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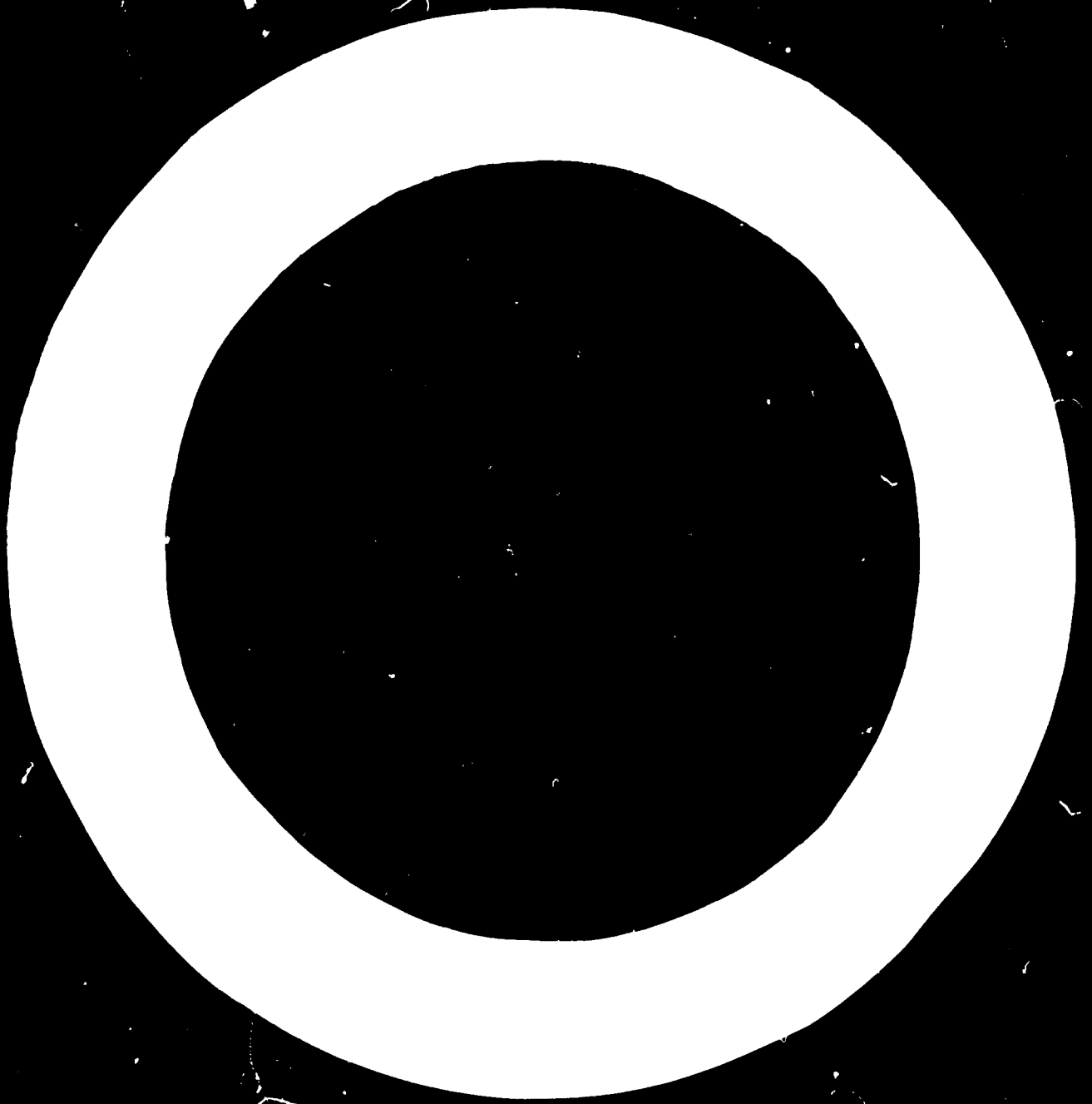
Second Session

Vienna, 17 April - 14 May 1968

Agenda Item 4

REPORT ON 1967 ACTIVITIES  
OF THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Submitted by the Executive Director of UNIDO



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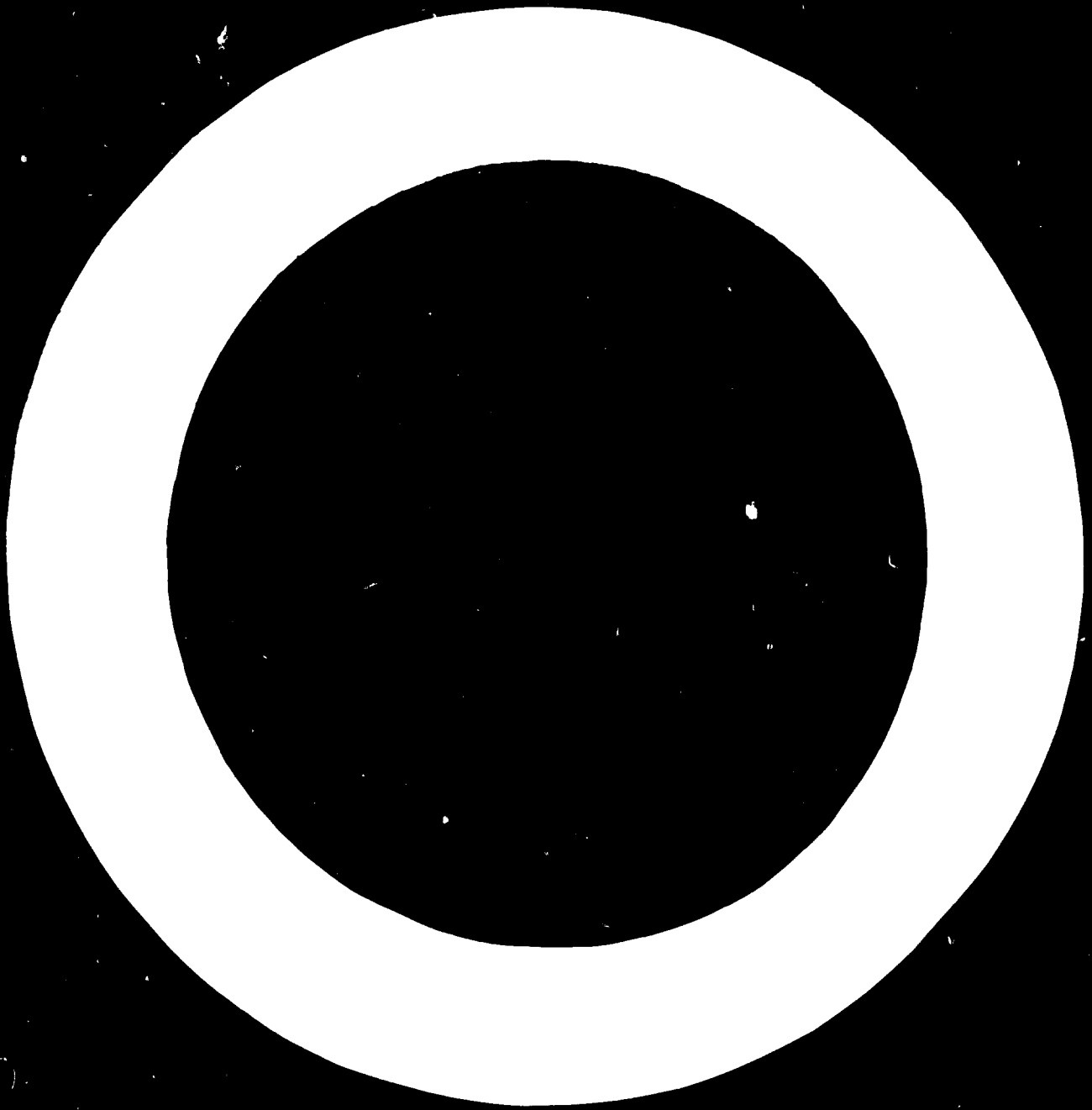
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### Introduction

1. The 1967 report on UNIDO's activities is submitted to the Industrial Development Board on its Second Session in compliance with resolution 2152(XXI) of the General Assembly.

2. The report has been prepared following the guidelines set up by the Board at its First Session and aims at providing an account of the operational and supporting activities of UNIDO during 1967. The activities described in the report should be considered in the context of the Programme of Work of UNIDO for 1967 submitted to the Board at its First Session (document ID/B/4). In order to facilitate the reference to the latter document, the organization of this report follows as closely as possible that of the Programme of Work. On the other hand, in order to provide for continuity in the method of reporting in the following years, the material has been organized in fifteen main areas of work following the procedure adopted in the Programmes of Work for 1968 and 1969 which are also submitted to this Session of the Board (ID/B/20/Rev.1 and Add.I and ID/B/26).

3. A number of activities carried out by UNIDO in 1967 represent a continuation of the projects initiated in 1966 or in the earlier years under the programmes of work of the former Centre for Industrial Development. At the same time, an effort was made during the year to re-orient the new activities as far as possible along the guidelines set forth by the Board in its First Session as to priorities and nature of the supporting activities.

4. As is also being pointed out in the Introduction to the Programme of Work for 1968 (ID/B/20/Rev.1 and Add.I), in evaluating the activities of UNIDO in 1967 a certain number of factors have to be taken into account, namely:

- (a) 1967 being the first year of establishment of UNIDO, and the year of the transfer of the seat of the organization from New York to Vienna, the organization had to contend with many difficult organizational problems, including the setting up of administrative, managerial and physical facilities for services formerly provided by the United Nations Secretariat<sup>1/</sup>;
- (b) The move of UNIDO Headquarters from New York to Vienna involved a certain degree of dislocation, including loss of staff members who were unable, for a variety of reasons, to move to the site of the new organization; and

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<sup>1/</sup> A note on the Administrative Activities of UNIDO in 1967 is contained in Annex 1 to this document.

- (c) There were considerable claims on the resources of the Secretariat in connexion with the preparation and the holding of the International Symposium on Industrial Development in Athens.

5. A notable development in the course of the year in connexion with the operational activities of UNIDO was the designation of UNIDO by the United Nations Development Programme as a participating and executing agency in its field of competence as of 1 July 1967. As of that date UNIDO took over all operational projects in the field of industry that had been formerly under the responsibility of the Department of Economic and Social Affairs at United Nations Headquarters in New York. Thus, in addition to the Special Industrial Services, which had been already under its direct responsibility, UNIDO has been put fully in charge of technical assistance activities in the field of industry under all United Nations programmes of technical assistance.

6. As a result of the transfer of operational responsibilities described in the previous paragraph, arrangements were reached with United Nations Headquarters in New York to transfer gradually the responsibilities for the financial management of all technical assistance programmes in industry, formerly handled by ASTAO.<sup>2/</sup> These arrangements provided that the transfer should be completed by 31 December 1967 so that as of 1 January 1968, the financial management of the various technical assistance projects in industry would be under the full responsibility of UNIDO's Headquarters in Vienna.

7. In connexion with UNIDO's assumption of new responsibilities under the various assistance programmes described above, an effort was made to ensure a transfer of functions with a minimum of dislocations during the transitional period. Arrangements were made between the responsible officers of UNIDO and UNDP to ensure continuity of operations and avoid as much as possible delays that would affect the operations in the field. Arrangements were made to establish effective channels of communication between Vienna and New York, in which the New York Liaison Office of UNIDO referred to in the following paragraph is playing an important role.

8. Effective 1 November 1967 a UNIDO Liaison Office was established at United Nations Headquarters in New York with the following functions:

- (a) To provide for UNIDO representation at intergovernmental and other meetings held at United Nations Headquarters;

<sup>2/</sup> Administrative Services, Technical Assistance Organization, subsequently Financial and Administrative Management, Office of Technical Co-operation (OTC).

- (b) To carry out liaison functions for the co-ordination of the activities of UNIDO with those of the appropriate Secretariat units at United Nations Headquarters, in particular with the UNDI, and of the international agencies located in the United States and Canada; and
- (c) To maintain liaison with industries, research organizations and other agencies related to the operational and research programmes of UNIDO, with special emphasis on industrial financing and promotion.

9. A new element in the machinery established in UNIDO in the field of operational activities is the appointment of field industrial advisers following the recommendations of the First Session of the Industrial Development Board aiming at strengthening the links of UNIDO with the field. In October 1967 an agreement was signed between UNIDO and UNDP under which UNDP undertook the financing of a certain number of UNIDO field advisers outposted to offices of Resident Representatives established in selected developing countries<sup>3/</sup>. The functions of these officers include in the first place promotion and co-ordination of technical assistance projects in industry in the countries under their jurisdiction through contacts with the national authorities and institutions dealing with industrial development. They advise the Resident Representatives on matters relating to operational activities within the competence of UNIDO and also maintain the necessary contacts with the Regional Economic Commissions. The field adviser programme was initiated in the second half of 1967 with the outposting of two staff members to Latin America and the Far East and other ad hoc arrangements for the servicing of the Middle East and African regions. Information on the further development of this programme in 1968 and 1969 is given in the respective Work Programmes for these years (ID/B/20/Rev.1 and Add.I and ID/B/26 and its addenda.)

