDP/TECHNICAL ASSISTANCE

EUROPE/MIDDLE EAST (cont'd)

	<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
<u>Yugoslavia</u>			
<u>Fellowships in Chemical and Other Industries (294-51)</u>			
<u>Purpose:</u> Fellowships are to be awarded in chemical and other industries.		9/30	10,650
<u>Training Chemists in Analytical Methods Relating to Celluloses and Hemicelluloses (294-57)</u>			
<u>Purpose:</u> To assist in training chemists and engineers of the Institut za Celulozo in Papir in the latest analytical methods relating to celluloses and hemicelluloses.	1/6		10,400
<u>Implementation:</u> The expert is in the field.			
<u>Production of Bleached Sulphate Pulp Paper (294-57)</u>			
<u>Purpose:</u> A paper industry adviser (bleached sulphate pulp) is to assist in the production of bleached sulphate paper.	1/6		10,400
<u>Implementation:</u> The expert is in the field.			
<u>Development of Process to Dispose Waste Waters from Wood Pulp (294-57)</u>			
<u>Purpose:</u> An expert in the pulp industry (industrial wastewater treatment) is to assist in the development of the best method and process to dispose of waste waters from wood pulp (sulphate process). The expert is to be assigned to factories in Sarajevo and Banja Luka.	1/2		3,400
<u>Implementation:</u> The candidate has been accepted by the Government.			
<u>Manufacture of Kraft Pulp Paper (294-57)</u>			
<u>Purpose:</u> An expert in pulp technology (kraft pulp) is to assist in training work crews in the pulp and paper departments of the Paper Factories in Plaski and Maglaj in the manufacture of kraft pulp paper.	1/6		10,100
<u>Implementation:</u> The candidate has been accepted by the Government and is expected to take up his post before the end of 1968.			
<u>Paper Coating and Sizing (294-57)</u>			
<u>Purpose:</u> An expert in paper coating and sizing is to train crews of factories in Veljce-Polje, Radece, Zagreb and Belgrade in coatings, including colour coatings, and surface-sizing of paper.	1/6		10,400
<u>Implementation:</u> The post is under recruitment; two candidatures which had been submitted were rejected by the Government.			

UNDP/TECHNICAL ASSISTANCE

EUROPE/MIDDLE EAST (cont'd)

Yugoslavia (cont'd)

Production of Neutral Sulphite Pulp and Paper (294-57)

Purpose: A paper industry adviser (neutral sulphite pulp) is to be assigned to advise in the production of neutral sulphite pulp and paper.

1/1

10,400

Implementation: The expert is in the field.

Paper Technology (294-57)

Purpose: An expert in paper technology (groundwood pulp) is to be assigned to the pulp and paper factory Matkova Nitrova for training work crews in the groundwood and papers departments.

1/1

10,400

Implementation: Under recruitment.

Straw Pulp Production (294-57)

Purpose: An expert in straw pulp production is to be assigned to pulp and paper factory of Konaci.

1/6

10,400

Implementation: The candidate has been accepted by the Government and is expected to begin his mission in December 1968.

Problems of Polymer Production (294-57)

Purpose: An expert in polymerization processes is to be assigned to the Research and Development Institute of Industrija Nafta INA in Zagreb to advise on problems of polymer production.

1/1

3,400

Implementation: The expert is expected to assume his duties in November 1968.

Sawdust Panel Manufacturing (294-57)

Purpose: A sawdust panel manufacturing expert is to advise the Wood Industrial Company LIM in Ivangrad on better utilization of raw materials and waste products.

1/1

3,600

Implementation: An expert is fulfilling his assignment in several short visits.

UN/REGULAR PROGRAMME

AFRICA

	<u>Experts</u> m/m	<u>Fellows</u> m/m	<u>Cost</u> US\$
<u>Algeria</u>			
<u>Project Evaluation in Connexion with the Economic Development Plan (ID-587)</u>			
<u>Purpose:</u> To advise the Direction Générale du Plan and the Ministère de l'Industrialisation et de l'Énergie on project evaluation in connexion with the economic development plan.	1/12		22,000
<u>Implementation:</u> The expert is in the field.			
<u>Cameroon</u>			
<u>Feasibility Studies on Projects for the Development Plan (ID-340)</u>			
<u>Purpose:</u> Industrial engineer, attached to the Ministère des Affaires Économiques des Plans, is to prepare feasibility studies on projects considered for the Second Five-year Development Plan, 1966-1971.	1/8		14,900
<u>Implementation:</u> The expert is in the field.			
<u>Central African Republic</u>			
<u>Elaboration of Types of Small-scale Industry (ID-999)</u>			
<u>Purpose:</u> To elaborate the types of small and medium-scale industries which could be created, taking the local market into account.	1/7		13,300
<u>Implementation:</u> The expert will assume his duties in November 1968.			
<u>Congo, Brazzaville</u>			
<u>Development of Small-scale Industry (ID-955)</u>			
<u>Purpose:</u> To assist in the development of small-scale industries.	1/4½	1/7½	11,400
<u>Implementation:</u> This mission will begin in October 1968.			
<u>Congo, Democratic Republic of</u>			
<u>Development of Small-scale Industry (ID-1064)</u>			
<u>Purpose:</u> To advise on the elaboration and execution of a general programme of development for small-scale industries.	1/12		22,000
<u>Implementation:</u> The post was occupied until 22 June 1968, but the contract of the expert was not extended. A replacement is under recruitment.			

Industrial Production

Annex IV (cont'd)

Congo, Democratic Republic of the

Fertilizer Production and Marketing

Purpose: To send a fact-finding mission on fertilizer production and marketing to the Democratic Republic of the Congo.

1 1/2 weeks

Implementation: Mission completed.

Dahomey

Industrial Policy, Project Evaluation (ID-868)

Purpose: To advise the Direction des Affaires Economiques du Ministère des Finances on industrial policy, project evaluation, feasibility studies and consulting services to industrial enterprises.

1/12

11,400

Implementation: The expert is in the field.

Gabon

Development of Small and Medium-scale Industries (ID-834)

Purpose: An expert is to elaborate, within the framework of the objectives of the development plan, the types of small and medium-scale industries which could be created, taking into account the local markets. He is also to advise on the development of small-scale industries.

1/8

15,700

Implementation: A candidature has been submitted to the Government.

Kenya

Management of Industrial Estate, Training Programmes (IX-536)

Purpose: An expert is to serve under the OPEX arrangement as general manager of the Nairobi Industrial Estate. He is also to be responsible for drawing up the functions and training programmes of a common technical service centre.

1/12

15,000

Implementation: The expert is in the field.

Liberia

Industrial Planning and Project Evaluation (ID-971)

Purpose: An industrial engineer, attached to the Department of Planning and Economic Affairs, is to elaborate branch studies, including project evaluation and establishment of institutional mechanisms, for the creation of industries.

1/6

15,000

Implementation: Candidatures are being evaluated, and submission to the Government should follow shortly. The expert is expected to be in the field before the end of 1968.

INDUSTRIAL PROGRAMME

AFRICA (cont'd)

	<u>Experts</u> <u>1/yr</u>	<u>Fellows</u> <u>1/yr</u>	<u>Cost</u> <u>US</u>
<u>Madagascar</u>			
<u>Evaluation of Industrial Projects (5000-68)</u>			
<u>Purpose:</u> To advise the Bureau de Développement et de Promotion Industriels in the evaluation of industrial projects.	1/2		11,400
<u>Implementation:</u> The expert is in the field.			
<u>Morocco</u>			
<u>Feasibility of a Pilot Industrial Estate (10-87)</u>			
<u>Purpose:</u> A specialist in industrial estates is to study the possibility of creating a pilot industrial estate, and is to examine the possibility of directing a request to the special fund for this purpose.	1/2		3,800
<u>Implementation:</u> The job description is with the Government for approval.			
<u>Organization of an Industrial Information Service (10-82)</u>			
<u>Purpose:</u> An expert is to advise on the organization of an industrial information service.	1/3		5,700
<u>Implementation:</u> The job description is with the Government for approval.			
<u>Development of Small-scale Industries (10-82)</u>			
<u>Purpose:</u> An expert is to advise on the development of small-scale industries.	1/3		5,700
<u>Implementation:</u> The job description is with the Government for approval.			
<u>Niger</u>			
<u>Industrial Programming and Project Evaluation (10-362)</u>			
<u>Purpose:</u> To assist in industrial development programming and project evaluation.	1/7		13,300
<u>Implementation:</u> The expert is in the field.			
<u>Nigeria</u>			
<u>Development of Industrial Estates (10-348)</u>			
<u>Purpose:</u> An expert is to advise on matters related to industrial estates in Eastern Nigeria.	2/9		17,000
<u>Implementation:</u> Under recruitment.			

INDUSTRIAL PROGRAMS

AFRICA (cont'd)

Senegal

Development of Small-scale Industries (ID-816)

Purpose: An industrial engineer is to advise on the development of small-scale industries.

Implementation: A candidate has been selected by the Government. He will report to duty in mid-November 1968.

Somalia

Project Formulation, Evaluation and Implementation (ID-777)

Purpose: An industrial adviser is to assist the Government of Somalia in industrial project formulation, evaluation and implementation, and in setting up an industrial development corporation.

Implementation: Mission completed.

Sudan

System of Grading and Standardization of Oil Seeds (ID-135)

Purpose: A vegetable oil processing expert is to continue to advise the Government on the formulation of a uniform system of grading and on the standardization of oil seeds.

Implementation: The expert is in the field and will complete his mission by the end of 1968.

Personnel Cost Comments

1/6 11,000

1/6 11,000

1/11 20,900

MULTI-COUNTRY PROGRAMME

THE AMERICAS

Experts	Fellows	Cost
m/m	m/m	US\$

Caribbean

Increase of Industrial Productivity (ID-105)

Purpose: An expert in productivity is to advise the government for a period of three months.

1/3

5,700

Implementation: Under recruitment.

Peru

In-plant training of executives (ID-837)

Purpose: An expert is to work on in-plant training of executives in selected industries.

1/6

11,400

Implementation: The Government is considering utilizing the funds for this post to finance a fellowship programme. Its decision is being awaited.

Trinidad and Tobago

Development of Small-scale Industries (ID-860)

Purpose: To assist in the formulation of a comprehensive programme for development of small-scale industries, including management consulting, supervised credit marketing assistance and industrial estates, with special emphasis on stimulation of indigenous entrepreneurship. The adviser is to assist the Industrial Development Corporation.

1/6

15,000

Implementation: Candidatures have been submitted to the Government. The expert is expected to be in the field before the end of 1968.

Uruguay

Productivity of the Food Processing Industry (ID-858)

Purpose: An adviser on the food processing industry, assigned to the Productivity Centre, is to analyse the present state of productivity in the most important branches of the food industry and is to assist in programming sectional branch studies.

1/6

9,500

Implementation: The expert is in the field.

Regional

Development of Mechanical Industries (ID-495)

Purpose: A regional adviser in the metallurgical industries is to evaluate the possibilities for the development and establishment of mechanical industries, especially with regard to capital and durable goods and semi-finished products. Duty station: Santiago, Chile.

1/12

17,000

Implementation: The expert is in the field.

UN/REGULAR PROGRAMME

THE AMERICAS (cont'd)

<u>Project Title</u>	<u>Duration</u>	<u>Estimated Cost</u>
<u>Regional (cont'd)</u>		
<u>Evaluation of Projects for Key Chemical Industries (ID-494)</u>		
<u>Purpose:</u> A regional adviser in the chemical industry is to assist in the economic and technical evaluation of projects for new chemical industries and in the preparation of country and regional development programmes relating to these industries. Duty station: Santiago, Chile.	1/1	17,000
<u>Implementation:</u> The expert is in the field.		
<u>Planning of New Pulp and Paper Industries (ID-495)</u>		
<u>Purpose:</u> A regional adviser in pulp and paper development is to assist in the general planning of new pulp and paper industries and in assessing expected consumption increases. Duty station: Santiago, Chile.	1/1	17,000
<u>Implementation:</u> The expert is in the field.		
<u>Technological Research in Industry (ID-495)</u>		
<u>Purpose:</u> A regional adviser on technological research in industry is to study means of co-ordinating work on technological research and interchange of results among Latin American Institutes. Duty station: Santiago, Chile.	1/12	17,300
<u>Implementation:</u> The expert is in the field.		
<u>Formulation of Industrial Policies and Programmes (ID-1162)</u>		
<u>Purpose:</u> An industrial economist with ECLA (Mexico) is to provide assistance to the Central American Governments in the formulation of industrial policies and programmes. Duty station: Mexico City.	1/12	30,500
<u>Implementation:</u> The expert is in the field.		

UNREGULAR PROGRAMME

AGIA/FAR EAST

China, Republic of

Solving Management Problems Related to Manufacturing Process (ID-599)

Purpose: An expert in management research is to conduct consulting services for local enterprises to solve management problems related, but not limited, to manufacturing processes, plant utilization and quality control.

<u>Experts</u> <u>n/m</u>	<u>Fellow</u> <u>n/m</u>	<u>Cost</u> <u>US\$</u>
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1/6	1/6	17,800
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Implementation: The expert is to assume his duties by the end of 1968. A fellowship in synthetic rubber manufacturing has been awarded.

Qualitative and Quantitative Analysis of Synthetic Fibres (ID-599)

Purpose: To assist the Bureau of Commodity Inspection and Quarantine in the qualitative and quantitative analysis of synthetic fibres, plastics and rubber and to advise it on the drafting of standards of quality, sampling procedures and criteria for acceptance or rejection of these materials.

1/6		11,000
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Implementation: Mission completed.

Iran

Increased Efficiency of Industrial Research Institute and Standards Organization (ID-272)

Purpose: An expert is to increase the efficiency of the Industrial Research Institute and Standards Organization.

1/12		24,300
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Implementation: The expert is in the field.

Organizing In-plant Training Programmes (ID-272)

Purpose: Two in-plant training experts are to organize in-plant training programmes, one for specialists in iron and steel, and one for electricians.

2/6	2/12	14,500
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Implementation: A decision is expected from the Government in the near future on the specific objectives of this project. The job description can then be finalized.

Regional

Regional Industrial Adviser with ECAFE (ID-1083)

Purpose: A regional adviser on the oils and fats industry is to be assigned to ECAFE and is expected, on request, to advise the countries of the region on the development of oils and fats industry, particularly in the use of new techniques of oil extraction and refining; in the standardization of products, storage, transport and marketing; and in the establishment of pilot rice bran stabilization plants and large-scale rice bran oil mills.

1/12		23,750
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Implementation: An expert is in the field.

INDUSTRIAL PROGRAMME

ECIAEAFIAT (cont'd)

regional (cont'd)

Regional Industrial Adviser with ECIFE (ID-1062)

Purpose: An expert is to be attached to ECIFE to provide assistance to countries of the region, on request, in the planning, development and establishment of industrial plants, particularly in the metal and engineering industries field.

Implementation: The expert is in the field.

1/1 11 1

1/1 11 1

Regional Adviser on Industrial Research Attached to ECIFE (ID-1063)

Purpose: A regional adviser on industrial research is to be attached to ECIFE to provide, on request, technical and advisory services to countries of the region on the planning and setting up of new industrial research institutes and on the further development of existing institutes.

Implementation: The expert is in the field.

1/1 11 1

1/1 11 1

Regional Adviser on Industrial Standardization Attached to ECIFE (ID-1064)

Purpose: A regional adviser on industrial standardization is to be attached to ECIFE to provide to the countries of the region, on request, technical and advisory assistance on problems relating to industrial standardization.

Implementation: The expert is in the field.

1/1 11 1

1/1 11 1

UN/REGULAR PROGRAMME

EUROPE/MIDDLE EAST

	<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
<u>Bulgaria</u>			
<u>Fellowships in Mechanical Engineering (ID-980)</u>			
<u>Purpose:</u> Fellowships are to be awarded in mechanical engineering.		3/10	3,600
<u>Cyprus</u>			
<u>Industrial Development Policy (ID-503)</u>			
<u>Purpose:</u> To advise the Ministry of Commerce and Industry on industrial development; to initiate studies for identification of industrial projects; to evaluate projects; and to advise on measures to promote industrial investment.	1/6		11,000
<u>Implementation:</u> Mission completed.			
<u>Hungary</u>			
<u>Fellowships in Various Engineering Fields (259-65)</u>			
<u>Purpose:</u> Fellowships are to be awarded in various engineering fields.		8/45	15,900
<u>Lebanon</u>			
<u>Development of Engineering Industries (ID-217)</u>			
<u>Purpose:</u> An industrial engineer economist (engineering industries) is to advise the Government on promising projects in engineering industries.	1/6		10,450
<u>Implementation:</u> The job description has been submitted to Technical Assistance Recruitment Service and several candidates have been evaluated; submission from Technical Assistance Recruitment Service is pending.			
<u>Poland</u>			
<u>Fellowships in Chemical Industries (ID-83)</u>			
<u>Purpose:</u> Fellowships are to be awarded in chemical industries.		6/15	6,000
<u>Romania</u>			
<u>Fellowships in Metallurgy (ID-876)</u>			
<u>Purpose:</u> Fellowships are to be awarded in metallurgy.		2/6	2,400
<u>Saudi Arabia</u>			
<u>Fellowship in Industrial Development (ID-896)</u>			
<u>Purpose:</u> Fellowship in industrial development.		1/6	3,600

REGULAR PROGRAMME

EUROPE/MIDDLE EAST (cont'd)

<u>Experts</u>	<u>Fellows</u>	<u>\$</u>
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Spain

Development of Footwear Industries (ID-506)

Purpose: To assist in the development of footwear and textile industries.

1/3

5,000

Implementation: Under recruitment.

Syria

Natural Gas Development (ID-513)

Purpose: An expert is to advise on natural gas development (petrochemicals and fertilizers).

1/6

15,000

Implementation: Under recruitment.

Yugoslavia

Fellowships in Small-scale Industries and Industrial Estates (ID-300)

Purpose: Fellowships are to be awarded in small-scale industries and industrial estates.

3/8

3,200

Regional

Regional Industrial Adviser Attached to the Economic Regional Commission (ID-852)

Purpose: A regional adviser on industrial development is to be attached to the Economic Regional Commission.

1/12

28,000

Implementation: The expert is in the field.

REGIONAL INDUSTRIAL SERVICES

AFRICA

Algeria

	<u>Experts</u> <u>n/a</u>	<u>Follow</u> <u>n/a</u>	<u>Cost</u> <u>US\$</u>
<u>Re-organization of Biscuit and Pastry Factories (67-85)</u>			
<u>Purpose:</u> To assist in working out a re-organization plan for a group of four biscuit and pastry factories that have been placed under central management; to give advice on matters relating to supply, specialization of production, quality control, sales and re-organization of the complex.	1/6		14,000
<u>Implementation:</u> A candidature has been submitted to the Government for approval.			
<u>Management of Fruit and Vegetable Processing Plants (67-86)</u>			
<u>Purpose:</u> To advise on the managing of four fruit and vegetable processing plants, none of which is operating efficiently. The expert is to focus his attention primarily on technical and economic aspects of management but is also to advise on the re-organization of the factories and on the supply of raw materials.	1/6		14,000
<u>Implementation:</u> The expert is in the field. The Government has requested an extension of the project, and the request is being considered.			
<u>Improved Operation of Glassware Industry (67-88)</u>			
<u>Purpose:</u> An expert to improve the operation of the glassware industry in Oran. This request was made by the Government in connexion with the re-activation of industries in plants that had been idle or working below capacity.	1/6		14,000
<u>Implementation:</u> The project is being reconsidered.			
<u>Lock Factory Operations (67-89)</u>			
<u>Purpose:</u> A hardware specialist is to advise the management of the lock factory Serrurerie Chaabia, on streamlining the production process and on general operations of the factory.	1/6		14,000
<u>Implementation:</u> The expert is in the field.			
<u>Study for a Milk Reconstitution Plant (68-283)</u>			
<u>Purpose:</u> A milk processing expert is to prepare a preliminary study for a milk reconstitution plant.	1/3		7,500
<u>Implementation:</u> Pending UNDP concurrence.			

SPECIAL INDUSTRIAL PROJECTS

AFRICA (cont'd)

Senegal

Industrial Financing and Evaluation of Project (67-1)

Purpose: An expert in industrial financing is to participate in the evaluation of projects proposed by the Société Nationale d'Investissement.

Implementation: Candidatures have been submitted to the government for approval.

Establishment of a Pilot Industrial Estate (67-233)

Purpose: To assist in the preparations for and establishment of a pilot industrial estate.

Implementation: An expert is under recruitment.

Central African Republic

Feasibility Study for Cassava Industrialization (68-351)

Purpose: A food technologist (specialist in cassava industrialization and project elaboration) is to analyse the existent plants for cassava flour production and estimate future demand of cassava flour, starch, feedstuffs and other products, pointing out equipment needed, plant size, location, investment and other basic requirements.

Implementation: The project is with UNDP, awaiting their concurrence.

Chad

Technical and Economical Analysis of Meat Complex (68-349)

Purpose: A food technologist, specialist in the elaboration of meat industries projects, is to make a technical and economical analysis of the meat complex located in Fort-Archambault.

Implementation: Under recruitment.