10. An important part of the activities of UNIDO during 1967 was devoted to the preparation and holding of the International Symposium on Industrial Development which met in Athens, as scheduled, from 29 November to 19 December 1967. The Symposium was attended by some 600 participants from 78 member states and 37 international organizations. The discussions at the Symposium, which were organized in Plenary Sessions and three Committees, led to a certain number of recommendations for action relating to both the specific and general policy aspects of industrialization of the developing countries. Concurrently with the Symposium, and taking advantage of the presence in Athens of many prominent representatives from governments and industries interested in the problems of industrialization, an Industrial

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<sup>3/</sup> The text of the Memorandum of Agreement appears as Annex 2 to this document.

Promotion Service was organized as a clearing-house for discussion of specific projects. A special category of attendants, so-called "Special Guests", was established to permit the participation of interested parties who were not members of official delegations. The Promotion Service was well attended and produced fruitful results in terms of projects discussed and initiated by participants.

11. A report on the Athens Symposium, which also includes a section on the Industrial Promotion Service, is submitted to the Board in document ID/B/21 and Add.I in accordance with resolution 2178 (XXI) of the General Assembly, which "considering that the Symposium, as the first world-wide forum on industrialization to be held under United Nations auspices is likely to play a significant role in focusing attention on policies and measures aimed at strengthening international co-operation in the field of industrial development and accelerating the industrial development of the developing countries", requested the Industrial Development Board "to study in due course the recommendations of the Symposium and to take appropriate follow-up action".

12. Close co-operation was maintained with Regional Economic Commissions and UNESOB in implementation of projects of common interest as regards both operational and supporting activities. Continued contacts were maintained with the respective secretariats in the form of joint projects, mutual exchange of information in areas of common interest and participation in meetings. The Regional Economic Commissions and UNESOB also actively participated in the preparation of the documentation for the International Symposium on Industrialization and members of their secretariats served on the secretariat of the Symposium.

13. As regards co-operation with the specialized agencies, reference may be made here to the relevant paragraphs in the Introduction to the Work Programme for 1968 which deals with this matter in some detail.<sup>4/</sup> Preliminary exchanges of views took place in the second half of 1967 with the specialized agencies concerned, namely ILO, FAO, UNESCO and WHO. These preliminary contacts were followed in February 1968 by a round of high-level consultations by the Executive Director of UNIDO with the heads of these organizations. The objective of these consultations was twofold: first to establish working arrangements with the specialized agencies concerned for the development of joint programmes of work in a certain number of well defined

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<sup>4/</sup> See paras. 11-16 of document ID/B/20/Rev.1.

areas of common interest; second, to arrive at a workable solution of the problem of co-ordination in those areas in which there is at the present time overlapping of activities, so as to enable UNIDO to exercise effectively the central role in co-ordination of activities of the United Nations System in the field of industrial development that has been conferred on it by the General Assembly. As is mentioned in document ID/B/27 submitted to this Session of the Board, it is felt that these consultations have made it possible to achieve substantial progress towards a constructive solution of the problem of co-operation and co-ordination of activities of the United Nations family of organizations in the field of industrial development.

14. In the same area of inter-agency relationships it should be noted that fruitful co-operation has been established with the World Food Program in the development of joint projects in the form of assistance in food for promotion of industrial projects in developing countries. This co-operation has been further strengthened through the secondment by the World Food Program of a staff member as liaison officer stationed at UNIDO Headquarters in Vienna.

15. The organization of this report is as follows: Following the Introduction, the material is in two parts. Part I contains a summary review of UNIDO activities in 1967, covering: (a) Technical co-operation projects under various programmes; (b) Meetings, seminars and working parties; (c) Studies and reports; (d) Publications; and (e) Consultants and staff resources. Part II gives a detailed presentation of the activities by projects under both operational and supporting activities, arranged by fifteen groups of activities.

16. The report contains in addition two annexes: Annex 1 on Administrative Activities of UNIDO in 1967; and Annex 2, the text of the UNDP/UNIDO Memorandum of Agreement on Field Advisers.

17. A separate report on the status of the Special Industrial Services Programme as of 31 December 1967 is submitted in document ID/B/22/Add.I.

PART I SUMMARY REVIEW OF THE ACTIVITIES IN 1967

18. As indicated in the introduction, this report follows the lines adopted for the draft of the 1968 programme of work (ID/B/20/Rev.1 and Add.I). The activities developed by UNIDO in 1967 are described in Part II, the material being organized in fifteen main groups. Under each activity group the activities are reported as follows: Section A lists the field projects; Section B lists the meetings of expert groups, seminars and working parties; Section C the studies and research projects; and Section D the publications issued in 1967. The field projects are listed by Technical Assistance programmes under which they are financed in the following order: UNDP, Special Fund component; Special Industrial Services (SIS); UNDP/TA; and the Regular Programme. Each project is given a short description, an indication of its duration in man-months and its cost.

19. In the following paragraphs a summary account is presented of the activities in 1967 by major areas as regards both operational and non-operational (supporting) activities.

I. Field Projects

(a) Technical Assistance, Special Fund Component

20. During 1967 UNIDO serviced eighteen projects of the Special Fund component of UNDP to a total value of \$36,163,100. This amount included \$16,549,100 for the share of the United Nations and \$19,614,000 for the counterpart contribution by the assisted countries. The approved target of expenditures for 1967 for all projects under the United Nations contributions was \$3,144,936. The actual expenditures during the year amounted to \$1,534,783 - about the same level as the \$1,597,000 spent in 1966 - or approximately 50 per cent of the earmarked amount. It should be borne in mind that Special Fund projects are carried out by the executive agency on behalf of the UNDP and the recipient governments. Thus, implementation is also affected by the absorptive capacity of the recipient countries, in particular by the rate of provision of the administrative and physical facilities under the countries' counterpart contributions.

21. The geographical distribution of the expenditures on the Special Fund projects was as follows:

Table 1  
Geographical Distribution of Expenditures in 1967  
under the UNDP Special Fund Programme

	<u>No. of projects</u>	<u>Amount of expenditure</u>	<u>Per cent</u>
Africa	8	\$ 555,027	36.1
The Americas	3	399,957	26.0
Asia and the Far East	4	368,737	24.0
Europe and the Middle East	<u>3</u>	<u>211,062</u>	<u>13.9</u>
Total	18	\$1,534,783	100.0

(b) Special Industrial Services

22. A detailed statement of the status of the Special Industrial Services Programme by the end of 1967 is contained in Addendum I to the present document. The following remarks relate to the implementation of the programme in 1967.

23. The cumulative value of requests under the SIS Programme approved as of the 31 December 1967 was \$2,951,785 as against \$449,000 by the end of 1966, making a total of \$2,502,705 in new requests approved in 1967. The largest part of these requests came up in the latter part of the year. The value of implementation, as measured by the figure of commitments, reached a total of approximately \$594,000 by the end of 1967. As compared to the exceptionally fast growth of the programme, the rate of implementation could be increased only gradually for reasons stated in detail in the document quoted above.

(c) Regular Programme and the UNDP/TA Component

24. As shown in Table 2 below commitments under the Regular Programme in 1967 amounted to \$951,453 against a programmed total of \$1,062,975 which gives a rate of implementation of 90 per cent.<sup>5/</sup>

<sup>5/</sup> It should be noted that this value exceeded the original allotment of \$1,049,000 by \$13,975.

(d) The Technical Assistance Component of UNDP

25. The programme value of \$2,732,115 given in Table 2 exceeds the original allotment - which is 50 per cent of the value of the programme for the 1967-1968 biennium - by \$353,725.<sup>6/</sup>

26. Referring again to Table 2, the programme shows a rate of implementation of 62 per cent in 1967. This relatively low rate is explained by the procedures of biennial programming. The practice usually followed in distributing the programme over the two-year period was to over-programme for the first year and under-programme for the second year of the biennium; in this way allotments were distributed over the programmed period in such a way as to avoid unspent allotments which are not transferrable to the next budget period. This procedure normally results in a low rate of implementation for the first year which is normally compensated by a higher rate in the second.<sup>7/</sup>

27. Tables 3 and 4 below give the distribution of expenditures under the two programmes by geographical area (Table 3) and by field of activity (Table 4).

28. As regards distribution by geographical area (Table 3), Asia and the Far East leads by a total of \$888,712 or 33.5 per cent of the total, followed by Africa with a total of \$549,073 or 20.7 per cent, Europe and the Middle East with a total of \$437,422 or 16.5 per cent and Latin America with a total of \$407,268 or 15.5 per cent. As is also shown in Table 3, the total of regional projects amounts to \$324,812 and interregional projects \$364,548.

<sup>6/</sup> This sum includes a subsequent allocation of \$89,280 for Indonesia, \$8,700 inter-agency transfers and \$256,645 of programming over resources available for the current year.

<sup>7/</sup> See also in this connexion paragraph 22 in the Programme of Work of UNIDO for 1968, Document ID/B/20/Rev.1. It will be noted that in the preceding biennium of 1965-1966 the implementation of the programme in 1966 exceeded that of 1965 by about 45 per cent. The obligations incurred in these two years were respectively \$2,141,600 and \$1,471,600.



Table 2  
Summary of the Implementation of Technical Assistance Programmes  
in 1966 and 1967

(Regular and UNDP/TA Programmes)

	Regular Programme		UNDP/TA		Regular and UNDP/TA	
	<u>1966</u>	<u>1967</u>	<u>1966</u>	<u>1967</u>	<u>1966</u>	<u>1967</u>
Total programme value	1,054,000	1,062,975	1,916,000	2,732,115	2,970,000	3,795,190
Total commitments	887,900	951,453	2,141,600	1,695,570	3,029,500	2,647,023
Percentage of implementation	88%	90%	-	62%	-	-

29. As regards distribution by fields of activities (Table 4), the largest share of technical assistance under the UNDP/TA programme, which is devoted primarily to assistance in the field, is absorbed by assistance to individual industries, with engineering industries as a major recipient of assistance. The next area in order of importance is industrial programming and policies (with major emphasis on Group 12). Other areas of concentration are small-scale industry (Group 11), standardization and quality control (Group 8) and management and training (Group 10).

Table 3

Value of Technical Assistance to Industry  
by Geographical Area  
(in thousands of dollars)

	Regular Programme, including OPFX	UNDP/TA	Total	Per cent
<u>AFRICA</u>				
Countries	119,555	325,489	445,044	16.8
Regional Projects	104,029	-	104,029	3.9
<u>THE AMERICAS</u>				
Countries	70,249	225,854	296,103	11.2
Regional Projects	111,165	-	111,165	4.3
<u>ASIA AND FAR EAST</u>				
Countries	110,340	693,175	803,515	30.3
Regional Projects	64,995	20,202	85,197	3.2
<u>EUROPE AND MIDDLE EAST</u>				
Countries	92,845	320,156	413,001	15.6
Regional Projects	24,421	-	24,421	0.9
<u>TOTAL ALL REGIONS</u>				
Countries	392,989	1,564,674	1,957,663	73.9
Regional Projects	304,610	20,202	324,812	12.3
<u>INTERREGIONAL PROJECTS</u>				
	253,854	110,694	364,548	13.8
TOTALS	951,453	1,695,570	2,647,023	100.0

Table 4  
Value of Technical Assistance to Industry  
by Field of Activity  
(in percentages)

Field of Activity	Regular Programme	UNDP/TA	Total
<u>Technology Division</u>			
1. Engineering	2.6	19.4	13.4
2. Metallurgical	-	8.4	5.4
3. Construction	5.3	2.1	3.2
4. Chemicals, Petro-Chemicals, etc.	7.3	7.2	7.2
5. Fertilizer	-	1.1	0.7
6. Light Industries	16.0	8.5	11.2
<b>Total Groups 1 - 6</b>	<b>31.2</b>	<b>46.7</b>	<b>41.1</b>
<u>Industrial Services and Institutions</u>			
7. Industrial Legislation	-	0.5	0.3
8. Industrial Research; Standardisation and Quality Control and Industrial Information	2.9	6.2	5.0
9. Industrial Consulting Services Industrial Organisation and Administration	2.7	0.7	1.4
10. Ind. Management and Training	-	6.1	3.9
11. Small-Scale Industries and Industrial Estates	22.0	8.9	13.7
<b>Total Groups 7 - 11</b>	<b>27.6</b>	<b>22.4</b>	<b>24.3</b>
<u>Industrial Policies and Programming</u>			
12. Industrial planning and programming; Project formulation; industrial location and regional development	41.2	27.1	32.2
13. Investment policies; industrial investment financing; financial planning	-	3.3	2.1
14. Export Promotion; development of export-oriented industries	-	0.5	0.3
<b>Total Groups 12 - 14</b>	<b>41.2</b>	<b>30.9</b>	<b>34.6</b>
<b>Grand total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## II. Fellowships

30. During the year, UNIDO continued to attach considerable importance to the needs of the developing countries in training of national personnel in various industrial activities, by providing fellowships under the individual and in-plant group training programmes. There were a total of 294 fellowship awards in 1967 - both individual and in-plant group training - under all 1967 programmes (UNDP/TA, UNDP/SF, Regular, Contingency financing), originating from 49 countries and representing 1398.5 months of training. Forty-six fellowships, totalling 285.5 months of training, could not be filled during the year for lack of submission of candidates by governments.

31. In addition, 245 fellowships, for a total of 974.5 months of training, were awarded in 1967 under funds carried over from the 1965-1966 programmes with seven more 1965-1966 posts totalling 31 months still awaiting submission of candidates by governments. Altogether, 590 fellowship posts were handled in 1967 for which 539 awards were made; 429 in the form of individual fellowships and 110 for in-plant group training in five countries: Italy, Poland, Sweden, the USSR and Yugoslavia.

32. Tables 5(a), (b) and (c) below give a breakdown of the fellowship programme in 1967 by geographical regions, fields of activity and host countries, respectively.

33. It will be noted in particular that the distribution of fellowship awards by fields of activity shows the greatest number of awards (479 posts) in various fields of industrial technology; 39 awards were made in the field of industrial services and institutions, and 21 in industrial policies and programming.

Table 5 The Fellowship Programmes in 1967

a) Distribution by Geographical Regions of origin of the Fellows

<u>Geographical Region</u>	<u>Posts under the 1965-1966 Programmes <sup>a/</sup></u>	<u>Posts under the 1967 Programme <sup>a/</sup></u>	<u>Total handled in 1967 <sup>a/</sup></u>
Africa	14/62	37/219.5	51/281.5
Asia	48/263	61/416.5	109/679.5
Latin America	10/31	37/227.5	47/258.5
Middle East	6/30	14/56.5	20/86.5
Europe	174/619.5	191/764	365/1383.5
<b>Total</b>	<b>252/1005.5</b>	<b>340/1684</b>	<b>592/2689.5</b>

<sup>a/</sup> The first figure in each entry relates to the number of fellows; the second to the number of man-months of training

**Table 5 The Fellowship Programmes in 1967 (continued)**  
**b) Distribution by Region and Field of Activities**

Region	Fields of Activity													
	Total number of fellows													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
AFRICA	40	13	13	--	5	--	7	--	--	1	--	1	--	--
ASIA	90	22	16	--	18	2	9	--	12	--	2	7	--	--
LATIN AMERICA	42	7	18	--	1	--	8	--	3	--	1	2	1	--
MIDDLE EAST	20	2	1	1	2	3	8	--	2	--	--	1	--	--
EUROPE	347	169	55	10	61	--	28	--	8	--	2	6	2	1
Total	539	213	103	11	87	5	60	--	25	--	9	5	17	3
of which:														
- Indiv. Progr.	429	187	32	11	87	5	47	--	25	--	9	5	17	3
- In-plant Group Training	110	26	71	--	--	--	13	--	--	--	--	--	--	--

Table 5 The Fellowship Programmes in 1967 (continued)

c) Distribution by host countries <sup>a/</sup>

<u>Host country</u>	<u>Number of programmes</u>	<u>Host country</u>	<u>Number of programmes</u>
Australia	1	Mexico	1
Austria	10	Netherlands	17
Belgium	7	Norway	6
Canada	8	Poland	16 (13)
China	1	Romania	2
Czechoslovakia	5	Spain	2
Denmark	11	Sweden	50 (17)
Finland	14	Switzerland	25
France	24	U.S.S.R.	71 (44)
Fed. Rep. of Germany	25	United Kingdom	82
India	3	U.S.A.	31
Ireland	2	Yugoslavia	20 (18)
Italy	44 (18)		
Japan	3	<b>Total</b>	<b>481 (110)</b>

<sup>a/</sup> The figures in brackets indicate the fellowships under in-plant group training programmes.

### III. Supporting Activities

34. The figures showing expenditures on supporting activities by various sources of funds are given in Table 6. In addition, 6(a) lists the various meetings held in 1967; Table 6(b) provides a list of studies; and Table 6(c) gives the UNIDO publications during 1967.

Table 6

#### Expenditures on Supporting Activities in 1967

	<u>UNIDO Budget</u>	<u>Regular Programme</u>	<u>UNDP/TA</u>	<u>Total</u>
(i) <u>Expert Groups, Seminars, In-plant Training and Workshops</u>				
Allotment	\$ 80,000	\$130,200	\$171,765	\$381,965
Expenditures	60,831	120,967	130,896	312,964
(ii) <u>Consultant Expenditures</u>				
Allotment	\$270,000			
Expenditures	235,000			



Table 6(a)

Expert Group Meetings; Seminars, Group Training and Workshops  
Held During 1967

	<u>Date</u>	<u>Place</u>
<u>Group 2. Metallurgical Industries</u>		
(1) Expert Consulting Group on the Aluminium Industry	10-17 Nov. 1967	Vienna
(2) Expert Consulting Group on Copper Industry	20-27 Nov. 1967	Vienna
<u>Group 6. Light Industries</u>		
(1) Experts Meeting on the Selection of Machinery in the Cotton Industry	23-27 Oct. 1967	Vienna
<u>Group 8. Industrial Research; Standardisation and Quality Control; Industrial Information</u>		
(1) Interregional Workshop of Managers of Industrial Research Institutes in Developing Countries	4-18 July 1967	Athens
(2) Expert Group Meeting on Advisory Service on the Supply of Industrial Equipment	20-24 Nov. 1967	New York
<u>Group 9. Industrial Consulting Services; Industrial Organisation and Administration</u>		
(1) Expert Group Meeting on Industrial Co-operatives	6-15 Nov. 1967	New York
(2) Seminar on the Organisation of Industrial Services in Africa (organised jointly with the African Training and Research Centre in Administration for Development - CAFRAD)	14-30 Aug. 1967	Tangier

Table 6(a) (continued)

	<u>Date</u>	<u>Place</u>
<u>Group 10. Industrial Management and Training</u>		
(1) Seven Group In-plant Training Programmes in Specific Branches of Industry, in Co-operation with Six Industrialized Countries	1967	USSR, Sweden, Italy, Yugoslavia, Poland, France
(2) <u>Ad Hoc</u> Experts Meeting of Directors of In-plant Group Training	13-17 Nov. 1967	Vienna
(3) Industrial Consultation Workshop	2-12 Oct. 1967	Belgrade
<u>Group 11. Special Problems and Institutions for Small-scale Industry Including Industrial Estates</u>		
(1) Interregional Symposium on Technical Services and Facilities for Small-scale Industries (organized jointly with the United Nations Office of Technical Co-operation and the Government of Denmark)	26 June - 8 July 1967	Vedbaek, Copenhagen
(2) Training courses for French or French-speaking small-industry experts (organized in co-operation with the Société d'Aide Technique et de Coopération - SATEC - and the French General Confederation of Small-scale and Medium-sized Enterprises)	Sept/Oct. 1967	Paris
<u>Group 12. Planning and Programming; Project Formulation; Industrial Location and Regional Development</u>		
(1) Workshop on Industrial Project Formulation and Evaluation	24 Dec. 1966 - 14 Jan. 1967	New Delhi
(2) Orientation Seminar for Policy Makers Regarding Industrial Project Formulation and Evaluation	16-21 Jan. 1967	New Delhi
(3) <u>Ad Hoc</u> Experts Meeting on Role of Advanced Skills and Technologies in Industrial Development	22-29 May 1967	New York
(4) Ad Hoc Experts Meeting on Regional Industrial Planning	29 May - 2 June 1967	Geneva

Table 6(a) continued)

	<u>Date</u>	<u>Place</u>
<u>Group 13. Investment Policies; Industrial Investment Financing; Financial Planning</u>		
(1) Experts Meeting on Investment Promotion of Industrial Projects for the Developing Countries	26-27 June 1967	New York
(2) Experts Meeting on Investment Promotion of Industrial Projects for the Developing Countries	19 Sept. 1967	New York
<u>Group 14. Export Promotion; Development of Export-oriented Industries</u>		
(1) Experts Meeting on Government Policies for the Promotion of Exports of Manufactures and Semi-manufactures from Developing Countries (organised jointly with UNCTAD)	26-30 June 1967	New York
<u>International Symposium on Industrial Development</u>	29 Nov. - 19 Dec. 1967	Athens

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In addition, UNIDO participated in the following meetings organised by the regional economic commissions, other entities of the United Nations family and other institutions:

Kuwait Seminar on Fertilizer Industries (organised by the Kuwait Petrochemical Company)	15-18 May 1967	Kuwait
Seminar on Prefabrication in the Building Industries for Latin American Countries (organised by the Centre for Housing, Building and Planning)	Aug. 1967	Denmark
Panel Meeting on Value of High-quality Water from Nuclear Desalting in Agriculture (organised by IAEA)	30 Oct. - 3 Nov. 1967	Vienna
Study Group Meeting on Impregnated Fibrous Materials (organised by IAEA)	20-25 Nov. 1967	Bangkok
Inter-governmental Ad Hoc Committee on Food Production Resources in Agriculture Development (organised by FAO)	2-9 Oct. 1967	Rome
Meeting on Supply and Demand Prospects for Chemical Fertilizers in Developing Countries (organised by OECD)	26-27 Aug. 1967	Paris

Table 6(a) (continued)

	<u>Date</u>	<u>Place</u>
Group of Experts Meeting on Statistics of Chemical Fertilizers and Pesticides (organized by FAO)	28-31 Aug. 1967	Geneva
1967 General Assembly of the International Organization for Standardization. UNIDO sponsored representatives from developing countries to attend several of the meetings.	14-28 June 1967	Moscow
Course for African Government Officials (organized by the United Nations African Institute for Economic Development and Planning and the Economic Commission for Africa)	1967	Dakar
Interregional Symposium on the Exchange of Experience in the Field of Assistance to Small and Medium-sized Firms (organized by OECD)	5-29 Sept. 1967	Paris

Table 6(b)

Studies and Research

Group 1. Mechanical and Electrical Engineering Industries

- (1) Automotive Equipment Industry (six studies)
- (2) Electrical and Electronic Equipment Industry (four studies)
- (3) International Classification Systems for Metalworking Machines and for Materials for Metalworking Industries
- (4) Adaptation of Acceptance Tests for New Machine Tools
- (5) Contribution by UNIDO to the FAO study, Role of Food Production Resources in Stimulating Agriculture in Developing Countries

Group 3. Construction and Building Materials Industries

- (1) Studies on the Competitiveness of Processes and Changing Technology in Consideration of the Adaptation of Technologies to the Construction Requirements of Developing Countries (four studies)
- (2) In Co-operation with the United Nations Centre for Housing, Building and Planning: Studies on Construction and Building Industries (three papers)
- (3) The Development of Clay Building Materials Industries (two papers)

Group 4. Chemicals, Petrochemicals and Synthetics, Insecticides and Pesticides, Pharmaceuticals and Other Related Industries

- (1) Selection of Projects and Production Processes for Basic and Intermediate Petrochemicals for Developing Countries (one study)
- (2) Setting-up of an Integrated Plastic Industry (seven studies)
- (3) Study on the Wider Utilization of Natural Rubber
- (4) Studies on the Setting-up of Regional or National Pilot Plants in the Field of Synthetic Industries
- (5) Contribution by UNIDO to the FAO Study, Role of Food Production Resources in Stimulating Agriculture in Developing Countries
- (6) The Chemical Utilization of Water Desalination Residues (one paper)

Group 5. Fertilizer Industries

- (1) Production of Fertilizers (four studies)
- (2) Study on Agricultural Inputs Prepared for FAO in Connexion with FAO's Study on Food Production Resources in Agricultural Development

Table 6(b) (continued)

Group 6. Light Industries

- (1) Food Processing (five studies)

Group 7. Industrial Legislation, Patents and Licensing

- (1) Patent Problems in Developing Countries

Group 9. Industrial Consulting Services; Industrial Organization and Administration

- (1) Report on the Nature and Role of Industrial Co-operatives in Industrial Development
- (2) Report on the Role of Manufacturers' Association in Industrial Development
- (3) Report on Trade Union Contribution to Industrial Development: Varieties of Economic and Social Experience
- (4) Manual on the Use of Consultants in Developing Countries

Group 10. Industrial Management and Training

- (1) Training Manual for Engineers and Technicians in the Textile Industry
- (2) Study on Problems of Industrial Maintenance in the Developing Countries
- (3) Survey of Current Activities in Industrial Management Training
- (4) Study on the Design of Ways and Means of Effectively Organizing Co-operation Between UNIDO and United States Universities

Group 11. Special Problems and Institutions for Small-scale Industry Including Industrial Estates

- (1) Reports on Industrial Estates and Industrial Areas in Europe and the Middle East
- (2) Financing of Small-scale Industries (three studies)
- (3) Study on the Contribution of Small-scale Industries to the Production of Bicycles
- (4) Study of National Measures for the Promotion of Exports of Small-scale Industry Products (India and Japan)
- (5) Study of the Situation, Prospects and Problems of Small-scale Industries in Selected Countries of the Middle East

Group 12. Planning and Programming; Project Formulation; Industrial Location and Regional Development

- (1) Industrial Location Planning
- (2) Profiles of Manufacturing Establishments in Selected Countries (Volume I)

Table 6(b) (continued)

- (3) Study on the Role of the Industrial Sector in Economic Development
- (4) Study on Surplus Agricultural Labour and the Development of Industry
- (5) Techniques of Sectoral Economic Planning; the Chemical Industries
- (6) An Economic Evaluation of the Expansion of Cement Production at Puttalam and of the Packing Plant near Colombo: A Case Study of Social Benefit-cost Analysis from Ceylon
- (7) An Economic Evaluation of the Durgapur Fertilizer Project: A Case Study of Social Benefit-cost Analysis from India
- (8) Lectures on Social Benefit-cost Analysis for Industrial Project Formulation and Evaluation
- (9) The Role of Policy-makers in Project Formulation and Evaluation

Group 13. Investment Policies; Industrial Investment Financing; Financial Planning

- (1) Co-operation Among Industrial Development Finance Institutions in Developing Countries (three bulletins)
- (2) Comparative Study on Fiscal Incentives for Industrial Development

Group 14. Export Promotion; Development of Export-oriented Industries

- (1) Report on Policies for the Promotion of Export-oriented Industries
- (2) Utilization of Industrial Excess Capacity for Exports

Group 15. General Research Projects Established as Continuing Activities

- (1) Industrial Development Survey

In addition, 66 documents (six of them in collaboration with ECA, ECAFE and ILO) were prepared by the UNIDO Secretariat for submission to the International Symposium on Industrial Development. A detailed list of this documentation appears in document ID/B/21, Annex 3.