Congo, Brazzaville

Modernization of Palm Oil Extraction Plants (67-151)

Purpose: To assist the Government to study the actual situation of the palm oil extraction plants and to make recommendations for modernization, as required. Special attention is to be paid to plants within the Equator prefecture region. In addition, the expert is also to evaluate technically and economically the viability of establishing a palm oil refining plant and a palmetto oil extraction plant, with emphasis on the most suitable location for bottle plants.

Implementation: The candidatures have been submitted to the Government for approval.

REGIONAL AND SERIAL SERVICES

AFRICA (cont'd)

	<u>Experts</u> =/m	<u>Fellows</u> m/m	<u>Cost</u> US\$
<u>Congo, Brazzaville (cont'd)</u>			
<u>Development Programme for Metallurgical Industries (67-159)</u>			
<u>Purpose:</u> An industrial economist and an industrial engineer are to explore the possibilities of an industrial development programme for the Pointe Noire district. The programme may include studies on metallurgical industries.	2/6		16,000
<u>Implementation:</u> The candidature of the industrial engineer was submitted to the Government on 23 September 1968. The industrial economist is under recruitment.			
 <u>Study on an Agro-Industrial Complex to Manufacture Canned Pineapple (67-171)</u>			
<u>Purpose:</u> To study the situation of the pineapple canning project undertaken by the Libby-Company and to undertake a prefeasibility study of an agro-industrial complex to manufacture canned pineapple slices, juices etc.	1/2		5,000
<u>Implementation:</u> A list of candidates has been submitted to the Government.			
 <u>Congo, Democratic Republic of</u>			
<u>Organizing a Project Evaluation Team to deal with Industrial and Capital Investment Projects (68-273)</u>			
<u>Purpose:</u> To determine the needs for a project evaluation team to deal with industrial and capital investment projects; to discuss the plan of the team in the administrative and planning set-up; to determine the composition of skills which the experts should possess; and to define the specific responsibilities of the team of technical assistance experts.	2/1		2,400
<u>Implementation:</u> Mission completed. The report of the mission was sent to the Government on 1 October 1968.			
 <u>Dahomey and Togo</u>			
<u>Survey of Industrial Development Potentialities (67-199)</u>			
<u>Purpose:</u> A team of specialists is to assist the Governments to Dahomey and Togo in surveying the industrial development potentialities of the countries and the possible avenues of co-operation in this field between them. The team consists of an industrial economist (team leader), an industrial engineer, a specialist for market studies and expert promotion, and a specialist for industrial legislation and financing.	4/8		20,000
<u>Implementation:</u> Mission completed. A report is being prepared for submission to the Governments.			

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

Ethiopia

Expert 1/12 25,000

Survey of the Manufacturing Industry (67-70)

Purpose: Two experts, assigned to the Government of Ethiopia in connexion with the Third Five-year Plan, are to provide an over-all survey of the manufacturing industry in the country, setting up capacity targets, and to review existing feasibility studies and formulate specific industrial projects.

Implementation: Mission completed.

Managerial Organization of Industrial Undertakings (67-105)

Purpose: To advise the Ethiopian Investment Corporation. The expert is to examine and assess existing accounting systems and the managerial organization of some of the EIC's industrial undertakings. His is to make the recommendations necessary for improving managerial efficiency, especially the development of modern and effective costing and accounting services.

Implementation: Mission completed.

Hides and Skins Purchasing and Export Organization for Leather Producing and Processing Industry (67-141)

Purpose: An expert on hides and skins marketing is to assist the Livestock and Meat Board of the Ethiopian Government to create and organize a complete hides and skins purchasing and export organization to meet the requirements and specifications of the leather producing and processing industry. He is to assist in drafting the necessary laws and rules and regulations for standardization and grading of hides and skins; to organize the purchasing centres; to upgrade the quality of the farmers' preparation by introducing purchase on the basis of quality; and to supply information on up-to-date dehydrating and conservations techniques. The expert is to train the respective counterparts in all the above-mentioned activities. The expert's work will supplement the efforts of the FAO team in the field of hides and skins. Thus he will be co-ordinating the implementation of this project with their activities.

Implementation: The expert arrived in the field on 10 July 1968.

Meat Processing Operations (68-282)

Purpose: On the basis of the recommendation of the expert who visited Ethiopia at the request of the Government: In August 1967, a food technologist is to provide assistance to the Government in meat processing operations.

Implementation: Under recruitment; the job description of the post is being circulated.

1/12 25,000

1/12 25,000

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

	<u>Experts</u> <u>n/r</u>	<u>Fellow</u> <u>n/m</u>	<u>Cost</u> <u>US\$</u>
<u>Ghana</u>			
<u>Management of Fibre Bag Manufacturing Plant (66-2)</u>			
<u>Purpose:</u> Three OPEX experts are to continue to serve the Fibre Bag Manufacturing Corporation in the capacity of managing director, maintenance engineer and workshop superintendent. In addition one fellowship in cost accounting is to be awarded.	3/12	1/3	101,000
<u>Implementation:</u> The experts are in the field, and the Government has been asked to nominate a candidate for the fellowship post.			
<u>Re-organization of the State Enterprises Secretariat (67-163)</u>			
<u>Purpose:</u> To assist in the re-organization of the State Enterprises Secretariat. The experts are to be assigned the following posts within the SES or its associate or subsidiary companies: director, administrative services; director, investments; director, user industries; group executive, construction industries; group executive, food industries; manager, central procurement; production technologist; specialist, employee motivation and salary policies; and specialist, job description and evaluation.	13/264		400,000
<u>Implementation:</u> Three of the experts are in the field and the recruitment of the remaining six is underway. A high-level UNIDO mission which visited Ghana in May 1968 established the fact that the Government wished to change the project, placing primary emphasis on the experts' managerial and technical skills. The mission also assisted in preparing a Special Fund project which is expected to develop out of the present project.			
<u>Guinea</u>			
<u>Establishing a Laboratory for Vegetables and Essential Oils (67-186)</u>			
<u>Purpose:</u> To assist the Government in establishing a research, test and control laboratory for vegetable and essential oils. A fellowship for six months is also included in the project.	1/3	1/6	10,600
<u>Implementation:</u> Under recruitment.			
<u>Techno-economic Feasibility Study of a Cotton Ginning Pilot Plant (67-187)</u>			
<u>Purpose:</u> To assist the Government in preparing a techno-economic feasibility study of a cotton ginning pilot plant.	1/2		5,000
<u>Implementation:</u> The candidature of one expert was submitted to the Government, but the project is to be postponed or cancelled. Clarification has been requested from the resident representative.			

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

Guinea (cont'd)

Production of Organic Fertilizers (67-197)

Purpose: An expert is to make a preliminary study on the feasibility of producing organic fertilizers from the garbage of the city of Conakry. The expert is to advise on the economic and technical viability of the project.

1 1/2 5,000

Implementation: The expert is in the field.

Kenya

Feasibility Study on Dry and Wet Maize Milling (67-122)

Purpose: To prepare a feasibility study on dry and wet maize milling and to make suggestions for project implementation.

1/4 10,000

Implementation: The expert has been recruited and is expected to arrive in the field in October 1968.

Feasibility Study of a Castor Oil Factory (67-124)

Purpose: To evaluate the feasibility study prepared by the Industrial and Commercial Development Corporation of a castor oil factory in Kilewezi.

1/12 5,000

Implementation: The mission was completed on 5 April 1968, and a report has been submitted to the Government.

Setting up a Workshop in the Industrial Estate of Nairobi (67-123)

Purpose: To assist the Government of Kenya in setting up a workshop within the common facility centre in the Industrial Estate of Nairobi. The workshop is to include: a tool room, a design office and a testing room. Assistance is also to be given in the selection of staff, machinery, equipment, tools and in the design and production of various tools and fixtures.

1/12 24,000

Implementation: The expert is in the field.

Feasibility of Producing Caustic Soda (67-126)

Purpose: A chemical adviser (caustic soda - sulphuric acid) is to examine the feasibility of producing caustic soda in Kenya. He is to make a survey of the prospects for the production of other chemicals.

1/2 5,000

Implementation: Mission completed; the expert's report was submitted to the Government on 17 April 1968.

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

Kenya (cont'd)

<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
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Analysing Techno-economic Problems of the Textile Industry (67-157)

Purpose: Two UNIDO experts are to assist the Government of Kenya in analysing the techno-economic problems of the textile industry in Kenya and are to advise the Government on its future course of action, taking into consideration the larger framework of the East African Common Market.

2/6

15,000

Implementation: The experts are in the field.

Liberia

Steel Project Study (66-26)

Purpose: An economic-engineering study for the Liberian Steel Project is to be made by a firm of consultants under contract with UNIDO. The study is to be transmitted to the Government.

Implementation: Mission completed.

Consulting firm

110,000

Advisory Services for Steel Project (67-64)

Purpose: An expert is to render advice, when requested, on a steel project.

1/4

30,000

Implementation: Mission completed.

Steel Fellowship (67-79)

Purpose: In connexion with the SIS steel projects, a fellowship award is to be granted to an industrial economist who, as a counterpart to an UNTA expert, is to be attached to a special co-ordinating unit established within the country's Department of Planning and Economic Affairs for the steel project.

1/8

3,600

Implementation: The fellowship has been awarded.

Analysis of Data and Execution of Steel Project (67-133)

Purpose: An industrial engineer (iron and steel) is to assist the Government in following up the economic-engineering study, in analysing the data and in executing the steel project.

1/12

28,000

Implementation: The expert is in the field.

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

<u>Experts</u>	<u>Fellow</u>	<u>Cost</u>
<u>m.m.</u>	<u>m.m.</u>	<u>US\$</u>

Libya

Fodder Yeast Production from Petroleum Refinery By-products (68-310)

Purpose: Two UNIDO staff members are to study the possibilities of fodder yeast production from petroleum refinery by-products and to formulate an official request by the Libyan Government to UNDP for integral part of a petrol refinery.

2/1		1,000
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Implementation: Mission completed. Request for a demonstration plant formulated and submitted to UNDP.

Madagascar

Rehabilitation of Brickworks Industry (67-128)

Purpose: Technical assistance to Somabri Brickworks is to be carried out in two stages: first an expert is to make a general study of the market for bricks in the construction industry and prepare a report giving recommendations for the financial and technical rehabilitation of the industry. The second phase is to cover a longer term assignment of another expert who is to be charged with implementing the initial recommendations.

1/3		7,000
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Implementation: The expert is expected to be in the field by November 1968.

Development of Small-scale Industry and Establishing Industrial Estates (67-149)

Purpose: To revise the policies and programmes of small-scale industry development, to establish industrial estates, and to prepare the project of setting up a pilot industrial estate.

1/1½		4,000
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Implementation: Mission completed.

Setting up of Vegetable Oil Plant (67-154)

Purpose: To assist the Government in solving a variety of problems in connexion with the setting up of the Tulear Vegetable Oil Company, and to provide training for local counterparts.

2/24	4/19	60,500
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Implementation: Candidatures have been submitted to the Government.

Nitrogen Fertilizers Production and Export Possibilities (67-192)

Purpose: An expert is to investigate the market for nitrogen fertilizers (particularly urea) in Madagascar and in East Africa and to study production and export possibilities.

1/1½		4,000
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Implementation: Mission completed; a report has been sent to the Government.

REGIONAL INDUSTRIAL SERVICES

AFRICA (cont'd)

• Malawi

Manufacture of Pottery (66-293)

Purpose: To assess the geological records available on clay deposits, to advise the Government on laboratory research for determining the quality of clays for the production of pottery and to make preliminary study on the manufacture of pottery.

Experts	Fellows	Cost
<u>n/m</u>	<u>m/m</u>	<u>US\$</u>

1/3		6,200
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Implementation: A candidature has been submitted to the Government.

Mali

Survey of State-financed Industrial Enterprises (67-167)

Purpose: Three experts, two industrial economists and one industrial engineer, are to make a survey from the technical and economic standpoint of the functioning of state-financed industrial enterprises, and to present recommendations for improvement. The experts are also to assist in the elaboration of specific industrial projects for inclusion in the Seven-year Development Plan.

3/44		84,000
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Implementation: The experts are in the field.

Improvement of Meat Processing Production (67-183)

Purpose: To review the present situation in meat processing production; to recommend necessary steps to improve the quality of production, the supply of raw materials, the productivity and specialization of present and future factories, and to explore the development on the domestic and export markets. In addition, a comprehensive programme of integrated agro-industrial development of the whole animal protein production is to be prepared and submitted. Recommendations for further United Nations assistance are to be made, if necessary.

2/6		13,000
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Implementation: A marketing expert is in the field. A meat production and processing candidate has been selected by the Government and will report for duty by the end of October 1968.

Advisory Services to the Ministry for State-owned Enterprises (68-304)

Purpose: Two experts are to advise the Ministry for State-owned Enterprises on the organization of various departmental services in the Ministry and on the introduction of uniform management control procedures in the State-owned enterprises.

2/6		12,400
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Implementation: Under recruitment.

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

Mauritania

Development of Small-scale Industries (66-228)

Purpose: An industrial economist is to formulate a programme for the development of small-scale industries; to investigate the possibility of expansion of small-scale industries in various parts of the country; and to undertake studies of the viability of industrial projects.

Implementation: With Technical Assistance Recruitment Service for recruitment.

Mauritius

Evaluation of a Feasibility Report for the Establishment of a Textile Industry (67-137)

Purpose: To evaluate a techno-economic feasibility report submitted by a private consultant to the Government, on the establishment of a textile industry in Mauritius. The expert is also to advise on financing the preparation of the feasibility study into a project-loan document and on recurring financial investment for the project.

Implementation: Mission completed; the final report has been sent to the Government.

Survey of Industries Using Sugar-cane Bagasse as Principal Raw Material (67-230)

Purpose: A consultant firm is to make a survey of industries that can be established in Mauritius using sugar-cane bagasse as their principal raw material, to advise on those manufactures which appear to offer some promise of economic success; to make a detailed study of particle board; and to advise on the economics of replacing bagasse as the primary fuel for generating the steam and power needed by the sugar mills.

Implementation: The specification for tender had been forwarded to the Purchase and Transportation Service of the UN, and the list of the firms proposed by the Purchase and Transportation Service has been accepted by the Government.

Consultant firm

30,000

Feasibility Study on the Establishment of a Glass Industry (67-231)

Purpose: To prepare a feasibility study on the establishment of a glass industry in Mauritius. The industry is primarily intended to satisfy the internal market, but the possibilities of exports of intermediates or finished products are not to be excluded.

Implementation: The expert is in the field.

1/2

1,000

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

	<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
<u>Niger</u>			
<u>Five-year Programme of Development for the Agro-industry in Niger (67-249)</u>			
<u>Purpose:</u> To outline a five-year programme of development for the agro-industry in Niger. The main task of the expert should be to summarize the basic needs in the food industry, for both local and export markets, and to pin-point the country's production potentialities in the food field.	1/2		6,000
<u>Implementation:</u> This project is in negotiation between UNIDO and UNDP.			
<u>Establishment of Pilot Industrial Estate (67-251)</u>			
<u>Purpose:</u> To prepare a techno-economic study for the establishment of pilot industrial estate in Niamey.	1/2		5,000
<u>Implementation:</u> Mission completed.			
<u>Rwanda</u>			
<u>Establishment of a Cement Factory (67-181)</u>			
<u>Purpose:</u> To advise on the technical and financial aspects of establishing a cement factory in Rwanda with an initial capacity of 100 tons per day, and with provision to double the output in the course of the next few years. The study should discuss various technologies of cement manufacture and make definite recommendations for the processes which would best suit Rwanda.	1/2		11,960
<u>Implementation:</u> Mission completed.			
<u>Uses of Methane Gas (68-323)</u>			
<u>Purpose:</u> To check and evaluate the bathygraphic data on Lake Kivu, to inspect the existing installations for the recovery of methane from Lake Kivu, to suggest possibilities for further uses of methane gas from Lake Kivu and to recommend steps towards implementing these suggestions.		1/11 days	400
<u>Implementation:</u> Mission completed.			
<u>Establishment of Malt Factory (68-328)</u>			
<u>Purpose:</u> To prepare a detailed project report for the establishment of a malt factory whose production should meet the needs of existing breweries and of the growing local market. The project report should contain the basic requirements of economic, technical and financial viability in terms of market data, equipment, construction, services, employment, investment needed and relative cost benefits. The expert is also to draw up the outline for the implementation of the project.	1/2		5,000
<u>Implementation:</u> The project is with UNDP for their concurrence.			

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

Rwanda (cont'd)

Fruit and Vegetable Processing (68-329)

Purpose: To prepare a preliminary study on the establishment of an industry for the production of juice concentrates, dehydration of fruits and vegetables.

Experts	Follow-up	Cost
1/3		4,000

Implementation: The project is with UNDP for their concurrence.

Development of the Tea Industry (68-330)

Purpose: To prepare a consistent plan of operation for the development of the tea industry including an evaluation of the potentialities of raw material production; an estimate of production capacity need for processing and a definition of the industrial requirements.

1/3		6,200
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Implementation: Under recruitment.

Establishment of an Industrial Promotion Service (68-331)

Purpose: An industrial investment promotion expert is to assist the recently established Banque de Développement du Rwanda in the establishment of an industrial promotion service utilizing both local and external financing sources.

1/1		3,000
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Implementation: The project has been submitted to UNDP for approval and advance recruitment has been initiated.

Senegal

Transformation of Military Installations into an Industrial Estate (67-184)

Purpose: To advise on the transformation of military installations at Thies into an industrial estate, and to assist in the implementation of this project and in the formulation of necessary recommendations for assistance from the UN, which might be subsequently requested.

1/12	2/12	32,200
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Implementation: The expert has been selected by the Government and will be available in January 1969.

Expansion and Development of Aluminium Foundries (67-191)

Purpose: To assist the Government of Senegal in the expansion and development of aluminium foundries in the country, particularly the aluminium foundry that is being established in Thies.

1/12	1/6	28,600
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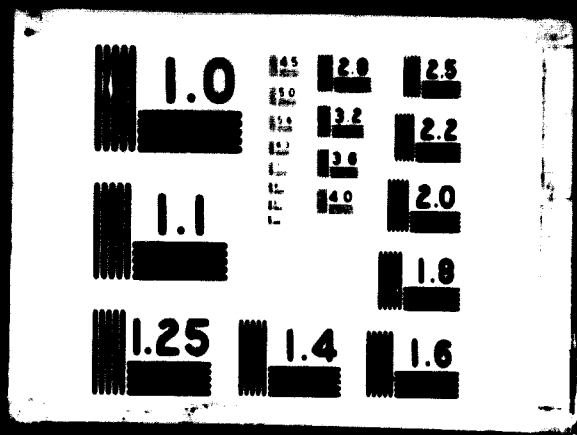
Implementation: The expert has been selected by the Government and will report for duty in mid-October 1968.



31.7.74

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SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

	<u>Experts</u> <u>n/m</u>	<u>Fellows</u> <u>m/n</u>	<u>Cost</u> <u>US\$</u>
<u>Somalia</u>			
<u>Commercial Utilization of Gypsum and Sepiolite (67-135)</u>			
<u>Purpose:</u> To assist the Government of Somalia in assembling, collating and evaluating all reports, data and other information on gypsum and sepiolite deposits in Somalia; to advise on industrial or commercial utilization of the gypsum and sepiolite; and to prepare plans and programmes for implementation.	1/3		7,500
<u>Implementation:</u> The expert is in the field.			
 <u>Survey of Food Processing Plants (67-140)</u>			
<u>Purpose:</u> A food processing expert is to undertake an exploratory and advisory mission to Somalia for the purpose of obtaining first-hand information on the equipment, production programmes and raw materials of food processing plants in Somalia.	1/2-3 weeks		1,200
<u>Implementation:</u> Mission completed.			
 <u>Reducing the Cost of Electric Power (67-215)</u>			
<u>Purpose:</u> Three experts are to be sent to Somalia to investigate the cause of the high cost of power and recommend ways and means to reduce it. This is to be a joint project with ESA Transport and Resources Division and UNIDO is to provide an electrical equipment engineer as the leader of the mission.	3/3		8,000
<u>Implementation:</u> Mission completed.			
 <u>Operation of the Chisimaio Plant (68-387)</u>			
<u>Purpose:</u> A meat processing expert is to assist the Somali Government for a period of six months in making a decision on the operation of the Chisimaio plant. The expert is to assist in the selection of additional equipment which may be found necessary in the light of the optimum production programme for the plant.	1/6		11,000
<u>Implementation:</u> Action on this project has been suspended at government request.			
 <u>Sudan</u>			
<u>Organization and Administration of the Public Sector (67-60)</u>			
<u>Purpose:</u> Two consultants are to advise the Government on the organization and administration of the public sector of industry, and on financial accounting in the public sector of industry.	2/4		10,000
<u>Implementation:</u> Several candidatures have been submitted to the Government.			

SPECIAL ADJUDICIAL SERVICE

AFRICA (cont'd)

Sudan (cont'd)

Expert	Period	Cost
		\$

Ammonia and Urea Fertilizer Plant Specifications (67-11)

Purpose: An expert is to assist in making the final decisions regarding the capacity and location of an ammonia and urea fertilizer plant, and to prepare specifications for the plant for world-wide tender.

1/3	2,000
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Implementation: A list of candidates has been submitted to the Government, but no response has been received.

Personnel Training of Food Processing Plants (68-57)

Purpose: A food technologist is to survey the operation of four government owned food processing plants, and to submit recommendations for job requirements, for the qualifications for personnel and for a complete training programme for the efficient running and control of the plants.

1/3	2,000
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Implementation: The candidature has been submitted to the Government.

Leather Production Technology and Marketing (68-262)

Purpose: A team of experts is to assist the Khartoum Tannery in the fields of leather production, leather technology, leather chemistry and hides and skins grading and marketing.

4/24	58,000
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Implementation: A list of candidates was submitted to the Government, and the Government selected one expert who is not yet in the field. The three other posts are expected to be filled before the end of 1968.

Transformation of Artisan Activities and the Stimulation of New Small-scale Industries (68-287)

Purpose: An industrial economist and an industrial engineer are to carry out a detailed area survey of industrial potential with the objective of drawing up a programme for the transformation of artisan activities and the stimulation of new small-scale industries.

2/6	15,000
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Implementation: A list of candidates has been submitted to the Government. The experts are expected to be in the field before the end of 1968.

Iogo

Establishment of a Plant to Manufacture Dry Cassava Flakes (67-166)

Purpose: An expert is to be assigned to the Government of Iogo to undertake an investigation of the possibilities of establishing a plant to manufacture dry cassava flakes for export.

1/1	14,000
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Implementation: Under recruitment by Technical Assistance Recruitment Service. Until now it was not possible to select a suitable candidate.

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>m/m</u>	<u>m/m</u>	<u>US\$</u>

Tunisia

Selection of Equipment and Production Methods (67-73)

<u>Purpose:</u> A production engineering expert is to assist in the selection of equipment for the Société de Fonderie et de Mécanique (SOFOMECA) and to advise on production and industrial management.	1/6	14,000
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Implementation: A list of candidates has been submitted to the Government.

Increasing Efficiency of Fruit-oil Processing Plant (67-73)

<u>Purpose:</u> To assist the Société Industrielle de Machine to bring the plant into high efficiency operation, and to investigate the feasibility of processing oil bearing fruits other than the olive, in order to operate the factory on a year-round basis.	1/6	14,000
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Implementation: Mission completed.

Promoting Foreign Investment (67-224)

<u>Purpose:</u> To help in the arrangements and documentation for holding a seminar on national and international aspects of promoting foreign investment into Tunisia.	1/3 weeks	2,500
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Implementation: Mission completed.

Modernization of Dockyard Facilities and Equipment (68-217)

<u>Purpose:</u> To assist the Mechanical Construction and Naval Company of Menzel Bourguiba and its subsidiary, the Bizerte International Dockyard Company, to modernize their facilities and equipment.	1/2	5,000
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Implementation: Mission completed.

Industrial Cost Accounting System (68-297)

<u>Purpose:</u> An industrial cost accounting expert, assigned to les Ateliers Mécaniques du Sahel (A.M.S.) at Sousse, is to develop and introduce a comprehensive cost accounting system.	1/4	9,000
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Implementation: Under recruitment with Technical Assistance Recruitment Service.

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

Uganda

Survey of Food Processing (68-255)

Purpose: A food technologist is to investigate and advise on food processing projects in Uganda.

1/1 week

Implementation: Mission completed by UNIDO headquarters staff member.

Refrigerator and Stove Production and Supervision of Plant (68-290)

Purpose: A production engineer (metalworking) is to assist the Uganda Metal Products and Enamelling Company Ltd. in starting refrigerator and stove production and generally in the technical supervision of the plant, advising on reorganization for more efficient production.

1/1

1,000

Implementation: A list of candidates has been submitted to the Government.

Fertilizer Industry: Investment and Market Arrangement (68-324)

Purpose: To obtain basic information on the fertilizer industry in Uganda and also to investigate the possibility of a reciprocal investment and market arrangement with Kenya.

1/1 week

1,000

Implementation: Mission completed; report has been sent to the Government.

United Arab Republic

Urea and Ammonium Sulphate Projects Preparation (67-57)

Purpose: A Preparatory Mission is to discuss in the United Arab Republic: urea and ammonium sulphate projects and a phosphate fertilizer project.

1/10 days

3,000

Implementation: Mission completed in May 1968.

Supervising the Operation of Bagasse Pulp and Paper Mill (67-78)

Purpose: A chief engineer is to assist the Government in planning and supervising the efficient operation of the Edfu Bagasse Pulp and Paper Mill.

1/24

2/18

57,000

Implementation: The expert is in the field.

Extension of Cotton Textile Facilities (67-83)

Purpose: To assist the Cotton Textile Consolidated Fund in planning the extension of facilities; specifically to make recommendations for equipment and personnel needed for the laboratory.

1/2

4,000

Implementation: Mission completed.

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

United Arab Republic (cont'd)

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>m/m</u>	<u>r/m</u>	<u>US\$</u>

Organic Chemical Industries (67-223)

<u>Purpose:</u> An industrial chemist or chemical engineer - assigned to the Organic Chemical Industries Company plant at Hawandia, Cairo, which specializes in the production of organic chemicals by the fermentation of sugar cane molasses - is to investigate, in collaboration with the staff of the company, various stages of the fermentation process with the object of maximizing the yields of the desired end products namely, butanol, acetone and ethanol.	1/2	5,000
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Implementation: The expert is expected to assume his duties before the end of 1968.

Exploitation of Heavy Black Beach Sand (67-234)

<u>Purpose:</u> To advise on the economic exploitation of the heavy black beach sand and on the separation of constituent minerals and their beneficiation; to make recommendations on management, administrative and financial structure; and to examine the international and home markets with a view to selling the constituent minerals.	3/4½	15,000
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Implementation: Candidatures for the posts of marketing economist and mineral beneficiation have been submitted to, and approved by, the Government, but one candidate is no longer available.

Establishment of a Central Textile Research and Development Institute (68-274)

<u>Purpose:</u> A textile chemist and an expert in textile research are to investigate the need for the establishment of a Central Textile Research and Development Institute.	2/3½	7,300
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Implementation: Project completed. On the recommendation of the team of experts, the Government submitted a request for SF assistance.

Design and Manufacture of High-voltage Porcelain Insulators (68-289)

<u>Purpose:</u> To advise on the design and manufacture of high-voltage porcelain insulators, and on the design and operation of high-voltage transmission lines.	2/3	9,000
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Implementation: A list of candidates has been submitted to the Government.

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

United Arab Republic (cont'd)

Experts	Follow-up	Cost
1/1	1/2	5,000

Production of Raw and Natural Silk (68-291)

Purpose: A combined FAO-UNIDO team is to assist in the production of raw and natural silk. FAO is providing an expert in the production of raw materials (silkworm eggs and raising of silk worms) and UNIDO an expert in natural silk spinning.

1/1 5,000

Implementation: The UNIDO expert candidature has been submitted to the Government. A candidature for the FAO expert post is still awaited.

Upper Volta

Exploratory Mission for Millet Milling (68-319)

Purpose: An expert in technical and economic management of different grain mills, especially in the milling of the staple grain (millet and sorghum) of the region of Upper Volta, is to examine the milling industry and to set up a programme of technical assistance for the further efficient development of the industrialization of millet milling.

1/1 5,500

Implementation: Pending concurrence by UNDP, under recruitment.

Establishment of a Pilot Industrial Estate (68-230)

Purpose: An industrial estates expert is to conduct a techno-economic study on the establishment of a pilot industrial estate in Ouagadougou and Bobo-Diou'asso.

1/2 5,000

Implementation: A candidature has been submitted to the Government.

Development of the Vegetable Oil Processing Industry (68-323)

Purpose: To study and outline a consistent programme of development for the vegetable oil industry, including the production of protein-enriched animal feedstuff from oil cakes, the by-products of vegetable oil industry. Aside from the existing peanut and cotton seeds, other potential vegetable oil bearing materials should be taken into consideration, such as soya beans, maize grains, sesame seeds and sunflower seeds.

1/3 6,200

Implementation: Under approval by UNDP, the job description has been sent to Technical Assistance Recruitment Service for circulation.

Development of the Fish Processing Industry (68-321)

Purpose: To assist the Ministry of Planning and Public Works of the Government of Upper Volta in establishing a fish processing industry for catching, processing and marketing fish on an integrated basis.

1/2 5,000

Implementation: The job description has been sent to Technical Assistance Recruitment Service for circulation.

SPECIAL INDUSTRIAL SERVICES

AFRICA (cont'd)

Zambia

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>m/m</u>	<u>m/m</u>	<u>US\$</u>

Establishment of Industries in Rural Areas (67-156)

Purpose: To survey and identify possibilities for the establishment of industries in Zambia, especially in rural and other underdeveloped areas, and to prepare preliminary feasibility studies and make recommendations on the implementation of such industries.

1/6

14,000

Implementation: The expert is in the field.

Survey of Metalworking and Engineering Industries (67-164)

Purpose: To undertake a survey and a study of the metalworking and engineering industry in Zambia, and to consider its probable future growth. The experts are also to be requested to give their studied opinions as to which of the manufacturing operations are the more viable, and which could increase their efficiency by mergers or re-organization.

15,000

Implementation: One expert is in the field. A list of candidates for the other post has been submitted to the Government for approval and the second expert is expected to be appointed in September 1968.

FEDERAL INDUSTRIAL SERVICE

Latin America

Argentina

Food Processing Development (67-209)

Purpose: A food development programming expert is to advise INTI on a long-range food processing development programme and to elaborate feasibility studies in conjunction with INTI for particular projects in the food processing industry.

Implementation: Under recruitment.

Operation of Textile Laboratory and Establishment of Quality Control (67-207)

Purpose: An expert is to advise the Textile Research Center at INTI on the equipment, facilities and general operation of the textile laboratory and on the establishment of a quality control service with the aim of improving the quality standards of textile goods.

1/9

4,000

Implementation: Mission completed.

Small Industry Extension Methods (68-252)

Purpose: Three experts, one on small industry extension methods (1 year) and two industrial design experts specializing in textiles and furniture and metal products for domestic use (each for 6 months), are to assist CIME (Centro de Investigacion de Metodos y Tecnicas para Pequenas y Medianas Empresas) of INTI. They are to study design requirements after considering market characteristics, functional quality and engineering aspects and costs, and are to prepare drawings and designs and assist in the manufacturing of prototypes.

3/24

52,000

Implementation: Under recruitment.

Machine Tool Design and Production (68-258)

Purpose: A senior machine tool design adviser (2 months) and a machine tool design and production expert (6 months) are to assist the National Industrial Technology Institut- (INTI) to advise on new designs for machine tools and new production methods and to evaluate possibilities of local manufacture, including numerically controlled and mass production equipment.

2/8

20,000

Implementation: The experts are to take up their posts about 15 October 1968.

Establishment of Aluminium Industry (68-286)

Purpose: An expert is to collect the existing technical and economic data regarding the establishment of a national aluminium industry.

1/5

12,000

Implementation: The expert is expected to arrive in the field in January 1969.

SPECIAL INDUSTRIAL SERVICES

THE AMERICAS (cont'd)

Bolivia

<u>Expert</u>	<u>Fellows</u>	<u>Cost</u>
<u>By</u>	<u>By</u>	<u>US</u>

Building Materials Pre-investment Survey (67-127)

Purpose: A building materials (refractory bricks, cement, asbestos panels, reinforcing steel) expert is to assist the Government in the preparation of industrial projects, and in the formulation and submission of requests for carrying out detailed feasibility studies or pre-investment surveys.

1/6		15,000
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Implementation: Mission completed.

Production of Tiles and Ceramics (68-296)

Purpose: To assist in the production of tiles and ceramics, making recommendations on the quality of raw materials suitable for the production of heavy ceramics including sanitary ware, and to make preliminary market surveys for ceramic products.

1/6		12,000
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Implementation: Under recruitment.

Evaluating Tenders for the Installation of a Petrochemical Industrial Complex (68-269)

Purpose: An expert is to work in close collaboration with Yacimientos Petroliferos Fiscales Bolivianos in evaluating tenders for the installation of a petrochemical industrial complex for the production and marketing of fertilizers and explosives from ammonium nitrate.

1/2 weeks		2,500
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Implementation: The project was implemented in March 1968.

Plate Glass Manufacture (68-299)

Purpose: An expert is to assess the geological reports and results of the mining investigation of quartz sand, limestone, sodium and calcium suitable for plate glass manufacture, and to assist in the establishment of a laboratory research service for the study of raw materials used in glass production.

1/6		12,000
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Implementation: Under recruitment.

Brazil

Technical and Managerial Assistance to Small-scale Industries (67-226)

Purpose: To advise the Department of Industry and Commerce of the State of Bahia on the establishment of a Central Service which will provide technical and managerial assistance to small-scale and medium-sized industries that are to be established in the Aratu industrial zone.

1/1		3,000
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Implementation: Mission completed.

SPECIAL INDUSTRIAL SERVICE

THE AMERICAS (cont'd)

Brazil (cont'd)

Tetraethyl Lead Production (67-228)

Purpose: Two chemical engineers are to assist PETROBRAS in a tetraethyl lead project.

Implementation: Recruitment has been discontinued at the request of the Government; awaiting confirmation of cancellation from the Government.

UNESCO	UNEP	\$

		1,000
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Establishment of Industrial Research Centre (67-37)

Purpose: A UNIDO staff member is to make a one-month mission to Salvador (Bahia) in connexion with the industrial research centre to be established in the State of Bahia.

Implementation: Mission completed.

1/1		3,000
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Corporate Financial Planning (67-238)

Purpose: A corporate financial planner is to advise PETROBRAS (Brazilian Petroleum Corporation) in the planning of its activities.

Implementation: Under recruitment.

1/12		24,000
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Possibilities of Assistance to the Food Industry (67-247)

Purpose: In a short-term mission, a UNIDO senior staff member, accompanied by an outside consultant, is to identify possibilities of assistance to the food industry.

Implementation: Mission completed.

2/20		2,800
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Establishment and Management of Technical Service Unit (68-277)

Purpose: An industrial management adviser and an industrial development planner are to assist the Commission for Industrial Development in the establishment and management of a Technical Services Unit of the Commission.

Implementation: Candidatures have been submitted to the Government and experts are expected to be in the field before the end of 1968.

1/24		56,000
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GENERAL INDUSTRIAL SERVICES

BRAZIL

Recruitment (Contract)

Experts n/m	Follow ups n/m	Cost US\$
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Rehabilitation of Textile Mill (68-263)

Purpose: A textile engineer and a textile management consultant are to advise on problems related to the rehabilitation of the Petropolis textile mill.

2/2

6,000

Implementation: Mission completed.

Establishment of Industrial Standards (68-264)

Purpose: Two industrial standards experts, one in tool design and the other in electrical standards, are to assist the Government for a period of four months each.

2/8

21,000

Implementation: The candidates have been approved by the Government and are expected to be in the field by mid-November 1968.

Agricultural Implements (68-265)

Purpose: A mechanical engineer is to assist the Commission for Industrial Development in the compilation of a register and evaluation of agricultural implements for tractors.

1/6

14,000

Implementation: The candidate was submitted to the Government and is expected to be in the field before 31 December 1968.

Selecting Sites for Industrial Parks (68-312)

Purpose: An expert in industrial estates physical planning is to assist in selecting sites for industrial parks in the Northeast of the country.

1/6

11,000

Implementation: Under recruitment.

Colombia

Assistance in Production Planning (68-278)

Purpose: An expert is to assist Forjas de Colombia in Bucaramanga in the capacity of assistant to the Manager in Production Planning for a period of six months.

1/6

13,720

Implementation: The expert is in the field.

SPECIAL INDUSTRIAL SERVICES

THE AMERICAS (cont'd)

Colombia (cont'd)

Maintenance and Manufacture of Forging Dies (68-275)

Purpose: An expert in forging dies is to assist the Technical Director of Forjas de Colombia under the general supervision of the Mechanical Engineer, in forge, design, maintenance and manufacture of forging dies. He is to recommend modifications in the dies presently used in order to improve the production.

Experts	Follow-up	Cost
		\$

1		18,000
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Implementation: A candidate was proposed by Forjas de Colombia and is under recruitment by the Technical Assistance Recruitment Service. He is expected in the field about November 1968.

Dominican Republic

Evaluation of Machinery and Installations of a Bagasse Building-boards Factory (67-146)

Purpose: As a follow-up to an exploratory mission undertaken by a UNIDO staff member for the evaluation of machinery and installations at the Dominco-Suizo S.A., a bagasse building-boards factory, a specialized consulting engineering firm is to prepare a complete inventory with cost estimates of required machinery and equipment, and a market study of products that can be manufactured economically in view of availability and cost of raw materials.

Implementation: The consulting firm has been selected and the contract is being prepared.

Consulting firm	49,200
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Ecuador

Processing of Naranja Fruit (67-98)

Purpose: A UNIDO staff member is to assist a government financing institution in solving certain problems in connexion with the processing of naranja fruit.

1/2 weeks	750
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Implementation: Mission completed.

Planning of Industrial Estates (67-101)

Purpose: To implement the physical planning of industrial estates in Quito, Guayaquil and Cuenca.

1/6	14,000
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Implementation: The expert is in the field.

Organic Materials and Compost Fermentation for Fertilizers (67-236)

Purpose: To assist the Government of Ecuador in the organic materials and compost fermentation industry for fertilizers.

1/12	24,000
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Implementation: The candidate has been approved by the Government and is expected to take up his post in November 1968.

ANNEX IV (cont'd)

ECUADOR (cont'd)

Equador (cont'd)

Expert	Fellow	Total
m/m	m/m	\$

Assistant to the Industrial Centre for Development of Textile Production (68-304)

Purpose: A team of four experts, a textile production engineer, a textile technologist (fabrics finishing), a specialist in dyeing of natural and synthetic fabrics and a marketing expert in textile production, is to be sent to assist the Industrial Centre for Development in Ecuador.

4/17

24,800

Implementation: Under recruitment.

El Salvador

Development of Small-scale Industries (68-271)

Purpose: An expert in small-scale industries is to advise the Government in a comprehensive programme of development.

1/8

18,000

Implementation: The expert is in the field.

Guyana

Food Industries Productivity and Quality Improvement (68-355)

Purpose: An engineer or economist, specialized in food industries productivity (six weeks), and a meat technologist (six months) are to be assigned to the Guyana Marketing Corporation to assist in problems connected with relocation of plant facilities and improvement of production and quality.

2/7½

14,000

Implementation: Pending UNDP's concurrence, advance recruitment is in progress. New drafts of the project data sheet and job descriptions were submitted to UNDP.

Haiti

Industrial Programming and Project Planning (68-284)

Purpose: A team of three experts in industrial programming and project planning (a general economist, an industrial engineer and a project formulator and evaluator) are to assist the Government in the planning of the industrialization.

3/4½

12,000

Implementation: Under recruitment.

GENERAL AND TOTAL SERVICES

JAMAICA (cont'd)

1.1

Design and Production of Handicrafts (68-132)

Purpose: An OPEX management expert is to be assigned to the Ministry of Trade and Industries, an organization entrusted by the Government with marketing handicrafts, to co-ordinate design and production of handicrafts with sales through the organization's own chain of retail stores.

Implementation: The expert is in the field.

Furniture Production Methods and Techniques (68-133)

Purpose: A furniture production engineer is to advise on modern production methods and techniques, factory layout and quality control.

Implementation: The expert is in the field.

Utilization of Local Clays and Glazing Techniques (68-272)

Purpose: A ceramics specialist (OPEX) is to work as an adviser to the Jamaica Ceramics Ltd. in the utilization of local clays and glazing techniques.

Implementation: The expert is in the field.

Maintenance Workshops, Problems of Management and Training (68-311)

Purpose: An industrial engineer is to be assigned for six months to the maintenance workshops of the Ministry of Public Works to solve problems of management and training.

Implementation: The candidate has been submitted to the Government and is expected in the field before the end of 1968.

Mexico

Evaluation of Manufacturing Projects (67-132)

Purpose: To assist in the evaluation of manufacturing projects with special regard to their impact on other sectors of the economy. The expert is to be attached to the Nacional Financiera S.A., an autonomous government institution created for the purpose of promoting industrial development through financial and technical assistance.

Implementation: Mission completed. The expert is continuing his assignment under UNDP/TA (see project 190-65).

1/1 11,000

1/1 11,000

1/1 15,000

1/6 11,000

1/1 21,000

SPECIAL INDUSTRIAL SERVICES

CENTRAL AMERICA (cont'd)

Nicaragua

Expert	Fellows	Cost
m/m	m/m	US\$

Evaluation of Petrochemical Project Based on Indigenous Surplus Hydrochloric Acid (67-109)

Purpose: Two chemical specialists are to assist the Government in the evaluation of a petrochemical project based on indigenous surplus hydrochloric acid. Besides examining the viability of establishing such a plant, they are to study the Central American market for synthetic resins, and to make recommendations with regard to the advisability of manufacturing additional types of synthetic resins.

2/6

12,400

Implementation: The candidates have been approved by the Government, and are expected to be in the field by February 1969.

Peru

Feasibility of Establishing a Bagasse Pulp and Paper Mill (67-161)

Purpose: A specialized consulting engineering firm is to carry out a complete technical and economic study to determine the feasibility of establishing a bagasse pulp and paper mill in or near Chiclayo, Peru.