Table 6(c)

1967 Programme of Printed Publications

The following publications were prepared and published in 1967:

		<u>Languages</u>
ID/1	Report of the Expert Group on Repair and Maintenance of Industrial Equipment in Developing Countries	E
ST/CID/9	Studies in Economics of Industry No.2 - Preinvestment Data for the Aluminium Industry	E
ST/CID/15	Fertilizer Manual	E
ID/SER.A/10	Industrialization and Productivity Bulletin No.10	E, F, S
ID/SER.B/3	Industrial Research and Development News, Vol.II, No.1	E (with F and S synopses)
ID/SER.E/1	Industrial Planning and Programming Series: No.1: Sectoral Programming, Chemical Industries	E, F, S

The following publications were edited and submitted for translation and for publication in 1967, but were not completed by the end of the year\*:

ST/CID/15	Fertilizer Manual	F, S
ID/1	Report of the Expert Group on Repair and Maintenance of Industrial Equipment in Developing Countries	F, S
ID/2	Fertilizer Technology Production and Usage	E
ID/3	Manual on the Use of Consultants in Developing Countries	E, F, S
ID/4	Industrial Estates and Areas in Europe and the Middle East	E
ID/5	Evaluation of Industrial Projects (Prague Symposium)	E
ID/6	Development of Metalworking Industries in Developing Countries (Moscow Symposium)	E
ID/7	Technological and Economic Aspects of Establishing Textile Industries in Developing Countries	E
ID/8	Report of Symposium on Metalworking Industries (Moscow)	E

\* In several cases, it is expected that the printing costs will be charged against the 1967 publications programme; in others the costs will be attributable to the 1968 publications programme (See ID/B/20/Rev.1, Annex 4)



Table 6(c) (continued)

		<u>Languages</u>
ID/SER.A/11	Industrialization and Productivity Bulletin No.11	E, F, S
ID/SER.A/12	Industrialization and Productivity Bulletin No.12	E
	<u>Training for Industry Series:</u>	
ID/SER.D/1	No.1: Training Economic Administrators	E, F, S
ID/SER.D/2	No.2: Estimation of Managerial and Technical Personnel Requirements in Selected Industries	E, F, S
	<u>Industrial Planning and Programming Series:</u>	
ID/SER.E/2	No.2: International Comparisons of Industry Data	E
ID/SER.E/4	No.4: Profiles of Manufacturing Establishments in Selected Countries, Vol.I	E

PART II DESCRIPTION BY GROUPS OF ACTIVITY

INDUSTRIAL TECHNOLOGICAL DIVISION

Group 1. Mechanical and Electrical Engineering Industries  
(formerly Metalworking Industries)

General remarks

The projects of technical assistance covered practically all sectors of engineering. Active assistance has begun this year in the electrical and the electronic industries. Work has also been carried out in such areas as organization of engineering design centres, in-plant quality control and manufacturing of prototypes.

A. Field activities under the various programmes of technical assistance

1. Regular Programme

Latin America

Chile ED-144/Rev.1

An expert was attached to the Chilean Steel Institute (ICHA). He was assigned to the Projects Evaluation Group and will carry out techno-economic feasibility studies for the production of various types of electrical equipment. He also designed manufacturing facilities (specifically, mechanical equipment) for the production of electrical equipment.

Duration of mission	man/months	1967	1/6
Estimated cost	\$11,000		
Account No.	5-050-084		

Group 1. Mechanical and Electrical Engineering (continued)

2. UNDP/TA Programme

Africa

Ghana 46-61

A director of industrial production is advising on machinery and supplies required by the enterprises, identifying production bottlenecks and other technical difficulties and making recommendations for overcoming them; scrutinising, assessing and preparing production plans for the statutory corporations.

This project is also reported under Industrial Services and Institutions.

Duration of mission	man/months	1967	1/12
Estimated cost		\$15,000	
Account No.		8-050-162	

Asia and the Far East

Afghanistan 155/63

Two industrial engineers advise the Planning and Projects Department (Industrial Section) of the Ministry of Mines and Industries. They advise on feasibility studies for specific industries, including factor planning, work out specifications to suppliers, economic and technical evaluation of offers from suppliers and follow-up of project implementation. The experts train also counterpart personnel. The Government is making enquiries as to the possibility of the extension of these two posts through 1970.

Duration of mission	man/months	1967	2/18
Estimated cost		\$35,000	
Account No.		8-050-006	

Group 1. Mechanical and Electrical Engineering (continued)

Burma 1-57/Rev.3

An industrial engineer was assigned to the Union of Burma Applied Research Institute (UBARI). He assisted UBARI Department of Standards in drawing up a detailed list of equipment for a metrology laboratory. He established a training programme on metrology in order to set up facilities for testing, calibration and certification of the scientific and precision instruments. He assisted the General and Technical Engineering services in the institute in the designing of industrial equipment in co-operation with chemical engineers.

This project is also reported under Industrial Services and Institutions Division.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		8-050-060	

China 29-57

An expert in industrial design completed in March 1967 his EPTA assignment of fifteen months and submitted various recommendations on means to promote industrial design programmes intended to meet the needs brought about by the country's industrial expansion.

This project is also reported under Industrial Services and Institutions Division - Group 1C.

Duration of mission	man/months	1967	1/3
Estimated cost		\$6,000	
Account No.		8-056-087	

Group 1. Mechanical and Electrical Engineering (continued)

India 37-57

An expert in electrical measuring instruments is attached to the Development Commissioner, Small-scale Industries, Ministry of Commerce and Industry. He is assisting the small-scale undertakings engaged in the production of electrical measuring instruments, so as to bring the existing standard of designs and manufacturing methods up to date. Several patents have been applied for in connection with this work.

This project is also reported under Industrial Services and Institutions Division - Group 11.

Duration of mission	man/months	1967	1/9
Estimated cost	\$18,000		
Account No.	8-050-204		

India 37-57

The duty of the expert assigned to this project was to design different types of tools, dies, jigs and fixtures required for various small industries' products. Efforts were made to manufacture these items in the institute workshop under the guidance of the expert.

This project is also reported under Industrial Services and Institutions Division - Group 11.

Duration of mission	man/months	1967	1/4
Estimated cost	\$9,000		
Account No.	8-050-204		

India 37-57

An expert assisted the Statistical Quality Control Units in their consulting work to industrial establishments.

This project is also reported under Industrial Services and Institutions Division - Group 10.

Duration of mission	man/months	1967	1/3½
Estimated cost	\$8,000		
Account No.	8-050-204		

Group 1. Mechanical and Electrical Engineering (continued)

India 37-57

An expert gave assistance and advice to the staff of the Die and Tool Designing Section of the Service Centre of the Guindy Industrial Estate.

Duration of mission	man/months	1967	1/5
Estimated cost	\$10,000		
Account No.	8-050-204		

Indonesia 43-57

A production engineer advised on means of achieving maximum productivity in the industrial sector. The expert will be joined by two other experts, an industrial economist and an industrial statistician, who will form the nucleus of a technical secretariat attached to the Presidium of the Ministry of Industry and Development.

This project is also reported under Industrial Services and Institutions Division - Group 10.

Duration of mission	man/months	1967	1/6
Estimated cost	\$8,000		
Account No.	8-050-207		

Iran 220-57/Rev.3

An expert assisted in the preparation of a programme for machine-building as part of the Fourth Development Plan of Iran. He assisted in the establishment of a technical bureau for the design and development of machine-building industries.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-210		

Group 1. Mechanical and Electrical Engineering (continued)

Iran XBO-441

An associate expert assisted in the preparation of a programme for machine-building industry and development of the industry in collaboration with an expert in the field.

Duration of mission	man/months	1967	1/12
Estimated cost	\$20,000		
Account No.	9-050-210		

Iran 220-57

An expert evaluated the existing industry development programme and undertook investigations in order to determine types of industries to be established in Iran. He also formulated recommendations for short-term technical assistance experts who were required in specific industrial fields.

Duration of mission	man/months	1967	1/4
Estimated cost	\$8,000		
Account No.	8-050-210		

Korea (Republic of) 60-57/Rev.2

An expert assisted in the development of modern technological processes and techniques in electrical equipment industries, including electronic equipment.

Duration of mission	man/months	1967	1/10
Estimated cost	\$18,000		
Account No.	8-050-545		

Malaysia 19-66/Rev.2

An expert in industrial design has been advising since June 1963 native craft industries in terms of their manufacturing, marketing, design, chances of survival and expansion. His assignment has been extended through 1968.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-270		

Group 1. Mechanical and Electrical Engineering (continued)

Singapore 203-67/Rev.1

A light industries expert assisted in engineering industries with special emphasis on establishment of a bicycle factory.

Duration of mission	man/months	1967	1/6
Estimated cost	\$11,000		
Account No.	7-050-391		

Singapore 203-67

A building-hardware adviser continued to advise the Government on problems of this industry in 1967.

Duration of mission	man/months	1967	1/9
Estimated cost	\$16,000		
Account No.	7-050-391		

Middle East and Europe

Bulgaria 236-67

An electronics engineer was assigned for six months to the National Academy of Sciences in Sofia. His main task consisted in advising and assisting on experimental development work in the laboratory in the field of electronic computers (digital).

Duration of mission	man/months	1967	1/6
Estimated cost	\$8,800		
Account No.	7-050-057		

Turkey 277-57/Rev.6

An engineer in gear manufacturing was appointed for a one-year mission to assist the manager of MKEK (Machinery and Chemical Industries Establishment) in training of technical personnel and management of the plants.

Duration of mission	man/months	1967	1/11
Estimated cost	\$20,000		
Account No.	8-050-435		



Group 1. Mechanical and Electrical Engineering (continued)

Turkey 277-57

A forging expert was assigned for six months to the MKEK (Machinery and Chemical Industries Establishment) to advise on the installation of a new forging plant. The expert drew up specifications for new equipment which has been ordered.

Duration of mission	man/months	1967	1/7
Estimated cost	\$12,000		
Account No.	8-050-435		

Latin America

Argentina 111-57/Rev.6

The National Aeronautical Board was provided with the services of an expert in the installation of heavy high-velocity machinery to train engineers and technicians in this field.

Duration of mission	man/months	1967	1/2
Estimated cost	\$5,000		
Account No.	8-050-024		

Argentina 111-57/Rev.6

UNIDO has provided the services of a combustion engineer to assist in the establishment of a laboratory of applied combustion, including the development of fuel combustion equipment, the aerodynamics of combustion and hot gases, model theory, flame probes and instrumentation for obtaining fundamental data. There are indications that a follow-up mission will be requested in 1968.

Duration of mission	man/months	1967	1/6
Estimated cost	\$11,000		
Account No.	8-050-024		

Group 1. Mechanical and Electrical Engineering (continued)

Chile 130-57

A machine tools expert advised CORFO (the Chilean Development Corporation) counterpart engineers and manufacturers of mechanical products in all aspects related to production methods, optimal use of available resources, new equipment and the best methods of its utilization, changes in layout and production sequence.

Duration of mission	man/months	1967	1/3
Estimated cost	\$5,000		
Account No.	8-050-084		

Dominican Republic 194-60/Rev.2

Since October 1965, a United Nations industrial adviser has been assigned to the Industrial Development Corporation to assist its Director General in solving problems arising from the implementation of development plans and at the same time to serve as technical supervisor to the CAMER project (establishment of a complex of metalworking industries).

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-126		

Ecuador 51-60/Rev.2

An engineering industries adviser was attached to the National Planning Board to assist in the implementation of various metal-mechanical industrial projects.

Duration of mission	man/months	1967	1/3
Estimated cost	\$7,000		
Account No.	8-050-135		

Group 1. Mechanical and Electrical Engineering (continued)

Peru 195-57/Rev.4

An expert in the automotive industry was assigned to the Industrial Division of the Ministry for Development and Public Works to advise on the projects related to the 1967-1970 Economic and Social Development Plan. He is taking part in the preparation of a production programme which will include selection of vehicle studies, use of imports, import requirements, size analysis and costs.