Implementation: A consulting firm has been selected for Government approval.

Consultant firm

72,000

Analysis of Industrial Production Costs of the Textile Industry (67-188)

Purpose: To assist the National Institute for Industrial Promotion (INPI) in a comprehensive analysis of industrial production costs in all branches of the country's textile industry.

Implementation: A consultant firm has been submitted for Government approval.

Consultant firm

19,500

Trinidad and Tobago

Food Processing Industry (67-90)

Purpose: A senior UNIDO staff member is to resolve problems related to the food processing industry of the island.

1/1

950

Implementation: Mission completed.

Rehabilitation of a Paper Mill (68-303)

Purpose: To advise on the rehabilitation of a closed-down paper mill.

1/1

3,000

Implementation: Mission completed.

SPECIAL INDUSTRIAL SERVICES

THE AMERICAS (cont'd)

Venezuela

Survey for the Petrochemical Institute (68-295)

Purpose: A team of three experts, a chemical engineer, an industrial economist and an industrial engineer, are to assist in making a survey for the Petrochemical Institute.

Implementation: Under recruitment.

SPECIAL INDUSTRIAL SERVICES

ASIA/FAR EAST

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>n/m</u>	<u>r/m</u>	<u>US\$</u>

Afghanistan

Feasibility of Modernizing a Match Factory (66-175)

Purpose: An expert is to investigate the feasibility of modernizing a match factory and to provide the Government with detailed recommendations regarding machinery and equipment. If it is not found feasible to modernize the factory, he is to recommend possible alternatives for developing the match industry.

1/3

6,000

Implementation: The Government has requested that the recruitment be suspended.

Ceylon

Improving the Efficiency and Quality of a Plant Producing Caustic Soda and Chlorine (67-178)

Purpose: A chemical engineer is to advise the Parathan Chemicals Corporation on improving the efficiency and quality of the plant producing caustic soda and chlorine.

1/4

8,000

Implementation: The expert is in the field.

Survey of Textile Industry (67-216)

Purpose: A team of two textile engineers is to carry out a survey of the textile industry.

2/8

20,000

Implementation: The experts are in the field.

Vegetable Oil Industry (67-222, 67-243)

Purpose: Two vegetable oil specialists are to review the present vegetable oil industry and study possibilities of further development.

2/24

48,000

Implementation: The candidates have been accepted by the Government.

Extraction of TiO_2 from Heavy Beach Sand (68-285)

Purpose: A titanium expert is to advise on the extraction of TiO_2 from heavy beach sand.

1/3

9,000

Implementation: The candidate has been accepted by Government and is expected to take up his post in November 1968.

SPECIAL INDUSTRIAL SERVICE

ASIA/EAST (cont'd)

China, Republic of

Setting up Consulting Services for Medium and Large Industries on Low-cost Technological Improvements (67-104)

Purpose: An expert in technological improvements, assigned to the China Productivity and Trade Centre (CPTC) is to assist in setting up consulting services for medium and large industries on low-cost technological improvements.

Implementation: Mission completed.

1/1 1,000

Application of New Productivity and Management Ideas (67-111)

Purpose: A consulting firm team consisting of an industrial economist, an industrial engineer, a financial analyst and an operations research specialist, in co-operation with the China Productivity and Trade Centre, is to assist major industrial corporations as well as light industries in the application of new productivity and management ideas.

Implementation: The consulting firm team is expected to begin its task before the end of 1968.

5/18 40,000

Survey of the Electronic Industry (67-115)

Purpose: To assist the China Productivity and Trade Centre (CPTC) in conducting a survey of the electronic industry with a view to ascertaining its potential for export.

Implementation: Mission completed.

1/3 6,500

Survey of Agricultural Implements (67-116)

Purpose: A marketing adviser for agricultural implements is to assist the China Productivity and Trade Centre (CPTC) in surveying this industry with a view to ascertaining its potential for export.

Implementation: Mission completed.

1/3 6,500

Ascertaining the Potential for Expansion of Exports (67-116)

Purpose: The service of three experts in the fields of electrical appliances, agricultural implements and packaging, and related materials industries are to be provided to assist the CPTC in conducting surveys of these industries with a view to ascertaining the potential for expansion of exports and to improving productivity. They are also to make the necessary recommendations for remedying present deficiencies.

Implementation: The experts in electrical appliances and agricultural implements completed their mission; the expert in packaging is expected to arrive in the field in October 1968.

3/9 19,500

SPECIAL INDUSTRIAL SERVICES

ASIA/FAR EAST (cont'd)

China, Republic of (cont'd)

Experts m/m	Fellows m/m	Cost US\$
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Improvement of Production Techniques in Plastics Manufacture (67-118)

Purpose: To assist the Government's Union Industrial Research Institute (UIRI) in the improvement of production techniques and application of new technology in the field of plastics manufacture.

1/4

8,000

Implementation: Mission completed.

Manufacture of Melamine from Urea or Calcium Cyanamide (67-119)

Purpose: An expert in process economics of carbonic compounds and thermo-setting plastics is to assist the Taiwan Fertilizer Corporation in selecting the right process for the manufacture of melamine from either urea or calcium cyanamide.

1/2

5,000

Implementation: The expert is to assume his duties in October 1968.

Development of Man-made Fibre Industry (67-120)

Purpose: A synthetic fibres expert, with experience in synthetic polymers, is to assist the Union of Industrial Research Institute (UIRI) in drawing guidelines for the future development of the man-made fibre industry, with special emphasis on maintaining standards of high quality.

1/6

15,000

Implementation: The expert is expected to arrive in the field in November 1968.

Manufacture of Clinker using Local Magnesite and Dolomite (67-182)

Purpose: An expert in refractory materials, assigned to the Union of Industrial Research Institute (UIRI), is to assist in its research programme on the manufacture of clinker using local magnesite and dolomite resources, on the stabilization of the clinker, on the utilization of the clinker in refractory-lined furnaces and on other subjects related to the development of refractories for the country's iron and steel industries.

1/6

15,000

Implementation: The expert is in the field.

Review of the Programme of Research of the Union of Industrial Research Institute (68-392)

Purpose: To review the present programme of research of the Union of Industrial Research Institute, particularly its main orientation towards assisting the development of chemical processes. The expert is also to advise on measures of co-ordinating research in accordance with the Government's over-all objectives in the development of science and technology.

1/12

23,100

Implementation: Pending UNDP concurrence.

SPECIAL INDUSTRIAL SERVICES

ASIA/FAR EAST (cont'd)

	<u>Expert</u>	<u>Start</u>	<u>\$</u>
<u>India</u>			
<u>Footwear Machinery and Equipment (66-17)</u>			
<u>Purpose:</u> A footwear machinery expert is to examine a list of machinery and equipment for a footwear production plant and to draw up a list of additional equipment required.	1/1		1,000
<u>Implementation:</u> Mission completed.			
<u>Survey and Utilization of the Titanium Products Industry (67-242)</u>			
<u>Purpose:</u> A geologist, a chemical engineer and a market analyst are to survey, and advise on the utilization of, the titanium products industry.	3/3		10,000
<u>Implementation:</u> The geologist and the chemical engineer completed their missions; the market analyst candidate has been accepted by the Government, and is expected to assume his duties in October 1968.			
<u>Development of Chrome Tanning Processes for Village Tanneries (68-288)</u>			
<u>Purpose:</u> A research chemist, specialized in the tanning of leather, is to prepare a plan of action and a programme of research for the development of suitable chrome tanning processes for village tanneries.	1/3		9,000
<u>Implementation:</u> The expert is expected to take up his post in November 1968.			
<u>Training Programme for Marketing and Export Promotion of Industrial Goods (68-366)</u>			
<u>Purpose:</u> A management expert is to assist the Indian Institute of Foreign Trade in its training and export promotion activities. He is to plan and organize short-term advisory and problem-solving meetings on modern marketing and on export promotion methods and techniques with top industrial executives from selected industries. He is also to advise the Indian Institute of Foreign Trade on possible improvements and expansion of their current and future training programmes.	1/8	20/80	65,000
<u>Implementation:</u> UNDP approval awaited; advance recruitment initiated.			
<u>Indonesia</u>			
<u>Improving the Management, Production and Control of Spinning Mills (67-174)</u>			
<u>Purpose:</u> To advise on ways of improving the management, production planning and control of spinning mills.	1/12		24,000
<u>Implementation:</u> The expert is expected to assume his duties in October 1968.			

REGIONAL INDUSTRIAL SERVICES

ASIA AND PACIFIC (cont'd)

Indonesia (cont'd)

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>1/6</u>	<u>6/6</u>	<u>1</u>

Rehabilitation of Mechanical Workshops (67-176)

Purpose: A team of three experts is to assist the Government in the economic and industrial rehabilitation of the three mechanical workshops in Surabaya, Bandung and Djakarta, particularly in solving the problems concerning technical aspects, production planning and control systems, and product costing and budget accounting procedures.

3/36

7,000

Implementation: The approved technical adviser candidate (1/12 man-months) will report for duty at the beginning of November. The production planning and control adviser (1/12 man-months) reported for duty on 22 September 1968. The government approved candidate for product costing adviser (1/12 man-months) will report for duty at the beginning of November 1968.

Improving the Organization and Management of State-owned Paper Mills (67-177)

Purpose: A team of two experts, a management adviser and a cost accountant is to assist in improving the organization and management of state-owned paper mills, and is to introduce product costing and budget systems.

2/24

48,000

Implementation: The cost accountant is in the field and the management adviser is expected to arrive in October 1968.

Use and Maintenance of Steel Plant Equipment (67-214)

Purpose: An adviser with experience in the use and maintenance of steel plant equipment and machinery is to inspect and study steel plant equipment and machinery presently lying in storage in order to assess their deterioration and damage. The expert is also to advise on what possible uses the machinery and plant equipment could be put to an industry.

1/1

3,500

Implementation: Mission completed.

Installation and Initial Operation of Cold Steel Wire Drawing Mill (68-322)

Purpose: A steel wire mill expert is to install and start the cold steel wire drawing mill at Tjilegon.

1/6

11,000

Implementation: The expert is to arrive in the field in November 1968.

Problems of Superphosphate Plant Operation (68-379)

Purpose: A team of three experts is to study the problem of the Tjilatjap Superphosphate Plant and to advise on possible up-grading of sulphur deposits in the Manaradja.

3/3

5,800

Implementation: The experts are expected to assume their duties in October 1968.

Industrial Projects

Industrial Water Programme (68-354)

Purpose: A UNIDO staff member is assigned with the Government of Iran to study the possibilities related to industrial water programme and to study the possibilities for residual re-operation.

Implementation: Mission completed.

Feasibilities of Manufacturing Phosphorus-based Pesticides (68-355)

Purpose: An expert is to study the feasibility of manufacturing phosphorus-based pesticides and also the possibilities of diversifying chlorinated products.

Implementation: The expert is in the field.

Identification of Sources of Finance for Specific Industrial Projects (68-356)

Purpose: The first phase of this project is to promote the financing of specific industrial enterprises, and is to consist of: exploratory and preparatory work for detecting and selecting enterprises requiring external financing; and the preparation of documentation for promotional activities envisaged for the second phase of the project.

Implementation: Mission completed.

Decision-making System for Industrial Projects (68-357)

Purpose: Two UNIDO staff members are to make a survey in Iran with a view to recommending the decision-making system for industrial projects.

Implementation: Mission completed.

Economic Evaluation of an Aluminium Reduction Plant (68-410)

Purpose: A UNIDO staff member is to prepare for the mission of a group of four experts who are then to make an economic evaluation of an aluminium reduction plant proposed for construction and completion in 1970/1971. The four-man team is also to undertake a review and make recommendations on procedures and techniques of project preparation using an aluminium plant as a prototype.

Implementation: The preparatory mission by a UNIDO staff member has been completed; the four-man team mission is awaiting UNDP concurrence.

7/1

800

1/70

1,800

5/4

10,500

GENERAL INFORMATION

ANNEX IV (cont'd)

	<u>Experts</u> <u>m/m</u>	<u>Fellows</u> <u>m/m</u>	<u>Cost</u> <u>US\$</u>
<u>India</u>			
<u>Development of Small-scale Industries (68-276)</u>			
<u>Purpose:</u> An expert is to continue the work of the expert assigned since October 1961 to the Ministry of Economic Affairs in advising on matters related to the creation and development of small-scale industries.	1/6		11,000
<u>Implementation:</u> The expert is in the field.			
<u>Match Factory Production Methods (68-336)</u>			
<u>Purpose:</u> A match factory expert is to advise the management on the measures to be taken to improve the production methods of the existing factory.	1/3		6,200
<u>Implementation:</u> Under recruitment.			
<u>Malaysia</u>			
<u>Textile Marketing Policy (67-113)</u>			
<u>Purpose:</u> A textile marketing expert has been assigned since November 1967 to the Malaysian Industrial Development Finance, Ltd (MIDFL) to make a comprehensive study of the local textile market in order to set up guidelines for future policy.	1/8		19,000
<u>Implementation:</u> Mission completed.			
<u>Leather Tanning Quality Improvement (67-244)</u>			
<u>Purpose:</u> In co-operation with the Malaysian Industrial Development Finance, Ltd (MIDFL), the expert is to advise the Malaysian Leather Company, Ltd on the technical aspects of leather tanning with a view to improving quality in order to bring it up to international standards; to advise on the types of machines to be used and make recommendations concerning the plant lay-out; and to make general recommendations on the management of the plant.	1/6		14,000
<u>Implementation:</u> The expert is expected to assume his duties in November 1968.			
<u>Directing the Industrial Service Centre (68-300)</u>			
<u>Purpose:</u> Expert in industrial financing (OPAS) to prepare financial analysis and evaluate financial statements and other economic data, to recommend and formulate industrial consortial arrangements and joint ventures.	1/6		7,500
<u>Implementation:</u> The expert is to arrive in the field in December 1968.			

REGIONAL INDUSTRIAL SERVICES

ALTA/FAR EAST (cont'd)

Malaysia (cont'd)

Project Identification, Formulation and Development (68-300)

Purpose: To organize and manage a division responsible for project identification, formulation and development.

Implementation: Under recruitment.

1/6 12,000

Industrial Marketing and Feasibility Studies (68-300)

Purpose: To organize, set up and run the Applied Research Division, to perform industrial marketing and feasibility studies, if necessary in co-ordination with consulting engineers or technical specialists, in order to find out the needs of certain branches of manufactures.

Implementation: Under recruitment.

1/6 12,000

Promotion of Industrial Investment (68-300)

Purpose: An expert in industrial promotion, assigned to the Federal Industrial Development Authority (FIDA) under the OPA's scheme, is to organize and run a division for the promotion of industrial investment among local as well as international entrepreneurs and investors.

Implementation: The expert is expected to arrive in the field in September 1968.

1/6 12,000

Pakistan

Evaluating Iron and Steel Project Proposals (68-261)

Purpose: An expert is to evaluate the technical, financial and techno-economic aspects of various iron and steel project proposals, and is to assist in the formulation of final projects.

Implementation: The expert is in the field.

1/6 16,000

Philippines

Evaluation of Specific Investment Proposals related to Industrial Estate Project (67-253)

Purpose: To assist in the evaluation of specific industrial investment proposals related to Limay Industrial Estate Project, within the framework of the regional development programme concurrently being studied for implementation in the area of Limay.

Implementation: Mission completed by one expert; the second expert is under recruitment.

2/4 12,000

PHILIPPINE INVESTMENT BOARD

APPENDIX (cont'd)

Experts Fellow Cost
1/12 1/12 25,000

Philippines (cont'd)

Evaluation of Engineering Project (67-254)

Purpose: A mechanical engineer is to assist the Board of Investment in implementing the Investment Incentives Act, and is to assist in the evaluation of projects that will be submitted in 1968 to the board for registration.

1/12 25,000

Implementation: Candidatures have been submitted to the Government and are under recruitment.

Establishing a Working System for Market Studies (67-254)

Purpose: A market analyst is to assist the Board of Investment in establishing a proper working system for market studies within the technical evaluation staffs to be attached in the Board.

1/3 7,000

Implementation: Under recruitment.

Preparation of Investment Priorities Plans (67-254)

Purpose: An industrial economist (team leader) is to assist in carrying out studies necessary for the preparation of investments priorities plans for 1968 and 1969, and is to assist the Board of Investment in implementing the Investment Incentives Act.

1/12 25,000

Implementation: The expert is expected to assume his duties in November 1968.

Implementing the Investment Incentives Act (67-254)

Purpose: A chemical engineer is to assist the Board of Investment in the collection and interpretation of relevant data and their publication for the benefit of interested parties and is to assist the Board in implementing the Investment Incentives Act.

1/12 25,000

Implementation: The expert is expected to take up his post in November 1968.

FEDERAL INDUSTRIAL SERVICE

ATAKAB LAAT (cont'd)

Singapore

<u>Expert</u>	<u>Period</u>	<u>Cost</u>
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Legislation of Fire Safety Standards (67-119)

Purpose: A fire safety expert is to assist the Singapore Government in reviewing the existing fire safety legislation governing the construction of factory buildings, the transport and storage of petroleum products, chemicals and inflammable materials, and in establishing technical standards for the enforcement of fire safety.

1/6		1,000
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Implementation: The expert is in the field.

Control on Industrial Effluents and Trade Waste Discharges (67-130)

Purpose: To advise the Government on the problem of industrial effluents and trade waste disposal, including air pollution. The expert is to draft standards, code and enforcement of control on industrial effluents and trade waste discharges.

1/6		15,000
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Implementation: Mission completed.

Establishment of an Export Promotion Centre (67-239)

Purpose: A senior industrial economist, attached to the Economic Development Board, is to advise the Government on industrialization within the competence of the Economic Development Board, in particular on the establishment of an Export Promotion Centre and training of required staff.

1/7		15,000
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Implementation: Mission completed.

Manufacture of Padlocks and Other Building Hardware (68-266)

Purpose: A metalworking specialist is to continue to advise the Economic Development Board on the manufacture of padlocks and other building hardware.

1/9		20,000
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Implementation: The expert is in the field.

Improvement of Metal Products Design (68-333)

Purpose: A metal product designer is to work with the light manufacturing firms on the improvement of products design and on the introduction of new designs.

1/5		11,000
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Implementation: Under recruitment.

SPECIAL INDUSTRIAL SERVICES

ASIA/EAST (cont'd)

Singapore (cont'd)

Expert: Fellows Cost
m/m m/m US\$

Improvement of Plastic Products Design (68-329)

Purpose: An expert in the design of plastic products is to assist the Light Industries Services Unit of the Economic Development Board in the improvement of their product design, in the introduction of new designs, in the preparation of prototypes of new designs and in the subsequent production. 1/6 11,000

Implementation: Under recruitment.

Improvement of Wooden Furniture Product Design (68-333)

Purpose: An industrial product designer, specialized in wooden furniture, is to assist the Light Industries Services Unit of the Economic Development Board in the improvement of their product design, in the introduction of new designs, in the preparation of prototypes of new designs and in the subsequent production. 1/6 11,000

Implementation: Under recruitment.

Modernization and Expansion of Woodworking Establishments (68-334)

Purpose: A woodworking expert, attached to the Light Industries Services Unit of the Economic Development Board, is to assist local woodworking establishments in their modernization and expansion programme. 1/6 11,000

Implementation: Under recruitment.

Modernization and Expansion of Printing Establishments (68-338)

Purpose: A printing expert, attached to the Light Industries Services Unit is to advise and assist the local printing establishments in their modernization and expansion programme. 1/6 11,000

Implementation: Under recruitment.

Modernization and Expansion of Fancy Leather Products Industries (68-339)

Purpose: An expert in fancy leather products, attached to the Light Industries Services Unit, is to advise and assist the local fancy leather products Industries in their modernization and expansion programme. 1/6 11,000

Implementation: Under recruitment.

SPECIAL INDUSTRIAL SERVICE

ASIA/FAR EAST (cont'd)

Thailand

Feasibility of Establishing an Industrial Estate (IT 28)

Purpose: Two experts, an industrial engineer and an industrial economist, are to study feasibility and cost estimates for the establishment of an industrial estate for small-scale industries in the Bangkok and Chonburi areas.

Implementation: The industrial engineer is in the field; the industrial economist is being provided by the Asian Institute of Planning and Development.

<u>Person</u>	<u>Allow.</u>	<u>\$</u>
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1		6,000
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Small-scale Industries and Handicrafts Marketing (SR 301)

Purpose: A marketing adviser is to appraise the whole problem of marketing (domestic and foreign) of products of small-scale industries and handicrafts in Thailand and is to assist the Government in the establishment of a Small-scale Industries and Handicrafts Marketing Organization.

Implementation: The candidate has been accepted by the Government and is expected to take up his post in December 1968.

1/6		11,000
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SPECIAL INDUSTRIAL SERVICES

EUROPE/MIDDLE EAST

Subpart 10

Instruments Design (67-50)

Purpose: A team of six highly specialized experts, an advisor scientific manager, a quality control expert, an engineer (pneumatic devices and systems), an instrument engineer, an electronic engineer and a physical chemist, is to assist the Research Institute for Instruments Design in Sofia.

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>n/m</u>	<u>n/m</u>	<u>US\$</u>

6/1		54,000
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Implementation: Because of the difficulty in securing a qualified candidate for the post of the pneumatic device expert, the Government agreed to cancel the post. All the other posts have been filled. As a result of this mission, a Special Fund request for the continuation of technical assistance was submitted informally to UNIDO. The project manager's term was divided in two periods of two months each with three months absence between the two periods, and he is now completing his second term. After the completion of his seminar, a formal request for a Special Fund project can be expected. The WIPKIK Institute, judged from the reports of the expert, is developing remarkably well; a Special Fund project, if carried out, would probably bring this institute within the range of similar institutes in industrialized countries.

Establishment of a Packing Media Research and Experimental Institute (68-268)

Purpose: An expert assigned to the Ministry of Trade is to assist in the establishment of a Packing Media Research and Experimental Institute.

1/1		2,500
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Implementation: The expert is expected to take up his post shortly.

Cyprus

Establishing an Asbestos Pipe Manufacturing Plant (66-48)

Purpose: To review with the Ministry of Commerce and Industry and with the Cyprus Development Corporation the studies and plans that have been made for establishing an Asbestos Pipe Manufacturing Plant in Cyprus, and to advise the Government of the findings.

Implementation: The post is still under recruitment. The delay in filling the post has been due to difficulties encountered in obtaining suitable candidates in this field. The expert post is now to be filled through a consulting firm.

	Consulting firm	6,000
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Iceland

Report on the Manufacture of Marine Salts (67-115)

Purpose: To finalize the report prepared by a UNIDO staff member on the mission undertaken in 1967 on the manufacture of marine salts.

1/1		2,050
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Implementation: The UNIDO staff member completed the mission with the assistance of a consultant who was a specialist in refrigeration (refrigeration design engineer).

SPECIAL INDUSTRIAL SERVICES

EUROPE/MIDDLE EAST (cont'd)

Iran

Industrial Planning and Development (64-75)

Purpose: A team of three experts is to advise on the organization for Industrial Planning and Development of the Ministry of Industry.

Implementation: The industrial economist post was cancelled because the regional industrial adviser performed the job. The food industry post will be cancelled and requested as a separate project. The UNIDO staff member, an expert in project implementation and follow-up, has completed his two-week mission.

Israel

Increased Production of Metalworking Industries (67-52)

Purpose: An expert is to be sent to Israel in order to complete investigations and prepare recommendations on the possibilities of increasing the production of metalworking industries for export, from the point of view of product development and market analysis. This is to be the final stage of the 1967 SIS mission to Israeli metalworking industries.

Implementation: Mission completed.

Jordan

Establishment and Initial Operation of a Steel Rolling Mill (66-12)

Purpose: An expert in metallurgical engineering is to advise on the establishment and initial operation of a steel rolling mill.

Implementation: Mission completed.

Malta

Manufacture of Industrial Components and Identification of Potential Assembly Industries (124-67)

Purpose: To assist in the manufacture of industrial components and in the identification of potential assembly industries.

Implementation: Mission completed; a two month return visit of the expert was requested by the Government. Status at 31 December 1968: Expert undertook his second assignment on 1 October 1968.

1/12 2,000

1/12 23,100

1/6 11,000

SPECIAL INDUSTRIAL SERVICES

EUROPE/MIDDLE EAST (cont'd)

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>m/m</u>	<u>m/m</u>	<u>US\$</u>

Romania

Introduction of Welding Techniques and Equipment (68-315)

Purpose: To evaluate, select, and assist in the introduction of welding techniques and equipment, with a view to increasing the productivity and improving the quality of production in Romanian factories.

2/6

15,100

Implementation: Under recruitment.

Promotion of Certain Projects under SIS Programme (68-317)

Purpose: Three UNIDO staff members are to undertake an exploratory visit to the country for the promotion of certain projects under the SIS Programme.

3/12 days

800

Implementation: Mission completed.

Spain

Development of the Textile Industry (68-396)

Purpose: An industrial economist (textile industry), assigned to the Dirección General de Industrias Textiles, is to assist in planning the development of the textile industry in Spain.

1/7

13,000

Implementation: The post has been referred to Technical Assistance Recruitment Service for advance recruitment and is awaiting approval from UNDP.

Syria

Possibilities of Further Assistance to the Fertilizer Industry (67-204)

Purpose: A UNIDO staff member is to provide immediate preliminary advice on the possibilities of further UNIDO assistance to the fertilizer industry.

1/1 week

481

Implementation: The project has been completed and action for further assistance has been initiated; three follow-up requests have been received.

Evaluation of Tenders for a Triple Super-phosphate Project (68-270)

Purpose: To assist in the technical evaluation of tenders for a triple super-phosphate project.

1/2

5,000

Implementation: Mission completed, and report submitted in October 1968.

Supervision of Erection and Initial Operation of a Steel Rolling Mill (68-306)

Purpose: To investigate the proposed lay out of a steel rolling mill and, in the second phase, to supervise the erection and running in of rolling line.

1/14

26,500

Implementation: The expert is to report for duty before the end of 1968.

SPECIAL INDUSTRIAL SERVICES

EUROPE/MIDDLE EAST (cont'd)

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>m/m</u>	<u>m/m</u>	<u>\$</u>

Syria (cont'd)

Nitrogen Fertilizer Project (68-309)

Purpose: An expert in ammonia plants and an expert for nitric acid and calcium ammonium nitrate plants are to assist the Hons Nitrogen Fertilizer Project.

2/18		4,100
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Implementation: Under recruitment.

Study of Fertilizer Requirements and Urea Production (68-325)

Purpose: An expert is to make a study of fertilizer requirements and to advise the Government on urea production.

1/6		11,000
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Implementation: The project is under consideration by the UNDP.

Turkey

Cement Granulating Plant (67-55)

Purpose: To advise and assist the Turkish cement factories operated by Turkiye Cimento Sanayii T.A.S. in their granulating plant project.

1/7		11,800
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Implementation: Mission completed.

Cement Production using Slags from Iron and Steel Factories (67-55)

Purpose: A slag granulator expert is to advise the Government on how to increase cement production by using slags wasted at present from iron and steel factories.

1/6		13,600
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Implementation: A three months assignment was completed. A second period of three months has been requested by the Government and is expected to commence in November 1968.

Survey of Iron and Steel Industry and Improvement of Operations (67-195)

Purpose: To assist the State Planning Organization in Ankara in conducting a survey of the Turkish iron and steel industry and to make recommendations for improving the scale and efficiency of steel plant operations.

1/6		15,000
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Implementation: The candidate has been selected by the Government and is under appointment.

Installation of a Barite Ore Grinding Mill (67-212)

Purpose: An expert, attached to the firm Marit Maden Ltd and to the responsible official of the Ministry of Industry, is to supervise the installation of a barite ore grinding mill and to assist in training local personnel in barite grinding operations.

1/1		4,500
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Implementation: The candidate has been selected by the Government and will be available early in 1969.

SPECIAL INDUSTRIAL SERVICES

EUROPE/MIDDLE EAST (cont'd)

Turkey (cont'd)

Experts n/m	Follow- up/a	Cost US\$
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Conducting Agglomeration and Briquetting Pilot Plant Trials (67-2-5)

Purpose: An expert is to conduct agglomeration and briquetting pilot plant trials on Turkish lignite with a view to economic utilization of lignite for engineering and domestic applications.

1/12

24,000

Implementation: The expert is in the field.

Establishment of Alumina and Aluminium Plant (68-313)

Purpose: A team of four short-term experts is to be provided to the Government of Turkey for the evaluation of the techno-economical report on the establishment of an alumina and aluminium plant. The four expert posts are: alumina production, aluminium production, fabrication of aluminium, semi-products, critical path method.

4/18

36,500

Implementation: The experts in alumina production and aluminium production are in the field. The other expert posts are still under recruitment.

Yugoslavia

Hydrotreatment of Lubricating Oils; Improvement of the Octane Number of Gasoline, and Production and Quality Control of Petrochemicals (68-345)

Purpose: The following experts are to be provided: an expert to advise on technical problems related to the hydrotreatment of lubricating oils; an expert to advise on the selection of the most suitable process for the improvement of the octane number of gasoline; an expert to advise on problems related to the application of catalysts for the production of petrochemicals; and an expert to advise on problems related to production and quality control of petrochemicals.

4/20

37,400

Implementation: Posts under recruitment.

Gulf States (Bahrain, Qatar, Dubai, Abu Dhabi)

Review of Industrial Development Policies (68-397)

Purpose: To carry out a preliminary review of industrial development policies, to make preliminary recommendations, and to recommend further UNIDO assistance for each country and for the region.

2/2 weeks

2,000

Implementation: The mission was completed by a UNIDO staff member and by the project manager of the Kuwait Institute for Economic and Social Planning.

Annex I

ANNEX

Libya

Building Materials Research and Production Evaluation (9001-68)

Purpose: A building materials research expert, attached to the Ministry of Industry, is to: study the general situation of the building materials in Libya; examine housing conditions and use local building material for housing construction; make process and product evaluation; supervise a building material research laboratory; and make technical and feasibility studies, including the study of the market for building material in the construction industry and the analysis of the various production costs.

Implementation: Candidatures have been submitted to the Government for approval.

Production of Petrochemicals (9001-68)

Purpose: To advise the Ministry of Industry in the establishment of local production of petrochemicals.

Implementation: The candidature has been submitted to the Government for approval.

Management of Vegetable Oil Operations (X80-460)

Purpose: An expert (OPEX) is to continue to head the Vegetable Oil Bureau of the Ministry of Agriculture.

Implementation: The expert is in the field.

1/17 23,100

1/17 23,100

1/17 23,100

1/17 23,100

FUNDS-IN-TRUST

THE AMERICAS

<u>Experts</u>	<u>Fellows</u>	<u>Cost</u>
<u>m/m</u>	<u>m/m</u>	<u>US\$</u>

Ecuador

Evaluation of Industrial Projects (51-60)

Purpose: An associate expert is to assist a senior expert in advising the Dirección General de Industrias on industrial projects and on their financial and economic evaluation.

1/10

11,200

Implementation: The expert is in the field.

Jamaica

Footwear Production and Quality (XBO-427)

Purpose: An expert in footwear industry is to assist under Funds-in-trust the local industry to increase productivity in the various factory operations.

1/11

16,300

Implementation: The expert is in the field.

EUROPE/MIDDLE EAST

Kuwait

Industrial Development (XBO-215)

Purpose: An industrial economist is to advise the Industries Department of the Ministry of Finance and Industry on industrial development policy and the utility of specific projects.

1/10

20,011

Implementation: The expert is in the field.

ANNEX V

LIST OF FIELD ACTIVITIES
BY REGIONS AND COUNTRIES

Region and country	Project number	Project title	UNIDO activity group	Pre-gramme	Experts m/m	Follow-up m/m	UNDP Gov't Total	UNIDO Gov't Total
AFRICA								
Algeria	ALG-5	Industrial and Marketing Surveys on Petroleum Derivatives and Natural Gas	4	SF	2/4		1,214,588	1,214,588
	ALG-18	Centre for Industrial and Technological Studies	1	SF	2/18		1,000,000	1,000,000
	ID-522	Project Evaluation in Connexion with the Economic Development Plan	10	REG	1/10		1,000,000	1,000,000
	57-85	Re-organization of Biscuit and Pastry Factories	6	SIS	1/6		1,000,000	1,000,000
	57-86	Management of Fruit and Vegetable Processing Plants	6	SIS	1/6		1,000,000	1,000,000
	67-88	Improved Operation of Glassware Industry	3	SIS	1/3		1,000,000	1,000,000
	67-89	Lack Factory Operations	1	SIS	1/1		1,000,000	1,000,000
	68-283	Study for a Milk Reconstitution Plant	6	SIS	1/6		1,000,000	1,000,000
Burundi	304-67	Adviser on Small-scale Industries	11	TA	1/11		1,000,000	1,000,000
Cameroon	ID-340	Feasibility Studies on Projects for the Development Plan	12	REG	1/9		1,000,000	1,000,000
	67-165	Industrial Financing and Evaluation of Projects	13	SIS	1/13		1,000,000	1,000,000
	67-232	Establishment of a Pilot Industrial Estate	11	SIS	1/12	1/3	1,000,000	1,000,000
Central African Republic	ID-999	Elaboration of Types of Small-scale Industry	11	REG	1/7		1,000,000	1,000,000
	68-351	Feasibility Study for Cassava Industrialization	6	SIS	1/6		1,000,000	1,000,000
Chad	68-349	Technical and Economical Analysis of Meat Complex	6	SIS	1/3		1,000,000	1,000,000
Congo, Brazzaville	ID-955	Development of Small-scale Industry	11	REG	1/12	1/7	1,000,000	1,000,000
	67-151	Modernization of Palm Oil Extraction Plants	6	SIS	1/4		1,000,000	1,000,000
	67-159	Development Programme for Metallurgical Industries	2	SIS	2/6		1,000,000	1,000,000

Region and Country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts 1/m	Fellows m/c	Cost US\$
AFRICA (cont'd)							
Guinea	149-61	Development of the Chemical Industry	6	TA	1/12		22,300
	67-186	Establishing a Laboratory for Vegetable and Essential Oils	6	SIS	1/3	1/6	10,600
	67-187	Techno-economic Feasibility Study of a Cotton Ginning Pilot Plant	6	SIS	1/2		5,000
	67-197	Production of Organic Fertilizers	5	SIS	1/1½		4,000
Ivory Coast	IVCO-13	Centre for Industrial Studies and Promotion	13	SF			479,100
							UNDP
							Gov't
							<u>318,000</u>
							797,100
Kenya	IX-536	Management of Industrial Estate, Training Programmes	11	REG	1/12		15,300
	67-122	Feasibility Study on Dry and Wet Maize Milling	6	SIS	1/4		10,000
	67-124	Feasibility Study of a Castor Oil Factory	6	SIS	1/1½		5,000
	67-123	Setting up a Workshop in the Industrial Estate of Mairabi	11	SIS	1/12		24,000
	67-126	Feasibility of Producing Caustic Soda	4	SIS	1/1		9,500
	67-157	Analysing Techno-Economic Problems of the Textile Industry	6	SIS	2/6		15,000
Liberia	ID-971	Industrial Planning and Project Evaluation	12	REG	1/6		15,000
	66-26	Steel Project Study	2	SIS	Consulting firm		110,000
	67-64	Advisory Services for Steel Project	2	SIS	1/4		30,000
	67-79	Steel Fellowship	10	SIS		1/8	3,500
	67-133	Analysis of Data and Execution of Steel Project	2	SIS	1/12		28,000
Libya	282-63	Planning and Organization of Chemical Research Programme	8	TA	1/12		22,000
	X80-460	Organizing Specification and Standardization Section	8	TA	1/12		23,100
	68-310	Fodder Yeast Production from Petroleum Refinery By-products	4	SIS	2/1		1,000

Region and Project country	Project number	Project title	UNIDO activity	Pro-grams	Experts	Fellows	Cost US\$
					n/a	n/a	
AFRICA (cont'd)							
Libya	9001-68	Building Materials Research and Products Evaluation	3	F-in-I	1/12		23,100
(cont'd)	9001-68	Production of Petrochemicals	4	F-in-I	1/12		23,100
	280-460	Management of Vegetable Oil Operations	6	F-in-I	1/12		23,100
Madagascar	1-54	Advice on Problems of Industrial Development	12	TA	1/16½		28,000
	5000-68	Evaluation of Industrial Projects	12	REG	1/6		11,400
	67-128	Rehabilitation of Brickworks Industry	3	SIS	1/3		7,000
	67-149	Development of Small-scale Industry and Establishing of Industrial Estates	11	SIS	1/1½		4,000
	67-154	Setting up of Vegetable Oil Plant	6	SIS	2/24	4/19	50,500
	67-192	Nitrogen Fertilizers Production and Export Possibilities	5	SIS	1/1½		4,500
Malawi	68-293	Manufacture of Pottery	3	SIS	1/3		5,200
Mali	6-66	Evaluation of Proposed Specific Industrial Projects	12	TA	1/13½		15,000
	67-167	Survey of State-financed Industrial Enterprises	12	SIS	3/44		24,700
	67-183	Improvement of Meat Processing Production	6	SIS	2/6		15,000
	68-304	Advisory Services to the Ministry for State-owned Enterprises	9	SIS	2/6		12,400
Mauritania	68-368	Development of Small-scale Industries	11	SIS	1/3		2,700
Mauritius	67-137	Evaluation of a Feasibility Report for the Establishment of a Textile Industry	6	SIS	1/2		5,000
	67-230	Survey of Industries Using Sugarcane Bagasse as Principal Raw Material	4	SIS	Consultant firm		5,000
	67-231	Feasibility Study on the Establishment of a Glass Industry	3	SIS	1/2		7,000

Region and country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts m/f	Fellows m/f	Cost US\$
AFRICA (cont'd)							
Morocco	421-57	Textile Industry Development	6	TA	1/11		17,000
	ID-82	Feasibility of a Pilot Industrial Estate	11	REG	1/2		1,200
	ID-82	Development of small-scale Industries	9	REG	1/3		9,000
	ID-82	Organization of an Industrial Information Service	8	REG	1/2		5,000
Niger	ID-362	Industrial Programming and Project Evaluation	12	REG	1/7		14,000
	67-249	Five-year Programme of Development for the Agro-industry in Niger	6	SIS	1/2		6,000
	67-251	Establishment of Pilot Industrial Estate	11	SIS	1/2		5,000
Nigeria	10-61	Evaluation of Feasibility Studies for Manufacturing Industries and Project Implementation	12	TA	1/11		23,000
	10-61	Directing the Federal Institute of Industrial Research	6	TA	1/24		14,000
	10-61	Food Processing	6	TA	1/24		24,000
	ID-548	Development of Industrial Estates	11	REG	2/9		17,000
Rwanda	RMA-3	Pilot Plan for Industrialization and Pyrethrum Production, Mukirige	4	SF	7/41	6/15	UNDP 1,486,500 Govt 1,050,000 Total 2,536,500
	217-63	Development and Expansion of Small-scale Industries	11	TA	1/11		17,000
	217-63	Industrial Project Formulation, Evaluation and Implementation	12	TA	1/12		22,000
	67-181	Establishment of a Cement Factory	3	SIS	1/2		11,000
	68-323	Uses of Methane Gas	5	SIS	1/11 days		400
	68-328	Establishment of a Malt Factory	6	SIS	1/2		5,000
	68-329	Fruit and Vegetable Processing	6	SIS	1/3		7,000
	68-330	Development of the Tea Industry	6	SIS	1/3		6,200
	68-331	Establishment of an Industrial Promotion Service	13	SIS	1/1		7,000

Region and Project country number	Project title	UNIDO activity group	Pro- gramme	Experts m/m	Fellows m/m	Cost US\$
AFRICA (cont'd)						
Senegal	180-65 Formulation and Implementation of a Development Policy for Small Industries	11	TA	1/12		2,000
	ID-866 Development of Small-scale Industries	11	REG	1/6		11,500
	67-184 Transformation of Military Installations into an Industrial Estate	11	SIS	1/12	2/12	11,000
	67-191 Expansion and Development of Aluminium Foundries	2	SIS	1/12	1/6	15,500
Somalia	214-67 Industrial Programmer and Industrial Cost Account	12	TA	2/12		1,000
	ID-777 Project Formulation, Evaluation and Implementation	12	REG	1/6		10,500
	67-135 Commercial Utilization of Gypsum and Sepiolite	3	TA	1/2		1,000
	67-140 Survey of Food Processing Plants	6	SIS	1/12	1/6	1,000
	67-215 Reducing the cost of Electric Power	1	TA	2/3		1,000
	68-387 Operation of the Chisimaic Plant	6	SIS	1/6		1,000
Sudan	SUD-12 Industrial Research Institute, Khartoum	3	REG	6/24		1,000
	235-61 Preparation of Programme for the Industrial Sector	12	TA	1/12		1,000
	ID-235 System of Grading and Standardization of Oil Seeds	6	REG	1/11		1,000
	67-60 Organization and Administration of the Public Sector	9	TA	1/4		1,000
	67-152 Ammonia and Urea Fertilizer Plant Specifications	3	TA	1/3		1,000
	68-257 Personnel Training of Food Processing Plants	6	TA	1/3		1,000
	68-262 Leather Production Technology and Marketing	6	TA	1/3		1,000
	68-287 Transformation of Artisan Activities and the Stimulation of New Small-scale Industries	11	TA	1/3		1,000