Duration of mission	man/months	1967	1/3
Estimated cost	\$6,000		
Account No.	8-050-339		

Venezuela 201-57

UNIDO has provided the services of an expert in metalworking industries to assist in the elaboration and application of programmes for the development of small and medium-scale industries in the field of metalworking. He has also advised on the introduction and use of modern techniques and studied the possibilities of integrating the resultant products with more complex mechanical products.

Duration of mission	man/months	1967	1/12
Estimated cost	\$26,900		
Account No.	8-050-471		

3. Special Industrial Services

Africa

Tunisia SIS 66/33 TUN-1

An expert assisted the technical management of Ateliers Mécaniques du Sahel to solve the problems related to special tools and the training of Tunisian labour.

Duration of mission	man/months	1967	1/6
Estimated cost	\$14,000		
Account No.	9-050-432		

Group 1. Mechanical and Electrical Engineering (continued)

Asia and the Far East

China                    SIS 67/84 CHINA-1

An expert was provided to study the electrical and electronics industries in that country. It has also requested advice towards the utilization and expansion of the electronic computer facilities of the National Research Institute.

Duration of mission	man/months	1967	1/3
Estimated cost	\$7,500		
Account No.	9-050-087		

India                    SIS 66/37 IND-2

A mission of seven experts assisted by one UNIDO staff member visited India to investigate the ways and means to increase the opportunities of Indian products on the international market. The team investigated engineering industries, chemical and metallurgical production and other miscellaneous goods. In engineering industries special attention was paid to electronic components, solid-state devices, measurement instruments, household appliances and accessories, further rolled steel products, ferrous castings and forgings, drop forged and other hand tools, dies, jigs and fixtures and agricultural equipment, powered and unpowered. There are indications that the Government of India will request a project in form of pilot plant within the electronics industry to demonstrate by quality control and cost cutting, product improvement and its competitive up-grading. Such a project will entail an SIS-sponsored project of three to four months, followed by a Special Fund sponsored project of experts, fellowships and equipment to be installed in one or two large electronics plants in India.

This project is also reported under Policies and Programming Division - Group 14.

Duration of mission	man/months	1967	7/14
Estimated cost	\$35,000		
Account No.	9-050-204		

Group 1. Mechanical and Electrical Engineering (continued)

Iran                    SIS 67/108 IRAN-10

An expert in the manufacture of metal products has revised and completed his report covering an earlier mission to Iran under UN/EPTA programme. The report evaluates the country's programme of industrial development, specifies economically feasible industries and their processes, location, etc. and makes recommendations for short-term assistance.

Duration of mission	man/months	1967	1/1
Estimated cost	\$2,000		
Account No.	9-050-210		

Nepal

The purpose of this mission was a brief industry survey in order to advise the Government of Nepal on technical assistance that may be required and is already available under the various United Nations development programmes, including UNIDO's SIS programme. The mission took place between 23 October and 3 November 1967. Report with recommendations completed.

Middle East and Europe

Israel                    SIS/ISR 056-5

An exploratory mission was carried out under the SIS programme between 26 April and 11 May 1967. The tasks were to make a preliminary survey of the metalworking industry in Israel, to determine by qualifications and experience, the composition of the group of experts needed for later missions. The mission visited 25 metalworking enterprises producing different machinery and metal products. As a result of recommendations made by the mission, a 12-expert group was sent to Israel during August-September 1967, which completed the work of the mission.

Group 1. Mechanical and Electrical Engineering (continued)

Israel                    SIS 67/52 ISR-1

A team of eleven experts in selected fields of specialisation in the metalworking industries has been assisting the Government in solving problems of development of these industries. The changes which will be necessary to adapt the present structure of the industry to the requirements of foreign markets are of a long-term nature, but even now there are certain bottlenecks that can be removed in the short run with the proper assistance.

Duration of mission	man/months	1967	11/18
Estimated cost	\$71,000		
Account No.	9-050-219		

Latin America

Brazil                    SIS 67/147 BRA-1

An exploratory mission was sent to Brazil, consisting of five members of UNIDO. Mission recommended a programme of future assistance for the efficient utilization of new and existent industrial capacity.

Duration of mission	man/months	1967	5/4
Estimated cost	\$5,250		
Account No.	9-050-054		

Chile                    SIS 66/8 CHI-1

The Chilean Development Corporation requested the provision of a five-man mission for five months, under the sponsorship of SIS, all of the mechanical engineers (boilerplate, product, machine tools, quality control and automotive industry). A study of the Chilean engineering industry manufacturing capital goods was undertaken. The report of this mission has been made, and recommendations call for the use of considerable resources.

Duration of mission	man/months	1967	5/17
Estimated cost	\$45,900		
Account No.	9-050-084		

Group 1. Mechanical and Electrical Engineering (continued)

Ecuador SIS 67/102 ECUA-3

SIS funds were provided to finance the extension of a survey of certain engineering industries. The final report has now been received and is being evaluated for transmittal to the Government.

Duration of mission	man/months	1967	1/2
Estimated cost		\$1,200	
Account No.		9-050-135	

4. Fellowships

The individual fellowships and in-plant group training falling within the area of mechanical and electrical engineering industries were distributed among the various regions as follows:

Africa	13
Asia	22
Latin America	7
Middle East	2
Europe	<u>16</u>
Total	213

The distribution of the fellowship by programmes is as follows:

Individual programmes	187
In-plant group training programme	26

B. Expert group meetings, seminars, group training and workshops

1. Expert group meeting on the development of the automotive industry in developing countries

The preparatory work for the meeting was continued in 1967. A meeting is scheduled for the second quarter of 1968. The provisional cost plan and programme of the meeting was prepared and submitted for approval.

Estimated cost	\$13,000
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Group 1. Mechanical and Electrical Engineering (continued)

2. Expert group meeting on maintenance and repair of industrial equipment in developing countries

The meeting took place in New York from 28 November to 9 December 1966. During 1967 the report of the meeting has been prepared for printing. It was issued in mimeographed form on 21 April 1967 and circulated among Member Governments for information and comments.

C. Studies and research

1. Studies on automotive equipment industry

The number of commissioned studies was reduced from the twelve programmed for 1967 to six. The following six contracted studies were completed and received:

"The Establishment and Development of the Automotive Equipment Industry in Yugoslavia"  
by P. Rakovic

"The Establishment and Development of the Automotive Equipment Industry in India"  
by K.T. Merchant

"The Establishment and Development of the Automotive Equipment Industry in the U.A.R."  
by A.I. Gasarin

"The Planning of Facilities in the Manufacture of Automobiles and Trucks with Special Reference to Developing Countries"  
by A. Riha and O. Czivis

"Quality Control in Foundry Operations for Automotive Parts Manufacture"  
by L.E. Komarov

"Manufacture of Automotive Equipment in Developing Countries, Organization and Operation of Repair and Service Shops, Equipment, Spare Parts and Skills Problems Involved"  
by W.P. Eaton.

On the basis of the conclusions derived from the studies made in 1966 and 1967 a draft programme of an expert group meeting on the development of the automotive industry in developing countries was prepared.

Cost of project

\$6,000 in consulting funds

Ref: ID/B/4, Table 12, page 95.



Group 1. Mechanical and Electrical Engineering (continued)

2. Studies on the electrical and electronic equipment industry

Four studies were commissioned in addition to those initiated in 1966.

"State of Technology in the Electrical and Electronic Industries", prepared by a team of experts of ITD Company under the Chairmanship of G.N. Hills.

"Application of Electronic Computer in the Developing Countries", by Drs. Abetti and Lee of General Electric Computer Division.

"Feasibility of Sharing Manufacturing among Developing Countries in the Electrical and Electronic Industries", by Josef Pohanka.

"Study on the Evaluation of the Electronic Industry in the French-Speaking African Countries", by Thomson Houston Co.

Ref: ID/B/4, Table 12, page 95.

These studies are intended to help the developing countries in formulating programmes for the electrical and electronics industries.

3. Implementation of recommendations of Metalworking Symposium

International classification systems for metalworking machines and for materials for metalworking industries

The definition of the project has been made and a number of consultants were contacted.

Prof. H. Opitz, Director of the Machine Tool Research Laboratory of the Technical Hochschule in Aachen prepared the basic study, which has been sent to a number of experts for their comments.

Adaptation of acceptance tests for new machine tools

Following the preparatory work of the staff, Prof. A.P. Wladziewsky, Director of Scientific Research Institute for Machine tools in the USSR, prepared a study on this subject. The study which deals with all phases of acceptance tests and will serve as a practical manual was completed and sent to various organizations for comments.

Dies and jigs; their design, manufacture and utilization

This project which was proposed for 1967 has been postponed until 1968. Contacts have been made with various consultants to prepare an outline of this study.

Ref: ID/B/4, Table 12, page 96.

Group 1. Mechanical and Electrical Engineering (continued)

4. Studies on farm equipment industry

This project has been postponed.

Ref: ID/B/4, Table 12, page 97.

5. Technological aspects of quality control in the manufacture of engineering industries products

This project has been postponed.

D. Co-operation with the Regional Economic Commissions

The Technological Division is in permanent contact with the Secretariats of the Regional Economic Commissions, and its staff is available for consultation in connection with the preparation of the studies carried out in the electrical and electronics field within the regions. These may conclude in an expert meeting in 1968.

E. Publications

The development of metalworking industries in the developing countries

Proceedings of the United Nations Interregional Symposium on the Development of Metalworking Industries in Developing Countries, is to be issued in 1968. Forty-one studies by the experts from various countries participating in this Symposium have been reviewed, prepared and submitted for publication.

Group 2. Metallurgical Industries

General remarks

UNIDO activities in the field of metallurgical industries cover five sectors, namely: heavy non-ferrous metals, light non-ferrous metals, iron and steel, foundry and ore. Expert meetings were held during 1967 in two of these fields, heavy non-ferrous metals (copper, lead, etc.) and light non-ferrous metals (aluminium, magnesium, etc.). These meetings highlighted the latest innovations in alumina (aluminium oxide) and copper production with particular emphasis on their relevance to developing countries. As regards iron and steel, preparatory work for the Second Interregional Symposium on the Iron and Steel Industry to be held in Moscow September/October 1968 was initiated. Activities in foundry and ore beneficiation will be initiated in the future.

A. Field activities under various programmes of technical assistance

1. UNDP/TA Programme

Africa

Mali

6-66/Rev. 4

An industrial economist is assisting the Government in the development of the metals industry.

This project is also reported under Industrial Policies and Programming.

Duration of mission	man/months	1967	1/6
Estimated cost	\$22,000		
Account No.	8-050-276		

Asia and the Far East

Korea (Republic of) 60-57

An expert in foundry and metal corbing is attached to the National Industry Research Institute (NIRI) of the Ministry of Commerce and Industry to assist in the development of modern technological processes and techniques.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-545		

Group 2. Metallurgical Industries (continued)

Philippines 79-57/Rev.4

A steel industry adviser is attached to the Presidential Committee on the Steel Industry of the Philippines Government.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-342		

Middle East and Europe

Bulgaria 269-65

An expert provided needed advice on automation of processes of beneficiation of copper ores.

Duration of mission	man/months	1967	1/2
Estimated cost	\$3,600		
Account No.	8-050-057		

Turkey 277-57/Rev.5

A team of three experts (non-ferrous expert, industrial economist and industrial chemist) have studied and reported on the problems of creating an aluminium industry, development of copper industries, and production of zinc, lead and ferro-alloys.

Duration of mission	man/months	1967	3/30
Estimated cost	\$66,000		
Account No.	8-050-435		

Latin America

Dominican Republic 194-60/Rev.2

An expert assisted on improvements in the iron and steel industry.

Duration of mission	man/months	1967	1/12
Estimated cost	\$24,000		
Account No.	8-050-126		

Group 2. Metallurgical Industries (continued)

2. Special Industrial Services

Africa

Liberia SIS 66/26 LIBE-1

In order for the Liberian Government to be able to approach possible sources of financing for an integrated iron and steel plant, it has been found necessary to examine the situation further. This is being undertaken by a consultant firm. The Government of Liberia is participating in the cost of preparing the study to the extent of 15 per cent of expert cost.

Estimated cost \$110,000  
Account No. 9-050-255

Liberia SIS 67/64 LIBE-2

A top-level adviser has been assigned to the Government to provide advisory services for the iron and steel project on an intermittent basis during one year. This expert is meant to be of supplementary assistance to the engineering-economic study of the iron and steel project.

The major tasks for the adviser are to assist in contracting various prospective financing sources and to give high-level consultations to the Government.

Duration of mission man/months 1967 1/4  
Estimated cost \$7,500  
Account No. 9-050-255

Morocco SIS 67/66 MOR-1

An exploratory mission was undertaken by a UNIDO staff member to prepare projects dealing with the development of metallurgical industries. Projects concerned specifically with the exploitation of iron ore deposits, smelting of zinc ores, production of lead and recovery of copper and iron pyrrhotine ashes have been suggested as possible fields.