Region and country	Project number	Project title	UNIDO activity group	Pro- gramme	Experts n/m	Fellows n/m	Cost US\$
AFRICA (cont'd)							
Togo	199-67	Industrial Development Programming	12	IA	2/15		29,130
	67-166	Establishment of a Plant to Manufacture Dry Cassava Flakes	6	SIS	1/6		14,000
Tunisia	TU-15	National Centre for Industrial Studies, Tunis	12	SF	5/44		UNDP 771,700 Gov't 830,000 Total 1,601,700
	67-73	Increasing Efficiency of Fruit-oil Processing	6	SIS	1/6		14,000
	67-73	Selection of Equipment and Production Methods	1	SIS	1/5		14,000
	67-224	Promoting Foreign Investment	13	SIS	1/3 weeks		2,500
	68-217	Modernization of Dockyard Facilities and Equipment	1	SIS	1/2		5,000
	68-297	Industrial Cost Accounting System	1	SIS	1/4		9,000
Uganda	44-65	Development of Small-scale Industries	11	TA	1/12		13,250
	UGA-7	Small Industries Development Programme and Establishment of an Industrial Estate, Kampala	11	SF	4/20		UNDP 746,400 Gov't 1,114,995 Total 1,861,395
	68-255	Survey of Food Processing	6	SIS	1/1 week		250
	68-290	Refrigerator and Stove Production and Supervision of Plant	1	SIS	1/6		13,000
	68-324	Fertilizer Industry; Investment and Market Arrangement	5	SIS	1/1 week		1,000
United Arab Republic	UAR-55	Engineering and Industrial Design Development Centre, Nasser City	1	SF	3/30	9/66	UNDP 979,100 Gov't 1,689,300 Total 2,668,400
	UAR-66	Institute of Small Industries, Giza (Phase II)	11	SF	1/8		40,000
	UAR-69	Demonstration Pesticide Production Plant Based on Chlorine and Bromine Resources	4	SF			UNDP 1,053,600 Gov't 1,253,000 Total 2,306,600
	67-57	Urea and Ammonium Sulphate Projects Preparation	5	SIS	1/10 days		3,700

Region and country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts n/a	Fellows n/a	Cost US\$
AFRICA (cont'd)							
United Arab Republic (cont'd)	67-78	Supervising the Operation of Bagasse Pulp and Paper Mill	4	SIS	1/24	2/18	57,200
	67-83	Extension of Cotton Textile facilities	6	SIS	1/2		4,000
	67-223	Organic Chemical Industries	4	SIS	1/2		5,000
	67-234	Exploitation of Heavy Black Beach Sand	1	SIS	3/4 1/2		15,000
	68-274	Establishment of a Central Textile Research and Development Institute	6	SIS	2/3 1/2		7,300
	68-289	Design and Manufacture of High-voltage Porcelain Insulators	1	SIS	2/3		9,000
United Republic of Tanzania	68-291	Production of Raw and Natural Silk	6	SIS	2/12		26,000
	IAN-10	Industrial Studies and Development Centre, Dar-es-Salaam	12	SF	6/71	4/24	526,300 160,734 686,034
Upper-Volta	68-319	Exploratory Mission for Millet Milling	6	SIS	1/1		5,500
	68-280	Establishment of a Pilot Industrial Estate	11	SIS	1/2		5,000
	68-320	Development of the Vegetable Oil Processing Industry	6	SIS	1/2		6,200
	68-321	Development of the Fish Processing Industry	6	SIS	1/2		5,000
Zambia	139-65	Assistance to the Industrial Development Corporation	13	TA	1/12		27,000
	67-156	Establishment of Industries in Rural Areas	11	SIS	1/6		15,000
	67-164	Survey of Metalworking and Engineering Industry	1	SIS	2/6		15,000
The Maghreb Countries	REG-72	Centre of Industrial Studies for the Maghreb	12	SF	5/60		1,424,000 1,046,000 2,470,000
Regional	REG-A3	Formulation of Credit Strategy of Development Bank, Ind. Development	13	SF	1/5		1,700

Region and country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts m/m	Fellows m/m	Cost \$
THE AMERICAS							
Argentina	111-57	Installation of High Speed Heavy Machinery	1	TA	2/6		11,340
	111-57	Steel Products Marketing	2	TA	1/6		5,400
	111-57	Steel Production and Rolling	2	TA	1/3		5,670
	111-57	Evaluating Resources of Non-ferrous Ore and Minerals	2	TA	1/3		5,670
	111-57	Wool Technology Problems of Industrial Research	6	TA	1/3		5,670
	111-57	Leather Processing	6	TA	1/6		11,340
	111-57	Control of Chemical Process Operations Using Gas Chromatographic Techniques	4	TA	1/2		3,780
	111-57	Establishment of a Laboratory of Applied Combustion	8	TA	1/2 days		
	111-57	Weights and Measures Legislation	7	TA	1/4		7,560
	111-57	Study of Resource Potentials for Industrial Development	12	TA	1/3		5,670
	111-57	Promotion of Exports of Manufactured Goods	14	TA	5/18		24,000
	67-206	Food Processing Development	6	SIS	1/12		24,000
	67-207	Operation of Textile Laboratory and Establishment of Quality Control	6	SIS	1/9		24,000
	68-252	Small Industry Extension Methods	11	*SIS	3/24		57,600
	68-258	Machine Tool Design and Production	1	SIS	2/8		20,000
	68-286	Establishment of Aluminium Industry	2	SIS	1/5		17,000
Barbados	87-63	Elaboration of Industrial Standards System	8	TA	1/12		23,100
	10-1050	Increase of Industrial Productivity	10	REG	1/3		5,700

Regional and country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts S/A	Fellows M/E	Cost US\$
THE AMERICAS (cont'd)							
Bolivia	80L-20	Experimental Production Plant for Asbestos Processing, Cochabamba	3	SF			527,000 237,000 <u>764,000</u>
	67-127	Building Materials Pre-investment Survey	4	SIS	1/6		15,000
	68-296	Production of Tiles and Ceramics	3	SIS	1/6		12,000
	68-269	Evaluating Tenders for the Installation of a Petrochemical Industrial Complex	5	SIS	1/2 weeks		2,500
	68-299	Plate Glass Manufacture	4	SIS	1/5		1,000
Brazil	27-59	Solving Problems Related to the Chemical Industry	4	TA	1/12		17,000
	27-59	Development of Industrial Estates	11	TA	1/10		17,000
	67-226	Technical and Managerial Assistance to Small-scale Industries	11	SIS	1/1		2,500
	67-228	Tetraethyl Lead Production	5	SIS	2/4		1,000
	67-237	Establishment of Industrial Research Centre	8	SIS	1/1		3,500
	67-236	Corporate financial Planning	12	SIS	1/1		4,000
	67-247	Possibilities of Assistance to the Food Industry	6	SIS	2/20 days		1,000
	68-227	Establishment and Management of Technical Services Unit	10	SIS	2/24		1,000
	68-259	Rehabilitation of Textile Mill	6	SIS	2/2		2,000
	68-264	Establishment of Industrial Standards	8	SIS	2/8		1,000
	68-265	Agricultural Implements	1	SIS	1/8		1,000
	68-312	Selecting Sites for Industrial Parks	11	SIS	1/8		1,000

Region and country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts n/a	Fellows n/m	Cost US\$
THE AMERICAS (cont'd)							
Chile	130-57	Boiler Plate Manufacturing Industry	1	TA	1/12		22,000
	130-57	Machine Tool Manufacture	1	TA	1/13½	1/6	27,340
	130-57	Managerial Advice on Production, Programming and Quality Control	10	TA	1/12		24,000
Colombia	COL-30	Institute for Technological Research, Bogotá (Phase II)	8	SF	8/17	4/27	UNDP 780,700 Gov't 983,000 Total 1,763,700
	135-57	Evaluation, Selection and Execution of Industrial Projects	12	TA	1/12		22,520
	135-57	Project Evaluation and Implementation	12	TA	1/4		7,100
	68-278	Assistance in Production Planning	10	SIS	1/6		13,720
	68-278	Maintenance and Manufacture of Forging Dies	1	SIS	1/8		18,280
Dominican Republic	9000-68	Preparation of Market Studies	14	TA	1/12		15,000
	9000-68	Specifications for Raw Materials and Products in Light Industries	6	TA	1/12		17,077
	X80-642	Organization of Laboratory and Inspection Services	4	TA	1/12		15,000
	194-60	Maintenance and Repair	1	TA	2/24		29,108
	194-60	Development of Small and Medium-scale Industries	11	TA	1/12		21,000
	67-146	Evaluation of Machinery and Installations of a Bagasse Building-boards Factory	4	SIS		Consultant firm	49,200
Ecuador	51-60	Preparation of an Industrial Development Plan	12	TA	1/12		25,800
	67-98	Processing of Marañilla Fruit	6	SIS	1/2 weeks		750
	67-101	Planning of Industrial Estates	11	SIS	1/6		14,000
	67-236	Organic Materials and Compost Fermentation for Fertilizers	5	SIS	1/12		24,000

Region and Country	Project number	Project title	UNIDO activity group	Pro-grams	Experts #/m	Fellows #/m	Cost US\$
<u>THE AMERICAS (cont'd)</u>							
Ecuador (cont'd)	68-302	Assistance to the Industrial Centre for Development of Textile Production	6	SIS	4/12		24,800
	51-60	Evaluation of Industrial Projects	12	F-in-T	1/10		11,200
El Salvador	68-271	Development of Small-scale Industries	11	SIS	1/8		18,000
Guyana	68-355	Food Industries Productivity and Quality Improvement	6	SIS	2/7½		14,000
Haiti	8005-68	Establishment of an Essential Oils Industry	4	TA	1/4		7,700
	68-284	Industrial Programming and Project Planning	12	SIS	3/4½		12,000
Honduras	24-61	Industrial Planning and Project Evaluation	12	TA	1/12		22,000
	24-61	Formulation, Evaluation and Co-ordination of National Industrial Programme	13	TA	1/12		27,000
Jamaica	8006-68	Leather Industry Improvement	6	TA	1/12		23,100
	67-153	Design and Production of Handicrafts	11	SIS	1/12		16,000
	68-256	Furniture Production Methods and Techniques	11	SIS	1/12		14,000
	68-272	Utilization of Local Clays and Glazing Techniques	3	TA	1/12		17,000
	68-311	Maintenance Workshops, Problems of Management and Training	10	SIS	1/6		15,000
	X80-427	Footwear Production and Quality	10	F-in-T	1/11		16,000
Mexico	MEX-10	Resource Surveys of the State of Oaxaca	12	SF	1/6		24,000
	190-65/ Rev.1	Pharmaceutical Industry	4	TA	1/6		15,000
	190-65	Industrial Planning	12	TA	1/6		20,000
	67-132	Evaluation of Manufacturing Projects	12	SIS	1/12		17,000

Region and Project country number	Project title	UNIDO activity group	Pro- gramme	Experts d/m	Fieldwork d/m	Cost
<u>THE AMERICAS (cont'd)</u>						
<u>Netherlands</u>						
Antilles 100-65	Development of Small-scale Industries	11	TA	1/11		10,000
Nicaragua 181-57	Evaluation of Feasibility Studies for Manufacturing Industries and Project Implementation	12	TA	1/12		15,100
181-57	Fiscal Incentives and Industrial Development Policies	13	TA	1/12		25,100
67-109	Evaluation of a Petrochemical Project Based on Indigenous Surplus Hydrochloric Acid	4	SIS	2/6		10,400
Paraguay PAP-8	Technical Standards National Institute	8	SF	6/66	6/44	24,000
189-57	Industrial Development Emphasizing Balance of Payment Implications	13	TA	1/17		11,000
<u>Peru</u>						
195-57	Projections for Basic Petrochemical Products	4	TA	1/8		14,600
195-57	Formulation of Projects for the Production of Nitrogen, Phosphate and Potash Fertilizers	5	TA	1/6		13,200
195-57	Automotive Industries	1	TA	1/5		11,000
195-57	Shipbuilding Industry	1	TA	1/6		13,200
ID-837	In-plant Training of Executives	10	REG	1/6		11,400
67-161	Feasibility of Establishing a Bagasse Pulp and Paper Mill	4	SIS		Consultant firm	27,000
67-188	Analysis of Industrial Production Costs of the Textile Industry	6	SIS		Consultant firm	13,000
						CDP 24,000 Gov't 500,000 Total 1,000,100

Region and Project country number	Project title	UNIDO activity group	Pro- gramme	Experts y/m	Experts m/m	Cost US\$
THE AMERICAS (cont'd)						
Turkey and Tobago	Development of Small-scale Industries	11	REG	1/6		15,000
57-90	Food Processing Industry	6	SIS	1/2		350
68-303	Rehabilitation of a Paper Mill	4	SIS	1/1		1,000
Uruguay	Productivity of the Food Processing Industry	6	REG	1/6		2,500
Venezuela	Development of the Textile Industry	6	TA	1/12		16,000
X80-25	Installation of a Pilot Plant for Food Products	6	TA	1/6		14,400
201-57	Increase of Metalworking Products	1	TA	1/12		3,000
68-295	Survey for the Petrochemical Institute	4	SIS	3/3		1,000
Regional	The Central American Research Institute for Industry (ICAITI) Phase II	8	SF	2/24	13	150,000
						1,000,000
3-66	Industrial Policies and Programmes Related to the Economic Integration of Central America	12	TA	2/24		500
300-67	Regional Industrial Development with ECLA	12	TA	1/12		1,000
10-495	Development of Mechanical Industries	1	REG	1/12		1,000
10-495	Evaluation of Projects for New Chemical Industries	4	REG	1/12		1,000
10-495	Planning of New Pulp and Paper Industries	4	REG	1/12		1,000
10-495	Technological Research in Industry	6	REG	1/12		1,000
10-1100	Formulation of Industrial Policies and Programmes	12	REG	1/12		1,000

Region and Project country number	Project title	UNIDO activity group	Pro- gramme	Experts m/m	Fellows m/m	Cost US\$
<u>ASIA/FAR EAST</u>						
Afghanistan 153-63	Planning and Co-ordination of Industrial Projects	1	TA	1/2		4,000
155-63	Introduction and Implementation of the Metric System	8	TA	1/12		19,900
155-63	Feasibility Studies for Specific Industries	12	TA	2/6		10,100
IX-33	Feasibility Studies on the Establishment of Industries	12	TA	1/12		18,000
67-125	Feasibility of Modernizing a Match Factory	4	SIS	1/3		6,000
Burma 1-57	Establishment of a Metrology Laboratory	8	TA	1/8		10,920
Cambodia 4-60	Inventories of available Natural Resources and Utilization of Production Facilities	12	TA	1/6		11,000
Ceylon 20-57	Operation of Ceramic Plant	3	TA	1/20		37,000
ID-482	Operation of Textile Plant	6	TA	1/12		22,000
67-178	Improving the Efficiency and Quality of a Plant Producing Caustic Soda and Chlorine	4	SIS	1/4		8,000
67-216	Survey of Textile Industry	6	SIS	2/8		20,000
67-222 67-243	Vegetable Oil Industry	6	SIS	2/24		46,000
68-285	Extraction of TiO ₂ from Heavy Beach Sand	2	SIS	1/3		9,000
China, Republic of 320-67	Corporate Planning, Technological Improvements and Training for Managers of Industrial Enterprises	10	TA	2/12		25,000
ID-599	Solving Management Problems Related to Manufacturing Process	10	REC	1/5	1/6	17,800
ID-599	Qualitative and Quantitative Analysis of Synthetic Fibres	4	REG	1/6		11,000
67-104	Setting up Consulting Services for Medium and Large Industries on Low-cost Technological Improvements	9	SIS	1/6		15,000
67-111	Application of New Productivity and Management Ideas	10	SIS	5/18		40,000

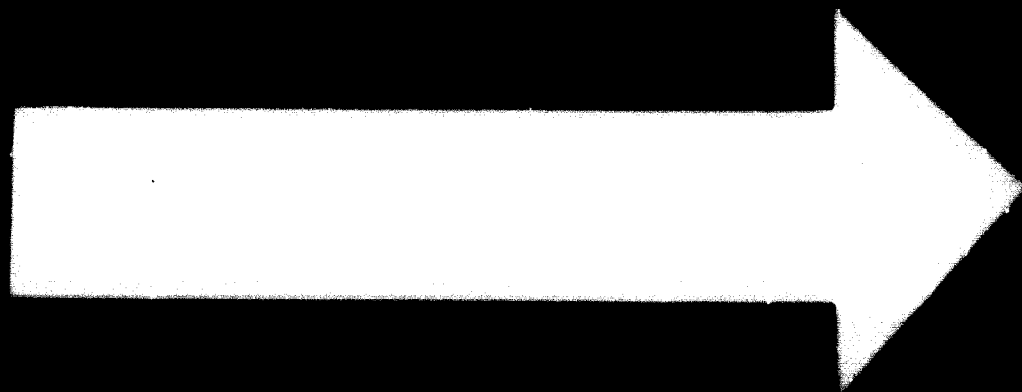
Region and Project country number	Project title	UN IDO activity group	Pro- gramme	Experts n/m	Fellows m/m	Cost US\$
ASIA/EAR EASI (cont'd)						
China, Republic of (cont'd)	67-116 Survey of the Electronic Industry	1	SIS	1/3		6,500
	67-116 Survey of Agricultural Implements	14	SIS	1/3		6,500
	67-116 Ascertaining the Potential for Expansion of Exports	14	SIS	3/9		19,500
	67-118 Improvement of Production Techniques in Plastics Manufacture	4	SIS	1/4		8,000
	67-119 Manufacture of Melamine from Urea or Calcium Cyanamide	4	SIS	1/2		5,000
	67-120 Development of Man-made Fibre Industry	4	SIS	1/6		15,000
	67-182 Manufacture of Clinker Using Local Magnesite and Dolomite	2	SIS	1/6		15,000
	68-392 Review of the Programme of Research of the Union of Industrial Research Institute	8	SIS	1/12		15,100
Fiji	150-67 Establishment and Operation of the Industrial Department of the Development Bank	13	TA	1/8		15,000
India	IND-67 Design Centre for Electrical Measuring Instruments	1	CF	1/5		15,000
	37-57 Production of Machine Tools *	1	TA	1/3		15,000
	37-57 Industry Investment Survey in Metallurgy	2	TA	1/32		15,000
	37-57 Steel foundry Operation	2	TA	1/12		15,000
	37-57 Dyeing and Finishing of Leather	4	TA	1/12		15,000
	37-57 Investigations in the Field of Polymers as Applied to the Leather Industry	4	TA	1/12		15,000
	66-17 Footwear Machinery and Equipment	6	CF	1/12		15,000
	67-242 Survey and Utilization of the Titanium Products Industry	2	SIS	1/6		15,000
	68-242 Development of Chrome Tanning Processes for Village Industries	6	CF	1/12		15,000
						Total 1,330

Region and Project Country Number	Project title	UNIDO activity group	Pro- gramme	Experts m/m	Follow- up	Cost
ASIA/FAR EAST (cont'd)						
India (cont'd)	68-366 Training Programme for Marketing and Export Promotion of Industrial Goods	10	SIS	1/6	10/60	1,000
Indonesia	43-57 Maintenance and Inventory System for Spare Parts	1	TA	1/6		1,000
	43-57 Rubber Production Techniques	4	TA	1/6		1,000
	43-57 Production Problems and Quality Control of Textile Industry	6	TA	1/6		1,000
	43-57 Integration and Co-ordination of Industrial Research	8	TA	1/6		1,000
	43-57 Design, Production Quality Control and Marketing of Straw Hats	10	TA	1/6		1,000
	43-57 Increasing Productivity in the Industrial Sector	10	TA	1/6		1,000
	43-57 Preparation of Pre-investment Studies for State Enterprises	12	TA	1/18		3,400
	43-57 Industrial Classification Survey and Programming Data	12	TA	1/18		3,400
	67-174 Improving the Management, Production and Control of Spinning Mills	10	SIS	1/6		24,000
	67-176 Rehabilitation of Mechanical Workshops	1	SIS	3/36		7,000
	67-177 Improving the Organization and Management of State-owned Paper Mills	10	SIS	2/24		45,000
	67-214 Use and Maintenance of Steel Plant Equipment	2	SIS	1/1		3,500
	68-322 Installation and Initial Operation of a Cold Steel Wire Drawing Mill	2	SIS	1/6		11,000
	68-379 Problems of Superphosphate Plant Operation	5	SIS	3/3		5,000
Iran	IRA-11 Establishment of an Industrial Estate, Ahuaz	11	SF	6/67	2/3	3,000 3,100,000 3,100,000
	IRA-16 Research Centre for Industrial and Trade Development	12	SF	3/36	6/7	1,000,000 1,000,000 2,000,000

Region and Project country number	Project title	UNIDO activity group	Pro- gramme	Experts m/yr	Fellows no.	Cost \$
ASIA/FAR EAST (cont'd)						
Iran (cont'd)	220-57 Development of the Electronic Industry	1	TA	1/6		1,400
	220-57 Selection of Industries for Development Planning	1	TA	1/8		14,000
	220-57 Development of Non-ferrous Metals Industries	2	TA	1/6		11,000
	220-57 Development of Pharmaceutical Industry	4	TA	1/2		3,600
	220-57 Development of Dyestuffs Industry	4	TA	1/6		11,400
	220-57 Long-range Programme for the Food Processing Industries	6	TA	3/18		13,000
	220-57 Food Industry Production Problems	6	TA	1/6		13,000
	220-57 Planning and Execution of a Programme of Standardization	8	TA	1/12		1,000
	220-57 Preparation and Implementation of National Standards	8	TA	1/12		1,000
	220-57 Preparation and Implementation of National Standards	8	TA	1/12		1,000
	220-57 Evaluating Programmes of the Industrial Sector	12	TA	1/14		1,000
ID-272	Increased Efficiency of Industrial Research Institute and Standards Organization	8	EEG	1/12		1,000
ID-272	Organizing In-plant Training Programmes	10	EEG	1/6		1,000
68-371	Industrial Sector Programming	12	EEG	1/10 days		1,000
68-352	Feasibilities of Manufacturing Phosphorus-based Pesticides	5	EEG	1/2 weeks		1,000
68-356	Identification of Sources of Finance for Specific Industrial Projects	12	EEG	1/1		1,000
68-359	Decision-making System for Industrial Projects	10	EEG	1/10 days		1,000
68-410	Economic Evaluation of an Aluminium Reduction Plant	10	EEG	1/1		1,000
Area, Republic of	60-57 Location of Small-scale Industry	11	EEG	1/1		1,000

Region and Project country number	Project title	UNIDO activity group	Pro- gramme	Experts m/m	Fellows m/m	Cost US\$
ASIA/FAR EASI (cont'd)						
Laos	60-61 Development of Small-scale Industry	11	TA	1/6		11,000
	68-276 Development of Small-scale Industry	11	SIS	1/6		11,000
	68-336 Match Factory Production Methods	6	SIS	1/3		6,200
Malaysia	19-66 Operation of Leather Tannery	6	TA	1/12		21,000
	19-66 Improvement of Leather Products Industries	6	TA	1/12		21,000
	19-66 Improvement of Leather Products Industries	10	TA	1/12		21,000
	19-66 Setting up a Handicraft Centre	11	TA	1/12		21,000
	19-66 Feasibility Studies of Industrial Projects	12	TA	1/6		28,050
	264-61 Adviser to the Economic Development Board	12	TA	1/12		22,000
	318-67 Economic Research and Project Evaluation	12	TA	1/12		18,500
	67-113 Textile Marketing Policy	6	SIS	1/8		19,000
	67-244 Leather Tanning Quality Improvement	6	SIS	1/6		14,000
	68-300 Directing the Industrial Service Centre	11	SIS	5/30		37,500
	68-300 Project Identification, Formulation and Development	12	SIS	1/6		12,000
	68-300 Industrial Marketing and Feasibility Studies	12	SIS	1/6		7,500
	68-300 Promotion of Industrial Investment	13	SIS	1/6		15,000
Mongolia	27-67 Production of Packaging Material	6	TA	1/3		5,500
	27-67 Improving Technological Processes for Leather	6	TA	1/12		21,900
Nepal	83-65 Survey for Building and Construction Materials	3	TA	1/2		3,850
	83-65 Feasibility Studies of Cotton Textile Production	5	TA	1/2		3,650
	83-65 Industrial Feasibility Survey of Wood Products	6	TA	1/2		3,850

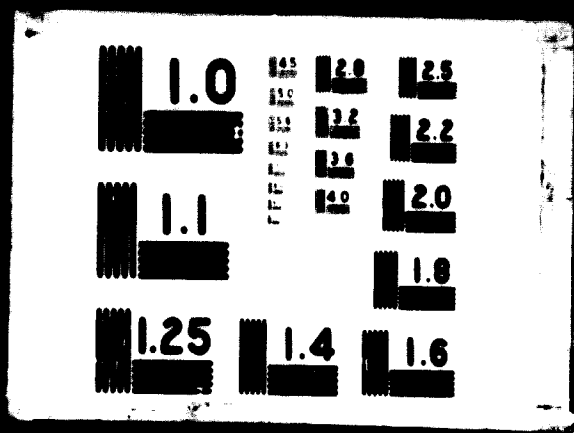
Region and Project country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts B/A	Fellows B/A	Cost US\$
ASIA/FAR EAST (cont'd)							
Nepal	83-65	Industrial Legislation	7	TA	1/3		6,000
	83-65	Evaluation of Surveys in Various Industrial Fields	12	TA	1/12		23,190
Pakistan	PAK-26	Pre-investment Studies for the Promotion of the Fertilizer and Petrochemical Industries	5	SF	8/64	6/50	UNEP 1,580,800 Gov't 935,111 Total 2,515,911
	73-57	Expansion of Chemical Manufacturing Industries	4	TA	1/8½		15,700
	73-57	Technical and Financial Aspects of Proposed Projects	12	TA	1/18		39,600
	73-57	Review of Industrial Policy and Appraisal of Industrial Development Programmes	12	TA	3/46		79,500
	68-261	Evaluating Iron and Steel Project Proposals	2	SIS	1/6		16,000
Papua	216-67	Development of a Clothing and Textile Industry	6	TA	1/9		17,660
Papua and New Guinea	216-57	Production of Building and Construction Materials	3	TA	1/9		17,400
Philippines	79-57	Steel Industry Surveys	2	TA	1/18	1/12	44,400
	79-57	Research in Industrial Microbiology	4	TA	1/4		2,000
	67-253	Evaluation of Specific Investment Proposals Related to Industrial Estate Project	11	SIS	2/4		1,000
	67-254	Evaluation of Engineering Projects	1	SIS	1/12		•
	67-254	Establishing a Working System for Market Studies	12	SIS	1/3		•
	67-254	Preparation of Investment Priorities Plans	12	SIS	1/1		•
	67-254	Implementing the Investment Incentives Act	13	SIS	1/1		•



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Region and Project Country number	Project title	UNIDO activity Group	Pro- gramme	Experts	Cost
ASIA/FAR EAST (cont'd)					
Singapore 51A-7	Foundry Demonstration and Service Unit	1	SF	4/10	11,000
26-66	Manufacture of Building Hardware	1	A	1/6	11,000
203-67	Industrial Research Facilities and their Improvement	8	TA	1/5	11,000
254-61	Establishment of bicycle-manufacturing factory	1	TA	1/12	11,000
264-61	Review of Methodology for Evaluation of New Industrial Projects	12	TA	1/11	11,000
264-61	Operation of Economic Development Board	13	TA	1/12	11,000
67-129	Legislation on Fire Safety Standards	7	SIS	1/6	11,000
67-130	Control on Industrial Effluents and Trade Waste Discharges	4	SIS	1/5	11,000
67-239	Establishment of an Export Promotion Centre	14	SIS	1/7	11,000
68-266	Manufacture of Padlocks and Other Building Hardware	1	SIS	1/9	10,000
68-333	Improvement of Metal Products Design	1	SIS	1/6	11,000
68-333	Improvement of Plastic Products Design	4	SIS	1/6	11,000
68-333	Improvement of Wooden Furniture Product Design	6	SIS	1/6	11,000
68-334	Modernization and Expansion of Woodworking Establishments	6	SIS	1/6	11,000
68-338	Modernization and Expansion of Printing Establishments	6	SIS	1/6	11,000
68-339	Modernization and Expansion of Fancy Leather Products Industries	6	SIS	1/6	11,000
THA-16	Technological Research Institute, Bangkok	8	SF	4/36	1/6
82-57	Analysis and Appraisal of Applied Scientific Research	8	TA	1/12	17,650
82-57	Establishment and Implementation of Industrial Standards	8	TA	1/12	17,650
66-35	Feasibility of Establishing an Industrial Estate	11	SIS	2/12	30,000
68-301	Small-scale Industries and Handicrafts Marketing	11	SIS	1/6	11,000
					UNDP 345,200
					Gov't 4,167,000
					Total 4,512,200

Region and Project country number	Project title	UNIDO activity group	Pro- gramme	Experts E/A	Follows E/A	Cost US\$
<u>ASIA/EAR EASI (cont'd)</u>						
Vietnam, 232-67 Republic of	Development of Industrial Estates	11	T4	1/12		10,000
Regional 10-1083	Regional Industrial Adviser with ECAFE	6	REC	1/12		10,000
10-1083	Regional Industrial Adviser with ECAFE	2	REC	1/12		10,000
10-1083	Regional Adviser on Industrial Research attached to ECAFE	8	REC	1/12		10,000
10-1084	Regional Adviser on Industrial Standardization attached to ECAFE	8	REC	1/12		10,000

Region and country	Project number	Project title	UNIDO activity		Pro-gramme	Experts m/m	Fellows m/m	Cost US\$
			group	group				
Bulgaria	236-67	Fellowships in Hydraulics	8	TA	TA	4/21	4/21	7,500
	269-65	Automation of Ore Dressing	2	TA	TA	1/2		4,200
	263-65	Coloured Coatings for Chromo Paper and Board	4	TA	TA	1/1		2,100
	269-65	Production of Unsaturated Polyester Resins	4	TA	TA	1/2		4,200
	269-65	Use of Modern Contact Glues in the Manufacture of Furniture	6	TA	TA	1/1		2,200
	269-65	Improvement of Design and Production in the Furniture Industry	6	TA	TA	1/1		2,100
	ID-980	Fellowships in Mechanical Engineering	1	REG	REG		3/10	3,600
	67-50	Instruments Design	1	SIS	SIS	6/21		54,000
Cyprus	68-268	Establishment of a Packing Media Research and Experimental Institute	8	SIS	SIS	1/1		2,500
	X80-451	Programme Evaluation	12	TA	TA	1/12		12,000
	ID-503	Industrial Development Policy	13	REG	REG	1/6		11,000
	66-48	Establishing an Asbestos Pipe Manufacturing Plant	3	SIS	SIS	Consultant firm		6,300
Hungary	259-65	Fellowships in Various Engineering Fields	1	REG	REG		8/45	15,300
	0/-115	Report on the Manufacture of Marine Salts	4	SIS	SIS	1/2		2,050
Iraq	168-39	Preparing Feasibility Studies for Various Industries	12	TA	TA	1/12		22,000
	68-275	Industrial Planning and Development	12	SIS	SIS	1/2 weeks		600
Israel	ISP-11	Industrial Research Centre	8	SF	SF	12/76	12/48	UNDP 1,267,100 Gov't 9,055,332 Total 10,322,432
	243-57	Coin Making Equipment	1	TA	TA	1/3	1/4	8,700
	243-57	Pharmacological Research	4	TA	TA	1/12		22,100

Region and country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts m/a	Fellows m/a	Cost US\$
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EUROPE/MIDDLE EAST (cont'd)

Israel (cont'd)	43-57	Fellowships in Fertilizer Industry	5	TA	1/6	1/6	5,000
	43-57	Fellowships in Diamond Cutting	6	TA		1/3	4,500
	243-57	Training in the Fields of Graphic and Industrial Designs	10	TA	2/4	2/6	12,400
	67-57	Increased Production of Metalworking Industries	14	SIS	1/1		7,000

Jordan	JOR-13	Centre for Industrial Development, Amman	12	SF	5/60	4/24	USDP 1,150,100 58,947 Total 1,209,047
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Kuwait	KG-10	Establishment and Initial Operation of a Steel Rolling Mill	2	SIS	1/12		7,100
	KG-15	Industrial Development	13	F-in-T	1/10		19,000

Lebanon	LE-55	Development of Engineering Industries	1	TA	1/5		1,000
	LE-57	Development of Engineering Industries	1	REG	1/6		10,000

Libya	LY-57	Manufacture of Industrial Components and Identification of Potential Assembly Industries	1	SIS	1/6		10,000
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Morocco	MO-57	Development of Pharmaceutical Industry	4	TA	1/1		1,000
	MO-57	Fellowships - Chemical Industries	4	TA		1/1	20,000
	MO-57	Fellowships in Chemical Industries	4	REG	2/10		10,000

Oman	OM-57	Acquisition of Modern Technology in the Construction Industry	1	TA	1/1		10,000
	OM-57	Fellowships in Metallurgy	2	REG		1/1	10,000

Pakistan	PA-57	Introduction of Welding Techniques and Equipment	1	SIS	1/3		10,000
	PA-57	Support in 100 Certain Projects under the C.D. Programme	10	SIS	1/1		10,000

Region and Country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts m/m	Fellows m/m	Cost US\$
EUROPE/MIDDLE EAST (cont'd)							
Saudi Arabia	SAU-14	Industrial Studies and Development Centre, Riyadh	12	SF	8/60		UNDP 534,500 Gov't 2,000,000 Total 2,634,500
	ID-546	Fellowship in Industrial Development	12	REG		1/6	3,600
Southern Yemen	YEM-67	Formulation of Industrial Development Policy	13	TA	1/6		11,000
Spain	ID-506	Development of Footwear Industries	6	REG	1/3		5,700
	58-326	Development of the Textile Industry	6	SIS	1/7		13,000
Cyprus	ID-513	Natural Gas Development	5	REG	1/6		15,000
	67-204	Possibilities of Further Assistance to the Fertilizer Industry	5	SIS	1/1 week		431
	68-270	Evaluation of Tenders for a Triple Superphosphate Project	5	SIS	1/2		5,000
	66-306	Supervision of Erection and Initial Operation of a Steel Rolling Mill	2	SIS	1/14		26,500
	68-309	Nitrogen Fertilizer Project	5	SIS	2/15		34,100
	66-325	Study of Fertilizer Requirements and Urea Production	5	SIS	1/6		17,000
Turkey	TUR-25	Small Industries Development Programme	11	SF	4/24	2/12	UNDP 962,800 Gov't 1,240,000 Total 2,202,800
	TUR-29	In-plant Training Centre for Engineers, Kirikkale	10	SF			UNDP 1,420,300 Gov't 3,000,000 Total 4,420,300
	277-57	Gear Manufacturing Training and Management	1	TA	1/1		1,800
	277-57	Establishment of a Forging Plant	2	TA	1/4		7,200
	277-57	Development of Petrochemical Engineering	4	TA	1/12		11,600

Region and country	Project number	Project title	UNIDO activity group	Pro-gramme	Experts m/m	Fellows m/m	Cost US\$
EUROPE/MIDDLE EAST (cont'd)							
Turkey (cont'd)	277-57	Chemical and Petrochemical Engineering, Gear Manufacturing, Forging and Management (Training)	10	TA	3/32		57,750
	67-55	Cement Granulating Plant Operation	3	SIS	1/7		11,500
	67-55	Cement Production using Slags from Iron and Steel Factories	3	SIS	1/6		1,400
	67-195	Survey of Iron and Steel Industry and Improvement of Operations	2	SIS	1/6		11,500
	67-212	Installation of a Barite Ore Grinding Mill	2	SIS	1/1		4,500
	67-245	Conducting Agglomeration and Briquetting Pilot Plant Trials	2	SIS	1/12		5,000
	68-313	Establishment of Alumina and Aluminium Plant	2	SIS	4/18		1,000
Yugoslavia	294-51	Fellowships in Chemical and Other Industries	4	TA		4/25	13,000
	294-57	Training Chemists in Analytical Methods Relating to Celluloses and Hemicelluloses	4	TA	1/5		15,500
	294-57	Production of Bleached Sulphate Pulp Paper	4	TA	1/5		10,000
	294-57	Development of Process to Dispose Waste Waters from Wood Pulp	4	TA	1/5		10,000
	294-57	Manufacture of Kraft Pulp Paper	4	TA	1/5		10,000
	294-57	Paper Coating and Sizing	4	TA	1/5		10,000
	294-57	Production of Neutral Sulphite Pulp and Paper	4	TA	1/5		10,000
	294-57	Paper Technology	4	TA	1/5		10,000
	294-57	Straw Pulp Production	4	TA	1/5		10,000
	294-57	Problems of Polymer Production	4	TA	1/5		10,000
	294-57	Sheet-Paper Manufacturing	4	TA	1/5		10,000
	294-57	Collaboration in Ball-Bearing Industry and Industrial Estates	10	TA			10,000
	294-57	Treatment of Lubricating Oils: Improvement of the Lubrication Number of Diesel Oil, and Production and Quality Control of Petroleum Products	10	TA			10,000

<u>Country</u>	<u>Project number</u>	<u>Project title</u>	<u>UNIDO activity group</u>	<u>Post-graduate</u>	<u>Experts</u>	<u>Follow-up</u>	<u>Cost</u>
<u>EUROPEAN/ISOLE-EASI (cont'd)</u>							
The Gulf States	67-297	Review of Industrial Development Policies	T3	SIS	21 weeks		1,000
Regional	ID-552	Regional Industrial Adviser Attached to the Economic Regional Commission	T3	REG	1 Yr		5,000

ANNEX VI

PROGRESS REPORT ON THE IMPLEMENTATION
OF UNDP PROJECTS BY UNIDO

Contents

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Evaluation of programmes of technical co-operation	19 - 30	5
Improvement of project implementation machinery	31 - 35	9

Share of UNIDO in the United Nations Development Programme

1. Since its designation on 1 July 1967 by the United Nations Development Programme as a participating and executing agency, UNIDO has taken charge of the part of the programme that falls within its field of competence.
2. Under the UNDP/SF component, UNIDO was in charge of 15 projects in 1968 with total UNDP earmarkings of \$22.9 million. Included in these figures were eight projects, which were approved during 1968 by the Governing Council of UNDP with total earmarkings from UNDP funds of \$6.8 million, and for which UNIDO was designated the participating and executing agency. The total number of projects approved by the Governing Council for all agencies in 1968 was 151 projects, costing \$141.2 million in UNDP earmarkings.
3. The share of UNIDO in the 1967-1968 UNDP/TA programme was \$4.8 million; the total value of the programme for the biennium was \$110 million.
4. The magnitude of the share of industry in the UNDP was the subject of varied comments by delegates to the second session of the Industrial Development Board (1968). The subject was further discussed at the sixth session of the UNDP Governing Council (1968) where some delegations called for increased UNDP contribution to industry with specific mention of such fields as pilot plants, repair and maintenance, small and medium-scale industry, export-oriented and imports substitute industries.
5. In his statement to the Council, the Administrator of UNDP expressed the hope that UNIDO would be associated with several additional UNDP/SF projects which were being prepared for the seventh session of the Council. He also called for imaginative new approaches and experimentation in the field of industrialization with more requests for advance-stage feasibility studies and pilot projects leading directly to increased manufacturing activity. He also referred to the need for expansion of assistance in the fields of repair and maintenance, agriculture-oriented industries and industrial training.

Percentage of implementation

6. The status of implementation for individual projects financed from UNDP funds is shown in Annex II under the Special Programme for the Development of the components.

7. During 1968 resources available to UNIDO for projects financed from the UNDP/TA component amounted to \$3,087,001 (including contingency allowance). Commitments recorded by 30 September 1968 plus estimated commitments for the last quarter of 1968 amounted to \$2,005,777, or a 64.9 per cent rate of implementation. In 1967, the rate of implementation was 62 per cent.

8. For the UNDP/SF component, an annual expenditure target is established for each project. This target is calculated at the beginning of each year for the operational projects, taking into consideration the schedule of implementation as laid down in the plans of operation which cover the entire duration of the projects.

9. For 1968 the total annual expenditure target for all operational UNDP/SF projects was \$3,561,382. Recorded expenditures as of 30 September 1968 plus estimated expenditures for the last quarter of 1968 amount to \$2,661,654, or a 74.7 per cent rate of implementation. The corresponding figures for 1967 were \$3,144,936 and \$1,534,433. It should be borne in mind that UNDP/SF projects are carried out by the executing agency on behalf of the UNIDO and the recipient Governments. The rate of implementation of these long-term projects is determined in many cases by factors extraneous to the executing agency, including the readiness and ability of assisted countries to deliver their counterpart contributions to the projects as well as the availability of suitable candidates, particularly project managers, acceptable to the Governments.

The UNDP Review of the UNIDO component of the programme

Agency review meeting

10. The first UNDP Agency review for UNIDO took place in June 1968. It presented UNIDO officers with the first opportunity for a general discussion with UNDP officials of the programme of work financed from UNDP sources.

11. A review was made of the approved UNDP/SF projects with emphasis on those facing operational difficulties and those due to be terminated in 1968. This review was followed by an analysis of the status of the requests in the pipeline and of new ideas that could be developed into viable projects; the possibility of new fields of activity was also examined.

12. UNDP representatives explained the concept and practice of joint programming and the co-ordination needed for the preparation of projects in which two or more participating agencies were involved. Several projects falling under this category were discussed in the light of past experience. The role of UNIDO's industrial field advisers in joint programming was also examined. The revised UNDP/TA programming procedure, which comes into effect on 1 January 1969, was discussed, including the problems of reporting and evaluation, and other administrative and financial matters related to the UNDP/TA programme.

13. A review was also made of the Special Industrial Services Programme, including the implementation of projects approved under this programme and the preparation of projects in the pipeline. Reference was made to the difficulties encountered in the recruitment of experts for SIS missions. Some suggestions were made for improvement in this area and for a speedier evaluation of the requests submitted for approval.

Global meeting of resident representatives

14. UNIDO took part also in the global meeting of UNDP resident representatives at Hot Springs, USA, from 22 to 27 February 1968, which was attended by some 80 regional and resident representatives, by representatives of the UN Secretariat, by the Regional Economic Commissions and by representatives of specialized agencies.

15. This meeting, which was devoted mainly to the nature of the new UNDP programming procedures, regional activities and of the technical field advisers of the agencies, provided UNIDO with an opportunity to clarify certain aspects of the new programming procedure and to develop further its working relations with the resident representatives. The role of the resident representatives with regard to the new procedures of continuing programming and project budgeting and his functions in the appraisal of new requests were clarified.

16. A review was made of regional activities and of the prospects for short- and long-term multi-national projects, the extent of participation and interest of the Governments in such projects, and the alternative of national projects designed within a regional or multi-national context. The status of the technical field advisers of the agencies and the working relationship of these advisers with the resident representatives, particularly with regard to the implementation of the agreements concluded by UNDP with UNIDO and FAO, were discussed and clarified.

17. The Hot Springs meeting provided an opportunity for representatives of UNIDO to meet resident representatives, and to acquaint them with the aims and objectives of UNIDO and to discuss present and future operational programmes in their respective regions.