Duration of mission man/months 1967 1/2 weeks  
Estimated cost \$850  
Account No. 9-050-291

Group 2. Metallurgical Industries (continued)

Nigeria SIS 66/10 NIG-4

Study of iron and steel market, as well as of existing and potential demand for steel products in Nigeria and the neighbouring countries has been carried out by a high-level expert.

Duration of mission	man/months	1967	1/2
Estimated cost		\$10,000	
Account No.		9-050-315	

United Arab Republic SIS 67/139 UAR-10

A UNIDO adviser made a short visit to the United Arab Republic to hold exploratory discussions with the authorities regarding the possibility of commercial exploitation of the country's large deposits of black sands.

Duration of mission	man/months	1/5	days
Estimated cost		\$150	
Account No.		9-050-450	

Asia and the Far East

Iran SIS 67/81

A four-man mission consisting of three UNIDO staff members and an official from Iran visited Mexico to study the HYL natural gas direct-reduction process for sponge iron production and its application in Iran and other developing countries.

Duration of mission	man/months	1967	3/2
Estimated cost		\$2,200	
Account No.		9-050-210	

Group 2. Metallurgical Industries (continued)

Korea (Republic of) SIS 67/72 KOR-3

A team of three experts, led by a UNIDO adviser, examined the report of the project as prepared by an international corporation on the basis of the terms of reference formulated by a previous SIS mission. It made a number of recommendations regarding the project.

Duration of mission	man/months	1967	3/2
Estimated cost		\$16,000	
Account No.		9-050-545	

Philippines SIS 66/38 PHI-1

A UNIDO adviser visited the Philippines briefly to discuss his report on the Integrated Steel Mil at Iligan and the implications contained therein.

Duration of mission	man/months	1967	1/1
Estimated cost		\$5,600	
Account No.		9-050-342	

Middle East and Europe

Jordan SIS 66/12 JOR-1

Jordan is taking initial steps in setting up facilities for the reproduction of rolled steel products (reinforced bars). Two experts, one on electric melting of steel scrap and the other on rolling of steel billets, have been assisting with this project.

Duration of mission	man/months	1967	1/8
Estimated cost		\$4,700	
Account No.		9-050-234	

Latin America

Venezuela SIS 67/168 VEN-1/Rev.1

A UNIDO staff member assisted the Government in formulating a request for SIS assistance for a study of prospects for exploiting, processing and marketing iron ore deposits at San Isidro.

Duration of mission	man/months	1967	1/1 week
Estimated cost		\$100	
Account No.		9-050-471	

Group 2. Metallurgical Industries (continued)

3. Fellowships

The programmes of individual fellowships and in-plant group training which fall in the area of metallurgical industries were distributed among the various regions as follows: (In number of fellows)

Africa	13
Asia	16
Latin America	18
Middle East	1
Europe	<u>55</u>
Total	103

The distribution of the fellowships by programmes is as follows:

Individual programmes	32
In-plant group-training programmes	71

B. Expert group meetings, seminars, group training and workshops

1. Studies on the techno-economic principles of the development of the iron and steel industries in the developing countries

The work programme for 1967 outlined the proposals for the Second Iron and Steel Symposium. Agreement was obtained from the Government of the USSR to hold the Symposium in Moscow from 19 September to 9 October 1968. The project outline, preliminary list of papers and cost plan of the Symposium were prepared. The main topic of the symposium has remained as planned: "The Techno-economic Principles of the Development of the Iron and Steel Industries in the Developing Countries." A meeting between the staff of UNIDO, OTC, and representatives of the Government of the USSR has been arranged in Moscow for the beginning of 1968 to discuss the substantive administrative matters related to the Symposium.

Estimated cost of project           \$7,500

Ref: ID/B/4, Table 11, page 93.

2. Organization of expert consulting groups in non-ferrous metal industries

A meeting of the Expert Consulting Group on the Aluminium Industry was held in Vienna from 10 to 17 November 1967. Papers were discussed on "Alumina production from various ores" examining the technological and economic status of alumina production in the world. A report was prepared on guidelines and methods for creating, improving and expanding the alumina industries in developing countries.



Group 2. Metallurgical Industries (continued)

The first meeting of the Expert Consulting Group on Copper Industry was held in Vienna from 20 to 27 November 1967. Papers were discussed on new processes, efficiency, modernization and extension of plants in the copper industry concerning specific situations to be faced by the developing countries. Five experts participated at the meeting and prepared recommendations for development policies and new technical assistance projects. In arranging the meetings contacts were established with the aluminium and copper industries of the host country (Austria).

Copies of the final reports were made available to all developing countries with interest in aluminium and copper industries.

Estimated cost of projects           \$24,000

Ref: ID/B/4, Table 11, page 94.

C. Studies and research

1. Iron and Steel Manual

The preliminary draft of the manual was reviewed, and a revised outline was worked out in 1967. Considering the scope and the variety of subjects to be covered, 30 authors were selected to prepare the different chapters of the manual under the guidance of the chief editor.

Ref: ID/B/4, Table 11, page 94.

2. Selected studies on metallurgy

Initial steps were taken regarding selected studies on metallurgy. A list of topics was prepared and authors selected for the preparation of the papers.

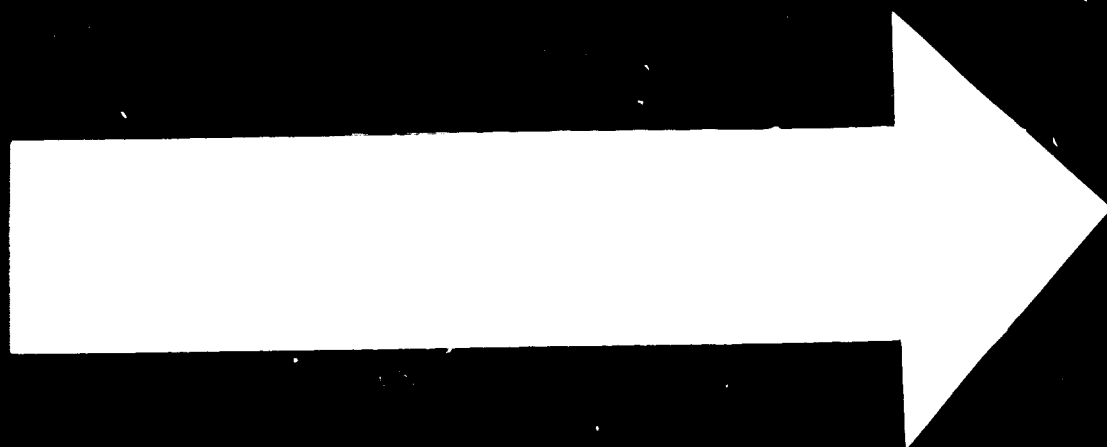
Ref: ID/B/4, Table 11, page 93.

D. Co-operation with the Regional Economic Commissions

The co-operation of the Regional Economic Commissions has been enlisted mainly in the preparation of documentation for the Second Iron and Steel Symposium.

E. Publications

"Progress in Iron Melting" by Prof. L.M. Marienbakh (CID-Foundry-8) was mimeographed and distributed. This was the publication of an additional paper originally planned as a contribution to the 33rd International Foundry Congress held in India in December 1966.

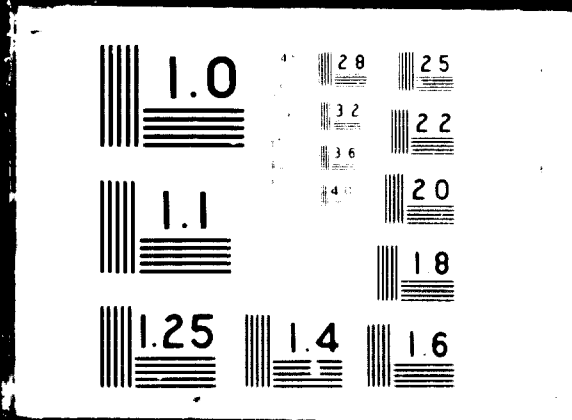


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Group 2. Metallurgical Industries (continued)

F. Special surveys and missions

During 1967, the UNIDO adviser on metallurgy provided technical advisory consultations on important metallurgical industries development projects in Morocco, Mexico, Republic of Korea, Iran, United Arab Republic, Bolivia and Colombia, including the establishment of integrated iron and steel plants.

Morocco

The projects examined during the mission covered the production metallurgy of zinc and lead, the iron and steel industry treatment of iron ores for pelletizing and the expansion of the metallurgical laboratory pilot plant facilities.

Mexico

Direct reduction of iron ores to produce sponge iron with natural gas was examined, based on the HYL process for potential applications in developing countries possessing in abundance good iron ores and cheap natural gas.

Korea (Republic of)

An extended stay in the Republic of Korea covered the establishment of an integrated steel plant with a capacity of one million tons. The full project was formulated including site location, layout, choice of technological processes, capital plant equipment and financing, optimum product-mix and over-all production economics.

Iran

Technical consulting advice was provided on their steel plant and non-ferrous metallurgical industries.

United Arab Republic

Heavy mineral Black Sands Project, expansion of the metallurgical laboratories.

Bolivia

The projects discussed covered iron ores deposits, re-rolling mill plant, ferrous and non-ferrous metals and industrial development projects.

Colombia

The establishment of a plant for production of foundry grades of pig iron, techno-economic productivity of the steel industry etc. were covered in this country.

Group 3. Construction and Building Materials Industries

General remarks

The activities of UNIDO in this branch of industry were limited to the building materials industries. In that area UNIDO developed close co-operation with the United Nations Centre for housing, building and planning. The common efforts were mostly oriented to the organization of expert meetings and seminars which will be held in 1968, apart from the Seminar on Prefabrication in the Building Industries for Latin American countries, which was carried out in 1967.

A. Field activities under the various programmes of technical assistance

1. Regular programme

Middle East and Europe

Syria ED-513

An expert in project evaluation has prepared a proposal for a pilot plant project to produce reinforced cement-concrete span pipes and poles.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		5-050-414	

This project is also reported under Policies and Programming Division - Group 12.

2. UNDP/TA Programme

Asia and the Far East

Ceylon 20-57/Rev.2

A ceramics expert has been advising on the manufacture of sanitary ware and training local personnel at the Pelengadulu factory.

Duration of mission	man/months	1967	1/12
Estimated cost		\$19,000	
Account No.		8-050-078	

Group 3. Construction and Building Materials (continued)

Korea (Republic of) XBO-66

An expert has been advising the Government on quality control for the products of Dachan Chinaware Company Limited.

This project is also reported under Industrial Services and Institutions - Group 10.

Duration of mission	man/months	1967	1/12
Estimated cost	\$20,000		
Account No.	9-050-545		

Latin America

Paraguay EX-2 Funds-in-Trust/Rev.1

From February 1964 to June 1967 services were provided through funds-in-trust of the Chief of Production at the Valle-mi cement plant. The expert assisted in the preparation of a development plan for the country's cement industry.

Duration of mission	man/months	1967	1/6
Account No.	6-050-336		

3. Special Industrial Services

Africa

Rwanda SIS 67/181

An expert advised on the technical and financial aspects of establishing a cement factory with an initial capacity of 100 tons daily.

Duration of mission	man/months	1967	1/2
Estimated cost	\$5,000		
Account No.	9-050-375		

Group 3. Construction and Building Materials (continued)

Middle East and Europe

Malta SIS 67/100 MALTA-1

Following the exploratory mission to Malta by a UNIDO interregional adviser, the Government was provided with advice on improvement in factory building methods and materials.

Duration of mission	man/months	1967	1/2
Estimated cost		\$1,800	
Account No.		9-050-279	

Turkey SIS 67/55 TUR-2

The Government was provided with the services of a cement production expert to study and evaluate the operations of existing factories and recommend measures for improvement.

Duration of mission	man/months	1967	1/5
Estimated cost		\$14,000	
Account No.		9-050-435	

4. Fellowships

The individual fellowships programmes which fall in the area of Construction and Building Material Industries were distributed among the various regions as follows:

Middle East	1
Europe	10
Total	11

There were no fellowships awarded under in-plant group training.

B. Expert group meetings, seminars, group training and workshops

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

The Technological Division continued its preparation for the Interregional Seminar which will be held in Denmark in 1968 as planned. The programme of the seminar was discussed with the authorities of the host country.

Group 3. Construction and Building Materials(continued)

Three papers were commissioned and completed in 1967:

"Sanitary Ware from Common Clays"  
by C. Castelli (cost \$800);

"Testing and Evaluation of Brick Clays"  
by V. Lach (cost \$500);

"Lightweight Aggregates"  
by Wilson (cost \$1,000).

The outline of other papers has also been prepared. The total cost of the seminar will be \$60,000, (Special Danish Government's contribution).

Ref: ID/B/4, Table 19, page 110.

2. Seminar on Prefabrication in the Building Industries for Latin American Countries

The seminar took place in Denmark in August 1967 and was organized by the Centre for Housing, Building and Planning. UNIDO participated in the work of the seminar, presenting a paper on prefabrication of houses in Latin America.

Ref: ID/B/4, pages 106-7

C. Studies and research

Studies were prepared to evaluate the competitiveness of processes and changing technology in consideration of the adaptation of technologies to the construction requirements of developing countries.