18. During 1968 UNIDO was visited by some 50 resident representatives and deputy representatives who were briefed on the activities and programme of work of the Organization in their respective regions.

Evaluation of programmes of technical co-operation

19. The Industrial Development Board at its second session stressed the need for an evaluation of the results achieved by the follow-up and implementation of projects.^{1/} This matter, in its broader aspects, has been the subject of recent resolutions adopted by the Economic and Social Council (ECOSOC).^{2/} The Administrative Committee on Co-ordination (ACC) has further established an Inter-Agency Study Group on Evaluation to review and clarify matters associated with terminology and work involved in the evaluation of technical co-operation programmes of the United Nations system.

^{1/} ID/B/41, para 45, page 11.

^{2/} ECOSOC 1364 (XLV) and 1365 (XLIII).

20. The ACC, in its report to the forty-fifth session of ECOSOC, provided clarification, based on the findings of its Study Group, on the concept of evaluation. This concept "would be more clearly understood if it were related to four distinct phases in development assistance activities, in each of which elements of evaluation entered to a greater or lesser extent. These phases were: identification of needs, appraisal of projects, operational control, and evaluation of results. The evaluation of results, if perhaps the most important in this context, was only one phase in the process."⁴ The evaluation of results was further defined as follows:

"Over-all evaluation consists in estimating the scope, cost and potential effectiveness of a project or programme before a decision is taken on it, checking the estimates and performance during its execution, and determining the cost and the results achieved when the project or programme is finally completed."⁴

21. The United Nations Institute for Training and Research (UNITAR), in its report to the forty-fifth session of the ECOSOC, suggested an additional element to the four phases of evaluation enumerated above, namely the over-all impact of technical co-operation activities on the economic and social development of countries. This type of evaluation is being currently undertaken in Chile, Ecuador, Iran, Thailand and Tunisia. The report also made some preliminary comments on each of the phases of evaluation exercise and concluded that it would be unpractical to try to evaluate the effectiveness of every project, for some types of projects required different methods as no single method would be applicable to all projects.

22. From the foregoing it is clear that evaluation has become a major concern within the United Nations system of organizations, particularly during the past three years. Since its inception UNIDO has been aware of the needs for a continuous process of evaluation, not only in the broader sense in which evaluations are presently being made by other competent bodies, but with an aim to ensuring that its own methods are suitable and adapted to the requirements and needs of the developing countries and are consistent with the purposes for which UNIDO was established.

⁴ E/CN.4/Annex VII, Annex VII, para 2.
⁵ A/32/22, para 74.

23. During 1967, a special unit was set up within the General Secretariat of the Division with the purpose of evaluating in a systematic and planned manner the activities of UNIDO with special regard to the field operation programmes. It was realized at once that evaluation had numerous aspects and that, in particular, an analysis was necessary of whether the methods which had been carried over from the United Nations system were fully applicable to the type of field operations related to industrial development. The task was divided into separate analyses of the various programmes, and they have been carried out for UNDP/SF, SIS and UNDP/PA programmes. The analysis of the regular programme and the extra budgetary operations of various kinds will follow.

24. In this first series of analyses, a general assessment is being made to identify specific areas of interest, and priorities are being established for subsequent study, in more depth, of selected aspects. The UNDP/SF and the SIS programmes were analysed in the first instance as it was felt that they pose a certain number of problems as regards operational methods and efficiency. The first subject singled out, in which significant improvements appear necessary, is the time lapse for starting or delivering the projects. Among the factors that particularly affect the start of a project are the preparation of job descriptions, the drafting of plans of operation, recruitment etc. On the basis of findings made so far, certain measures have already been taken which will be followed up by operational directives designed to correct, gradually, existing deficiencies. Some results have already been obtained.

25. Another issue applying to all technical assistance operations that would require further examination is that of reporting. This includes the operational reports which are required to provide adequate headquarters backstopping and management of the programmes and projects; programme reporting which is required for the establishment and management of the programmes; reporting to the Industrial Development Board and other executive bodies on the development of field operations; and finally, the operational final reports, submitted to Governments, summarizing the results of the technical assistance missions.

26. A large amount of statistical and survey work is being performed and more time is necessary until the evaluation work can be translated into operational directives. One of the practical measures envisaged is the issuance of a new UNIDO guidebook for the drafting of progress reports and final reports by expert missions. Parallel with the issuance of the guidebook, operational directives will be prepared for the effective handling and utilization of the reports within the various sections of UNIDO. Particular attention will be given to the updating of the format and contents of final reports so that they answer the needs of industry and become a uniformly effective tool in the hands of Governments for application to their industrial development. In addition to their technical contents, special attention will be given in the final reports to applicability and possibilities for follow-up, taking into account the particular conditions of the country concerned.

27. The process of evaluation is intended to be a continuous function. The next step, after completing the above mentioned tasks, will be a more thorough examination of other factors affecting the quality of the field operations with the ultimate aim of continuously improving the transfer of know-how.

28. In addition to the headquarters evaluation activities started at UNIDO in 1968, it is envisaged to establish a field evaluation machinery to provide regular and continuous information from the field to headquarters. Evaluation reports, which are being prepared outside of UNIDO and which are relevant to UNIDO's activities, will be examined and utilized with special regard to the avoidance of duplication and overlapping.

29. In this context, UNIDO hopes to evolve, in co-operation with interested Governments, certain aspects of adapting technical assistance procedures to problems of industrial development as well as methods for assessing the results and impact of specific projects on the industrial development and on the over-all economy of their countries. Training and fellowships programmes and the effectiveness of regional and interregional programmes will be given special consideration.

30. Although the activity of evaluation has been in effect only for a relatively short time, some results have already been achieved. Evaluation is an important activity which will have to be continued and intensified. In view of the complexity of the process of industrial development, the effectiveness of the evaluation machinery has an important bearing on the efficiency of the assistance programmes.

Improvement of Project Implementation Machinery

31. In the course of the year a number of measures were taken at headquarters to expedite the implementation of field projects. A Technical Assistance Recruitment Service Unit has been established in UNIDO which will take over, as of 1 January 1969 the recruitment and appointment of UNIDO experts outside the Western Hemisphere. Concurrently, work commenced for the establishment in Vienna of a roster of candidates for UNIDO expert posts. Preparations have also been made to issue job descriptions for technical assistance personnel direct from Vienna.

32. The possibility of concluding contractual arrangements with industrial enterprises and institutions for the provision of experts to UNIDO projects, particularly under the SIS programme, has also been explored and a model contract has been drawn up for use in such arrangements. Several firms will be provided with job descriptions of vacant posts by the end of 1968.

33. On several occasions UNIDO substantive officers visited national authorities in connexion with recruitment of experts in order to explain the needs of UNIDO and to prospect for, or interview, candidates for particular posts.

34. In addition to accelerating the recruitment of project personnel, UNIDO took administrative measures to streamline its project implementation procedures at headquarters. The responsibility for projects, at all stages, from receipt of a request to the completion of work in the field has been entrusted to the area sections of the Technical Co-operation Division to eliminate delays or overlapping in the recording, review and approval of requests heretofore handled separately. It is expected that the new procedure will also better cope with the Special Industrial Services and will facilitate the revised

method of continuous programming for UNDP/TA. At the same time, special emphasis was placed during 1968 on expediting implementation of field projects under all programmes, with the satisfactory results indicated by this year's implementation figures.

35. A special report on the subject of recruitment of technical assistance personnel appears in document ID/B/53.

ANNEX VII

NOTE ON VOLUNTARY CONTRIBUTIONS

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The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Industrial Development Organization concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

1. Introduction

1. The Board of Administrative and Financial Affairs of the Industrial Development Board, in its report to the Board, the Director-General of the Board and the Secretary-General in accordance with the results of the action undertaken by the secretariat with a view to obtaining voluntary contributions for the UNIDO operational programmes pursuant to paragraph 23(a) of section II of General Assembly resolution 2152 (XXI).

2. In a note verbale dated 29 August 1968, the Executive Director, recalling resolutions 7 (I) and 19 (II) adopted by the Board at its first and second sessions, expressed the hope that States Members of the United Nations or members of specialized agencies or of the International Atomic Energy Agency, would participate in the Pledging Conference to be convened by the Secretary-General during the twenty-third session of the General Assembly. During various visits and missions in 1968, the Executive Director and senior staff members of the secretariat stressed in their discussions with high government officials of the countries visited the great importance attached by UNIDO to the Pledging Conference as a valuable instrument for financing the UNIDO operational activities. The UNIDO industrial field advisers, in their respective regions, have used their contacts with the appropriate governmental institutions to express similar views and the New York Liaison Office of UNIDO has maintained close contacts with the Permanent Representatives of the Member States to the United Nations in order to create favourable conditions for the Conference.

3. In response to resolution 2 (I) of the Board, pursuant to paragraph 23(a) of section II of General Assembly resolution 2152 (XXI) of 17 November 1966, the Secretary-General convened the first United Nations Pledging Conference on UNIDO by a note verbale dated 5 September 1968 in which the Governments of States Members of the United Nations, or members of specialized agencies or of the International Atomic Energy Agency were invited to participate in the Conference and to announce their contributions at the Conference.

4. The Conference met at United Nations Headquarters on 2 December 1968. The Governments of the following States were represented: Afghanistan, Algeria, Argentina, Australia, Austria, Belgium, Bahrain, Cambodia, Ceylon, Chile, China, Colombia, Costa Rica, Denmark, Dominican Republic, El Salvador, Federal

Republic of Germany, Finland, France, Greece, Iceland, India, Indonesia, Iran, Iraq, Israel, Italy, Japan, Kenya, Kuwait, Liberia, Luxembourg, Malaysia, Mauritania, Mexico, Netherlands, New Zealand, Niger, Norway, Oman, Pakistan, Philippines, Poland, Republic of Korea, Romania, Saudi Arabia, Senegal, Singapore, Southern Yemen, Sudan, Sweden, Switzerland, Syria, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, United Arab Republic, United Kingdom, United Republic of Tanzania, United States of America, Union of Soviet Socialist Republics, Upper Volta, Venezuela, Yemen, Yugoslavia and Zambia.

5. The Secretary-General said in his opening statement that in recommending the establishment of a separate plenary conference for UNIDO, the Industrial Development Board had expressed its conviction that the autonomy and effectiveness of UNIDO could be better ensured if it also had its own independent financial resources. Both the General Assembly and the Industrial Development Board had frequently stressed the need to assure adequate resources for the operations of UNIDO, which had already initiated a wide spectrum of industrial operations. In the light of the undeniable importance of industrialization for developing countries, many Governments should announce specific pledges of contributions to UNIDO. The success of the Conference would advance the industrial progress of the developing countries.

6. In his statement to the Conference, the Executive Director of UNIDO recalled the high hopes that the creation of UNIDO had inspired. The ultimate success of UNIDO in coping with the problems of industrialization depended on the existence of an adequate framework for international co-operation, for although significant forward strides had been made, the challenge of the task that lay ahead still loomed large. The response of the Governments to this challenge and their support in providing the means necessary to carry out the practical aspects of the work would ultimately determine whether UNIDO would be able to live up to the high hopes inspired by its creation.

7. During the Conference a number of Governments had pledged to contribute to UNIDO. The Executive Director expressed his appreciation for the generosity of the contributing Governments and his confidence that the contributions would be used to the best advantage in carrying out the work of UNIDO. He also expressed his confidence that the contributions would be used to the best advantage in carrying out the work of UNIDO.

8. In statements made by representatives of the contributing Governments, the view was expressed that UNIDO should have an autonomous source of finance for its operational activities and a degree of financial independence equal to that of comparable United Nations bodies. Some participants indicated that their Governments, although willing to pledge contributions to UNIDO, were not at present in a position to do so, mostly for financial reasons. They hoped however to announce their contributions at a later date. These countries were: the Dominican Republic, El Salvador, Gabon, Ghana, Guatemala, Kenya, Mexico, Mongolia, Niger, Panama, the Philippines, the Republic of Korea, Southern Yemen, Syria, Thailand, Trinidad and Tobago, Turkey, Upper Volta, Yemen and Zambia.

9. In a letter dated 16 December 1968, the Permanent Representative of the Philippines to the United Nations informed the Secretary-General that his Government had decided to pledge US\$10,000 as its contribution to UNIDO for 1969, and in a note dated 16 December 1968 the Permanent Representative of Barbados to the United Nations informed the Secretary-General that his Government had pledged a token sum of EC\$500 (US\$250) as its contribution to UNIDO. With these additional pledges the total of funds pledged by the Member States amounts to the equivalent of US\$2,666,358. (See table on page 5.)

10. Other members of the Conference expressed the view that the technical assistance activities of UNIDO should be financed from UNDP funds and that UNIDO's operational activities should be expanded by absorbing more UNDP projects; for these reasons they did not intend to contribute to a special fund for the operational activities of UNIDO. Some indicated that they had increased their contributions to UNDP and hoped that these increases would be devoted to industrial activities. These countries were: Australia, Canada, Denmark, Finland, Iceland, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States of America.

1968 United Nations Pledging Conference on UNIDO

Contributions Pledged to UNIDO for 1968

<u>Country</u>	<u>Currency of pledge</u>	<u>Equivalent in US\$</u>
Afghanistan	US\$	1,000
Algeria	-	10,000
Argentina	US\$	10,000
Austria	US\$	10,000
Barbados	EC\$500	1,000
Brazil	US\$	10,000
Bulgaria	20,000 levar	10,000
Ceylon	-	2,000
Chile	-	5,000
China	US\$	10,000
Cuba	20,000 peser	10,000
Cyprus	300 Cyprus pounds	120
Czechoslovakia	1,000,000 Czechoslovak crowns	138,504 ^{a/}
Germany, Federal Republic of	US\$	1,000,000
Greece	US\$	5,000
Guyana	US\$	1,000
Hungary	500,000 forints	16,667
India	-	50,000
Indonesia	-	25,000
Iran	US\$	50,000
Iraq	US\$	10,000 ^{b/}
Israel	US\$	10,000 ^{b/}
Italy	US\$	300,000
Ivory Coast	US\$	4,000
Jamaica	US\$	4,000
Kuwait	US\$	10,000
Lesotho	US\$	500
Malta	100 pounds sterling	250
Mauritania	US\$	2,000
Nigeria	US\$	5,000
Pakistan	-	25,000
Peru	US\$	10,000
Philippines	US\$	10,000
Poland	1,200,000 zlotys	50,000
Romania	200,000 lei	17,333
Rwanda	150,000 Rwanda francs	1,500
Singapore	US\$	1,000
Somalia	US\$	1,000
Sudan	US\$	10,000
Tunisia	US\$	5,000
United Arab Republic	47,500 Egyptian pounds	109,241
United Republic of Tanzania	56,000 Tanzanian shillings	7,333
Union of Soviet Socialist Republics	500,000 roubles	555,357
Venezuela	US\$	20,000
Yugoslavia	-	10,000
		<u>2,000,000</u>

a/ For the Special Industrial Services programme

b/ Of which \$5,000 in local currency for anti-transportation activities.

Utilization of Contributions in Non-Convertible Currencies

11. The utilization of voluntary contributions is, in general, examined, as usual, on a year-by-year basis, with regard to the countries for the development of any activities of UNIDO. In the utilization of this money, an effort is made to coordinate the projects in which the contributions will be utilized with the other technical assistance and supporting activities of UNIDO.

12. It is believed that, on the basis of experience to be gained during 1969, a system could be evolved whereby such contributions could be optimally utilized to strengthen UNIDO activities in the field and at headquarters.

The Executive Director would like to submit for the consideration of the Board the following tentative guidelines for the utilization of the contributions, including those made in non-convertible currencies:

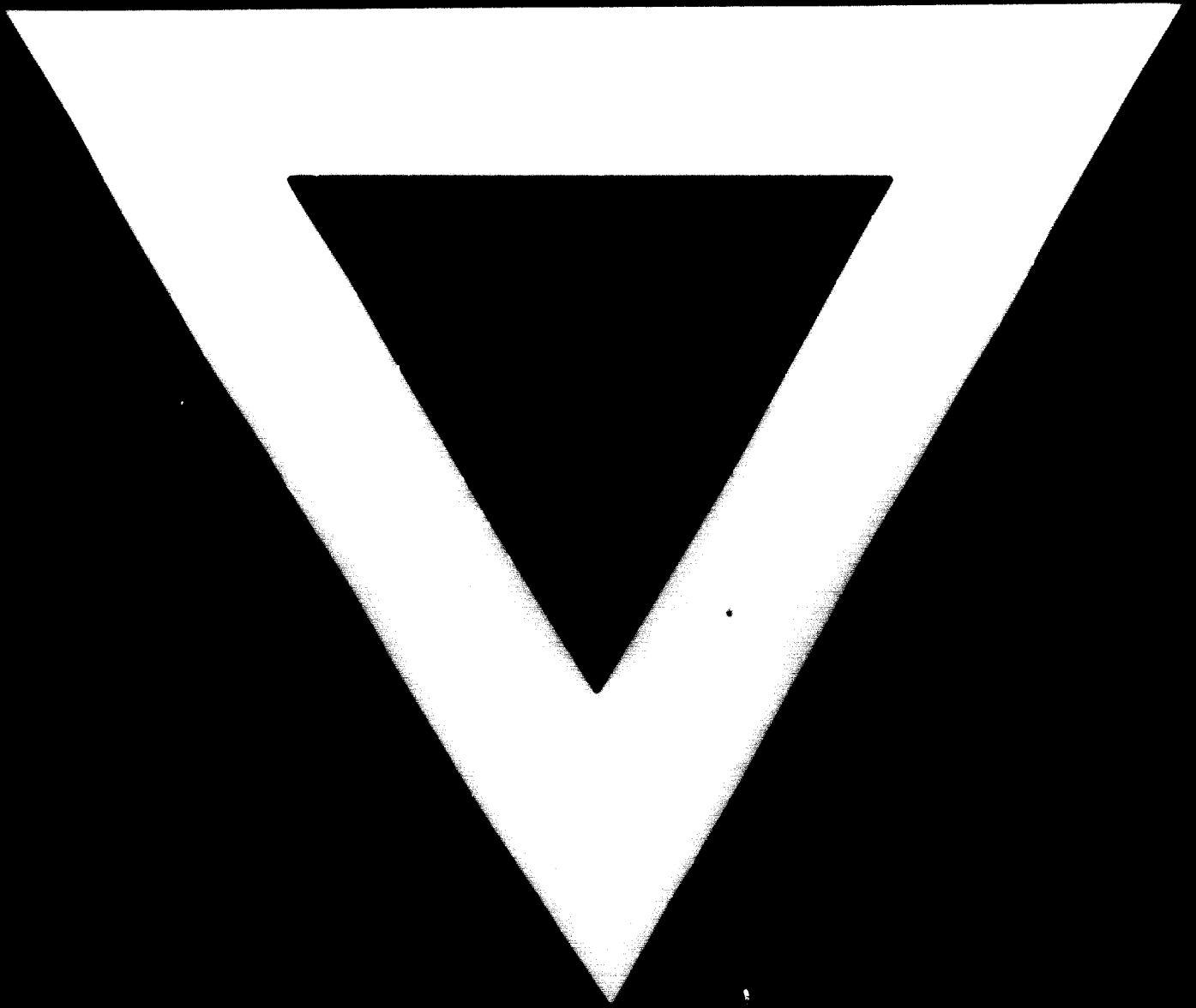
- To establish certain servicing units in developing countries. Such units, which could be used by one or by a group of industrial establishments, could include repair and maintenance shops (permanent establishments and/or mobile units); quality control, laboratory testing and research facilities; and pilot plants for production of spare parts.
- To strengthen or establish industrial information units in the developing countries. Included in such a programme would be special equipment, books, reference and all materials and the translation of important UNIDO publications into languages other than the official United Nations languages which are usually used in the regions. Facilities in donor countries might also be used for film production for promotional and training purposes.
- To set up training programmes. The programmes would include various training schemes for senior permanent personnel or personnel in the industrial or business sectors; they could be carried out through workshops, field visits and training programmes at UNIDO headquarters. Members of UNIDO National Committees would qualify for such programmes.
- To establish a system of paid UNIDO correspondents in Member States to report on appropriate and current industrial development activities.
- To send advisory and technical missions to developing countries for assessment and technical aid. Funds from other sources would be supplemented by the use of non-convertible contributions for the payment, in local currencies, of travel and other expenses.
- To carry out research, training and publication programmes of UNIDO. A special effort would be made to utilize non-convertible currencies.
- To encourage the use of non-convertible contributions to carry out industrial development projects in developing countries. These should be done through agencies: (a) which are members of UNIDO, (b) which are not members of UNIDO but which are active in industrial development in the region, and (c) which are not members of UNIDO but which are active in industrial development in the region.

requires laboring contributions, and in cases lacking the necessary resources, contributions are assigned to an outside organization.

- To organize meetings. Meetings are organized at regional or international meetings. Contributions from all countries are particularly welcome at these types of events.
- To carry out industrial promotion, including participation at selected trade fairs or exhibitions.

13. In all the above cases it is understood that the financial authority would issue the appropriate instructions and take the necessary steps to ensure that non-convertible contributions are utilized to the fullest extent by using them for payments in local currencies.





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