"Small-Scale Manufacture of Portland Cement". The paper is available in English and Spanish versions. Experts in the United States and Argentina were commissioned to review it.

"Puzzolana Cement", by Chropa. Under revision.

Ref: ID/B/4, pages 106-7

"Plastics as Building Materials". The paper was revised by a staff member and the author asked to make corrections.

Ref: ID/B/4, pages 106-7

"Building Lime, its Properties, Uses and Manufacture". Experts in the Netherlands were asked to review the paper.



Group 3. Construction and Building Materials(continued)

Three papers prepared under the joint programme with the United Nations Centre for Housing, Building and Planning were reviewed by the same Centre:

"Bamboo and Reeds" by D. Narayanamurti;

"Organization of Building Operations in Africa" by G. Blachere;

"Organization of Building Operations in Latin America" by L.M. Migone.

Ref: ID/B/4, Table 19, page 110.

D. Co-operation with other United Nations units

In 1967 UNIDO continued its co-operation with the United Nations Centre for Housing, Building and Planning. In addition to the joint programmes of studies this co-operation consisted mainly in the preparation of the seminars mentioned under paragraph B.

In addition a survey on the construction and building materials industries is under preparation, in co-operation with ECAFE Secretariat, for the Seminar on Prefabrication in the Building Industries for the Asia and Far East region.

Estimated cost

\$4,000

Group 4. Chemicals, Petrochemicals and Synthetics, Pharmaceuticals and Other Related Industries

General remarks

During 1967 developing countries with ample petroleum and natural gas resources were increasingly interested in establishing petrochemical complexes. Apart from two major projects under the Special Fund in Algeria and Pakistan, the latter of which started in 1967, other projects on feasibility studies on a relatively small scale were requested by several countries. There was also considerable interest in the integration of chlorine-producing industries with the petrochemical industry for the production of industrial solvents and synthetic polymers.

The experience of 1967 proves that developing countries in a relatively advanced stage of development in petrochemicals are now in a position to ask for technical assistance in the manufacture of more sophisticated petrochemical intermediates.

A. Field activities under the various programmes of technical assistance

1. Regular Programme

Africa

Africa regional

ED-439/Rev.5

An adviser on chemical industries assisted in the planning and execution of technical assistance projects of country, sub-regional and regional interest in the field of chemicals (including pharmaceuticals) and fertilizers. He contributed to industrial surveys and research studies on chemical and fertilizer industries and assisting governments, on request, in carrying out pre-feasibility and feasibility studies.

This project is also reported under Policies and Programming - Group 12.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	5-050-900		

Group 4. Chemicals, Petrochemicals etc. (continued)

Asia and the Far East

China ED-599/Rev.4

A quality control adviser (polymer chemist) advised and trained the counterpart personnel of the Bureau of Commodity Inspection and Quarantine in the analysis of synthetic fibres, plastics, rubbers and other petrochemical products.

This project is also reported under Industrial Services and Institutions - Group 10.

Duration of mission	man/months	1967	1/6
Estimated cost		\$8,000	
Account No.		5-050-087	

2. UNDP/TA Programme

Africa

Guinea 149-61

An industrial chemist was attached to the Ministry of Industrial Development to work in areas related to the development of chemical industries.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		8-050-177	

Asia

Iran 220-57/Rev.6

An adviser was attached to the Ministry of Economy of the Iranian Government. He assisted in carrying out feasibility studies on the development of basic pharmaceutical products (including antibiotics) with a view to promoting the co-operation of the three countries (Iran, Pakistan and Turkey) and possibly setting up joint-purpose enterprise in the field.

This project is also reported under Policies and Programming - Group 12.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		8-050-210	

Group 4. Chemicals, Petrochemicals etc. (continued)

Middle East and Europe

Israel

243-57/Rev.3

A pharmacologist has been advising the Pharmacological Institute since August 1965. His assistance in reorganizing the Institute and training individual staff members in techniques of screening organic chemicals is bringing results, and the Institute is about to accept work from firms outside Israel.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-219		

Turkey

277-57

A petrochemical engineer served as a member of a team of experts advising the Government on the establishment of an industrial projects office. The expert undertook techno-economic investigations to determine the types of petrochemical manufacturing processes most suitable for Turkey.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-435		

Yugoslavia

294-57

An expert in petrochemical processes was assigned for two months in 1967 to the Organisko Kemijska (OKI) in Zagreb, to assist in developing processes and technical analysis and to make recommendations on the type of equipment required for the finishing of polyethylene and polypropylene.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-219		

Group 4. Chemicals, Petrochemicals etc. (continued)

Latin America

Brazil 27-59

A chemical engineer attached to the superintendency for the development of the northeast assisted in planning the development of chemical and petrochemical industries in the region, especially industries linked to sugar based alcohol, common salt, petroleum and fertilizers. He worked in co-operation with Brazilian chemists and chemical engineers in supervising research work, including surveys as well as the installation of chemical industry complexes.

Duration of mission	man/months	1967	1/6
Estimated cost		\$11,000	
Account No.		8-050-054	

Nicaragua 18-57

An industrial adviser assisted the Ministry of Economy in elaborating a work programme which will enable the Industrial Bureau to co-operate more actively with the private sector in the planning of new activities as, for instance, in the metalworking and chemical (especially petrochemical) industries. He also studied the fiscal problems encountered by industry and outlined efficient methods for their solution.

This project is also reported under Policies and Programming - Group 12.

Duration of mission	man/months	1967	1/9
Estimated cost		\$16,500	
Account No.		8-050-312	

3. Special Fund Projects

Africa

Algeria 5

Industrial and marketing surveys on petroleum derivatives and natural gas

The purpose of the project is to assist the Government in carrying out feasibility studies for local utilization of petroleum derivatives and natural gas, as well as the export of natural gas.

During 1967 export markets for natural gas were surveyed and a study of the petrochemical and fertilizer industries was completed. Forecasts were made for long-range export markets, price tendencies, and Algerian production costs, and a contract was undertaken for the determination of specific plants to be built.

Group 4. Chemicals, Petrochemicals etc. (continued)

The project has been extended through February 1968 to allow for consultations between the Project manager, the subcontractors and the Government regarding Phase II of the petrochemicals marketing study.

As a result of the achievement of the project a new project for assistance in establishing a Centre for Industrial and Technological Studies has been recommended to the January 1968 Governing Council.

The project was approved by the Governing Council of January 1965 for a duration of 2 years; it provides for a total of 4 man-years of expert services, 4 man-years of fellowships and subcontracts for \$533,400. The total project cost is \$1,156,900 comprised of the Governing Council earmarking of \$836,900 and Government counterpart contribution of \$320,000.

Asia and the Far East

Pakistan

26

Pre-investment studies for the promotion of the fertilizer and petrochemical industries

The purpose of the project is to assist the Government to develop its fertilizer and petrochemical industries and to promote the use of fertilizer and petrochemical end-products.

During 1967 the project manager completed an analysis of existing productive facilities, formulated detailed specifications for contracting market surveys, arranged with FAO for delivery of experimental fertilizers. FAO, through a sub-contract, is co-operating with UNIDO on this project in the area of the promotion and use of fertilizers.

The market survey to determine present and potential demand for polyvinyl chloride, polyethylene and other petrochemical intermediates should start as soon as the Pakistan Government deposits the 600,000 rupees required for the payment of services to be provided by a local Pakistani consulting firm which will work with the international consulting firm. A market survey to determine present and potential demand for petrochemical intermediates is expected to provide a basis for UNIDO's recommendations for the establishment of production facilities.

The project was approved by the Governing Council in June 1965 for a duration of 3 years at a total cost of \$2,632,000 comprising the Governing Council earmarking of \$1,532,000 and the Government counterpart contribution of \$1,100,000. It provides for 16½ man-years of expert services and 8 man-years of fellowships.

Group 4. Chemicals, Petrochemicals etc. (continued)

4. Special Industrial Services

Asia and Far East

China                      SIS 67/118 CHINA-5

One polymer chemist is assisting the local plastics industry to improve the production technique.

Duration of mission	man/months	1967	1/1
Estimated cost	\$8,000		
Account No.	9-050-087		

Latin America

SIS preparatory mission to Peru (2-19 June 1967)

A staff member went to Peru to discuss with local representatives a proposed feasibility study for a paper and pulp plant based on bagasse. Discussions also took place to explore possibilities of assistance by UNIDO in the field of petrochemicals and plastics.

First exploratory mission to Brazil (20 July - 12 August 1967)

A five-member mission, including two staff members of the division visited Brazil to assist officials of the Brazilian Government as well as agencies and individuals concerned with industry in the identification of areas which could draw on UNIDO's contribution under various United Nations programmes of international co-operation. Out of some 41 expert posts for which UNIDO's assistance is required, 6 are directly concerned with petrochemicals. The implementation of various projects is being undertaken through official channels.

Argentina                      SIS 67/203

An expert assisted the Government in surveying and locating the most convenient site from an economical and technical point of view for the establishment of a plant to manufacture soda ash.

Duration of mission	man/months	1967	1/3
Estimated cost	\$10,000		
Account No.	9-050-024		

Group 4. Chemicals, Petrochemicals etc. (continued)

Trinidad and Tobago                      SIS 66/39 TRTO-1

A team of three experts visited Trinidad in order to complete a study on the technological processes and use of furfural and its immediate derivatives to be extracted from sugar-cane bagasse. The report has subsequently been evaluated and transmitted to the Government for further consideration.

Duration of mission                      man/months    1967    3/3  
Estimated cost                              \$7,500  
Account No.                                  9-050-429

Middle East and Europe

Iceland                                      SIS 67/115 ICE-1

A UNIDO staff member visited Iceland to assist in exploring the possibilities of developing a sodium sulphate industry by freezing sea-water.

Duration of mission                      man/months    1967    1/2 weeks  
Estimated cost                              \$550  
Account No.                                  9-050-198

5. Fellowships

The individual fellowships which fall in the area that includes chemicals; petrochemicals and synthetics; insecticides and pesticides; pharmaceuticals and other related industries were distributed among the various regions as follows:

Africa	5
Asia	18
Latin America	1
Middle East	2
Europe	61
Total	<u>87</u>

No fellowships were awarded under in-plant group training.









Group 5. Fertilizer Industries

General remarks

Many of the developing countries are still not in a position to meet their requirements in fertilizers and pesticides either by their own production or by imports. It is evident that one of the issues that requires consideration is the problem of marketing fertilizers from one developing country to the other, including the problem of financing.

Under-utilization of existing capacity due to shortage of imported raw materials and spare parts is another important problem. The need of foreign exchange for implementation of new projects in developing countries is still urgent. The shortage of sulphur and its increasing cost have reduced the level of production in many countries and this requires the study of new processes not using sulphur.

A. Field activities under the various programmes of technical assistance

1. UNDP/TA Programme

Middle East and Europe

Iran XBO-713

A special service agreement was approved for the establishment of an industrial marketing specialist. The expert advised the management of the National Petrochemical Company (Shivas Fertilizer Factory).

This project is also reported under Industrial Services and Institutions - Group 10.

Duration of mission	man/months	1967	1/1
Estimated cost		\$5,409	
Account No.		9-050-210	

Group 5. Fertilizer Industries (continued)

Israel 243-57/Rev.3

A mechanical engineer advised a chemical fertilizer plant on equipment maintenance.

Duration of mission	man/months	1967	1/2
Estimated cost	\$4,000		
Account No.	8-050-219		

Latin America

Peru 195-57/Rev.4

An industrial adviser on fertilizers collaborated with the Ministry for Agriculture and the National Fertilizer Corporation on the execution of fertilizer projects within the framework of the economic and social development plan for 1967-1970. In particular he advised on the formulation of projects for the production of nitrogen, phosphate and potash fertilizers, taking into account the indigenous market as well as the requirements under the agreements of the Latin American Free Trade Association.

Duration of mission	man/months	1967	1/6
Estimated cost	\$11,000		
Account No.	8-050-339		

2. Special Fund Projects

Africa

Rwanda 3

Pilot Plant for Industrialization and Pyrethrum Production

The purpose of the project is to assist the Government to stimulate an appropriate form of industrial development by establishing and initially operating a pilot plant for pyrethrum production and by providing expert assistance in industrial programming and evaluation of industrial projects.

In July 1967 a consultant was sent to Kigali to complete the plan of operation and assist in the preparations for the construction and operation of the factory.

The project was approved by the Governing Council in January 1966 for a duration of three years at a total project cost of \$1,859,500 comprised of the Governing Council earmarking of \$1,459,500 and the Government counterpart contribution of \$400,000. It provides for eighteen man-years of expert services and six man-years of fellowships.

Group 5. Fertilizer Industries (continued)

Asia and the Far East

Pakistan 26

Pre-investment studies for the promotion of the fertilizer and Petrochemical industries

The purpose of the project is to assist the Government to develop its fertilizer and petrochemical industries and to promote the use of fertilizer and petrochemical end-products.

During 1967 the project manager completed an analysis of existing productive facilities, formulated detailed specifications for contracting market surveys, arranged with FAO for delivery of experimental fertilizers.

FAO, through a sub-contract is co-operating with UNIDO on this project in the area of the promotion and use of fertilizers.

The market survey to determine present and potential demand for polyvinyl chloride, polyethylene and other petrochemical intermediates should start as soon as the Pakistan Government deposits the 600,000 rupees required for the payment of services to be provided by a local Pakistan consulting firm which will work with the international consulting firm. A market survey to determine present and potential demand for petrochemical intermediates is expected to provide a basis for UNIDO's recommendations for the establishment of production facilities.

The project was approved by the Governing Council in June 1965 for a duration of three years at a total cost of \$2,632,000 comprising the Governing Council earmarking of \$1,532,000 and the Government counterpart contribution of \$1,100,000. It provides for 16½ man-years of fellowships.

Middle East and Europe

Jordan 13

Jordan Centre for Industrial Development

One expert has been provided to work with the Jordan Centre for Industrial Development to study the economic feasibility of a synthetic nitrogen project and a compound fertilizer plant in Aquaba.

Duration of mission	3 months (extended for another 3 months to 28 February 1968)
Estimated cost	\$13,700

Group 5. Fertilizer Industries (continued)

3. Special Industrial Services

Sudan SIS 67/103 SUD-6

An exploratory mission was undertaken by two staff members to study raw materials, location, transport and capacity of the proposed ammonia and urea project and to clarify further assistance needed.

Duration of mission	man/months	1967	1/one week
Estimated cost		\$1,250	
Account No.		8-050-402	

Tunisia SIS 67/67 TUN-2

The services of an expert have been provided to study and report on the economics of sulphuric acid production from gypsum. The sulphuric acid is to be used for phosphate fertilizer production.

Duration of mission	man/months	1967	1/2
Estimated cost		\$4,000	
Account No.		9-050-432	

United Arab Republic SIS 67/57 UAR-6

Two experts, an economist and a fertilizer production expert, were provided to study and report on the best location, capacity and raw materials for a urea and ammonium sulphate complex.

Duration of mission	man/months	1967/68	2/1
Estimated cost		\$3,700	
Account No.		9-050-450	

United Arab Republic SIS 67/53

An expert made a study on bromine recovery and utilization.

Duration of mission	man/months	1967	1/1
Estimated cost		\$4,500	
Account No.		9-050-450	

Group 5. Fertilizer Industries (continued)

United Arab Republic      SIS 67/54 UAR-4

Ar. expert studied and reported on chlorine utilization for DDT manufacture.

Duration of mission	man/months	1967	1/2
Estimated cost	\$7,500		
Account No.	9-050-450		

Middle East and Europe

Syria      SIS 67/204 SYR-1

An exploratory mission was undertaken by a staff member to determine the assistance to be provided for the fertilizer project now under construction at Homs and for the proposed urea and triple superphosphate projects. As a result of the mission, several requests under SIS assistance are expected.

Duration of mission	man/months	1967	1/1 week
Estimated cost	\$500		
Account No.	9-050-414		

Latin America

Bolivia      SIS 67/127 BOL-1 (part of)

A staff member undertook an exploratory mission to assist in formulating proposals for a pilot demonstration plant using natural gas at Santa Cruz to produce industrial explosives and fertilizers and also for other assistance under SIS. (The same staff member en route from Bolivia made a short stop in Colombia for a preliminary mission to explore possibilities of extending assistance in the fertilizer and allied fields.)

This project is also reported under Industrial Policies and Programming and Industrial Services and Institutions.

Duration of mission	man/months	1967	1/3 weeks
Estimated cost	\$1,000		
Account No.	9-050-051		



Group 5. Fertilizer Industries (continued)

4. Fellowships

The individual fellowships which fall in the area of fertilizer industries were distributed among the various regions as follows:

Asia	2
Middle East	3
Total	5

No fellowships were awarded under in-plant group training.

B. Expert group meetings, seminars, group training and workshops

World Fertilizer Congress

The preparatory work for the World Fertilizer Congress has been completed and a plan of operation has been prepared. It is expected that 30 developing countries will take part and that there will be a total participation of 160 delegates.

The place of the Conference will be decided later. It will be held for three weeks in September 1969.

Ref: ID/B/20, page 55.

C. Studies and research

The following four studies were prepared by consultants during the year. The studies were recommended during the Kiev Seminar and listed in ID/B/9. 20 February 1967:

"Planning successful execution of large-scale ammonia projects - consideration in design, construction and operation";

"Dual process for the production of fertilizers and soda ash";

"The new process for production of phosphate fertilizers using hydrochloric acid";

"Projection analysis of production and consumption of fertilizers using the Compertz Equation and other mathematical projection methods".

The total cost of these studies is \$4,000.

Group 5. Fertilizer Industries (continued)

As regards developing a "World Directory of Fertilizer Production Facilities", preliminary consultation with experts from developed and developing countries on this work has been initiated.

Estimated cost of project                      \$5,000

Ref: ID/B/4, Table 14, page 102.

D. Co-operation with Regional Economic Commissions and other institutions

UNIDO co-operated with the Regional Economic Commissions and specialized agencies in the preparation of various studies, and other activities as follows:

A study was undertaken for FAO on agricultural inputs such as fertilizers, pesticides and agricultural machinery required in developing countries. The study was executed in connexion with FAO's study on "Food Production Resources in Agricultural Development" (C 67/41 22 August 1967). UNIDO was invited to participate in the meeting of the Inter-Governmental Ad Hoc Committee which met in Rome from 2 to 9 October 1967.

The Fertilizer Unit assisted the Mekong Committee in the selection of experts for the industrial surveys of Mekong and substantively supported the UNIDO mission which was sent to the Mekong countries.

UNIDO was invited to participate in an OECD meeting in Paris on 26 to 27 August 1967, which discussed a report on "Supply and Demand Prospects for Chemical Fertilizers in Developing Countries". This report made use of projections of fertilizer consumption by 1975 in developing countries established by UNIDO, as contained in the sectoral study presented to the International Symposium on Industrial Development (ID/CONF.1/38 - 6 July 1967).

UNIDO participated in a meeting of a group of experts on statistics of chemical fertilizers and pesticides organized by FAO in Geneva from 28 to 31 August 1967.

Group 5. Fertilizer Industries (continued)

E. Publications

The Fertilizer Manual (Sales No.67.11.B.1) was submitted for printing as a sales item at an estimated cost of \$19,800.

Fertilizer Technology - Production and Usage  
(Proceedings of the Interregional Seminar on the Production of Fertilizers, Kiev, Ukrainian SSR, 24 August - 11 September 1965) was printed and circulated. Estimated cost \$20,000

Printing of the report of the Ad Hoc Group on Fertilizer Production in Six Selected Countries with Good Natural Gas Resources has been postponed to 1968 for budgetary reasons.

Both publications referred to in ID/B/9, namely "Reducing Sulphur Needs in Fertilizer Manufacture" and "Creating, Evaluating and Establishing Successful Fertilizer Projects" have been postponed.

F. Special surveys and missions

Twenty-six missions were carried out in eighteen countries under the Special Industrial Services Programme. Out of this amount, eight technical assistant missions were carried out by staff members, two of which have developed into requests for Special Fund projects for demonstration plants in triple superphosphate and in pesticides; three were exploratory missions to determine areas in which further assistance should be given; two were location studies for fertilizer projects and one was for the purpose of assisting a project under construction.

Group 6. Light Industries

General remarks

The following industries are included under Light Industries:

- (a) Textile industries
- (b) Food-processing industries
- (c) Tanning and leather industries
- (d) Pulp, paper and wood-processing industries

During 1967 operational activities constituted the main part of the work undertaken by UNIDO in the field of textile industries. Experts were engaged to assist in development planning, evaluation of consumption, study of local textile markets, definition of national policy, execution of feasibility studies, organization of sectoral research and production. The requests received from the developing countries were mostly oriented to modernizing existing plants and to improving the efficiency of operation.

Requests in 1967 in the field of food-processing industries were related mainly to modernization of existing installations and establishment of new facilities. The basic purpose of UNIDO has been to direct the governments towards the establishment of an integrated agro-industrial complex producing increased quantities of quality food adapted to the needs of the particular country as well as of the foreign markets.

Work in the tanning and leather industry sectors is being organized within the unit.

Work in the pulp, paper and wood-processing industries unit was started towards the end of 1967 and was limited to technical assistance.

Group 6. Light Industries (continued)

A. Field activities - Textile industries

1. Regular Programme

Asia and the Far East

Ceylon ID-482/Rev.4

A textile manufacturing adviser attached to the chairman of the National Textile Corporation is advising on planning, erection of machinery, commissioning, achievement of the production targets, production programmes, training and other technological and allied aspects.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	5-050-078		

2. UNDP/TA Programme

Africa

Morocco 421-57/Rev.2

A textile industry expert was provided to conduct a general survey of the textile industry in Morocco and to present guidelines for its further development.

Duration of mission	man/months	1967	1/8
Estimated cost	\$14,600		
Account No.	8-050-291		

Middle East and Europe

Bulgaria OH-2

One expert was provided for six months by UNIDO in 1967 to advise on the dyeing of synthetic fibres in government-controlled textile mills.

Duration of mission	man/months	1967	1/6
Estimated cost	\$11,000		
Account No.	8-050-051		

Group 6. Light Industries (continued)

Latin America

Argentina III-57/Rev.6

A combustion engineer advised on research to be conducted by the Instituto Nacional de Tecnologia Industrial (National Institute for Industrial Technology) for the development of national industry.

Duration of mission	man/months	1967	1/6
Estimated cost		\$17,000	
Account No.		8-050-024	

Venezuela XBO-25

The Government has continued to receive assistance in the textiles field under funds-in-trust. An expert has carried out an evaluation of the consumption and production of synthetic fibres and has stressed the importance of quality control in increasing productivity.

Duration of mission	man/months	1967	1/12
Estimated cost		\$28,000	
Account No.		9-050-471	

3. Special Industrial Services

Africa

Sudan SIS 67/61 SUD-4

An expert has surveyed the textile industry of Sudan, identified its basic problems and presented guidelines for its further development, with particular emphasis on the most economical use of local raw materials and reduction of cost production. He has also recommended assistance related to specific technical and marketing aspects of the textile industry.

Duration of mission	man/months	1967	1/3
Estimated cost		\$6,000	
Account No.		9-050-402	

Group 6. Light Industries (continued)

A. Field activities - Food-processing industries

1. UNDP/TA Programme

Latin America

Bolivia EX-6/Rev.1

The United Nations has provided assistance in this field to the Government since 1964 through the provision of OPEX experts with duties of executive, operational and administrative character. They were called upon to co-ordinate and organize the operations of sugar plantations and mills in the Santa Cruz area and in particular to plan and co-ordinate the supply of sugar cane to the mills in co-operation with growers. There was only one expert in the field in 1967.

Duration of mission	man/months	1967	1/9
Estimated cost	\$11,000		
Account No.	6-050-051		

2. Special Industrial Services

Africa

Ethiopia SIS 67/107 ETH-5

One expert in meat processing has been provided to solve specific problems of one plant.

Duration of mission	man/months	1967	1/3 weeks
Estimated cost	\$2,500		
Account No.	9-050-141		

Morocco SIS 67/82

An exploratory mission, which included a UNIDO staff member, visited Morocco to assess the situation of the fish concentrate plant at Agadir and study alternative technological possibilities. The visit was also in preparation of a subsequent mission to study the feasibility of reconstructing the plant.

Duration of mission	man/months	1967	4/1
Estimated cost	\$4,900		
Account No.	9-050-291		

Group 6. Light Industries (continued)

Asia and the Far East

Iran SIS 67/93

A UNIDO staff member made an initial survey of the needs of the food industry and prepared terms for further assistance, if required.

Duration of mission	man/months	1967	1/2 weeks
Estimated cost		\$1,400	
Account No.		9-050-210	

Thailand SIS 67/62

An expert advised the Government on the organization and promotion of the sugar industry, feasibility of establishing a sugar institute and preparation of requests for further assistance for the sugar industry.

Duration of mission	man/months	1967	1/3
Estimated cost		\$6,000	
Account No.		9-050-420	



Group 6. Light Industries (continued)

A. Field activities - Tanning and leather industries

1. UNDP/TA Programme

Asia and the Far East

India 37-57/Rev.7

An organic pigments and dye adviser has trained a group of two or three scientists in investigation in the field of dyes and finishes and in the dyeing and finishing of leather.

Duration of mission	man/months	1967	1/2
Estimated cost	\$5,000		
Account No.	8-050-204		

Malaysia 19-66

A leather industries expert has been assisting the Government in the utilisation and improvement of the leather and leather products industries of Malaysia.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-270		

Latin America

Jamaica XBO-427 Funds-in-Trust

Since December 1964 UNTA and UNIDO have provided the services of an expert in footwear production to the Ministry of Development and Welfare on a funds-in-trust basis. During this period, productivity in the various factory operations has increased to the point where Jamaica now exports footwear instead of importing it, as in previous years.

Duration of mission	man/months	1967	1/12
Estimated cost	\$23,200		
Account No.	9-050-228		

Group 6. Light Industries (continued)

2. Special Industrial Services

Africa

Niger            SIS 67/121

A tannery expert worked on the evaluation of the quality of cowhide for export, studied the techno-economic viability of a tannery adjunct to the Niamey abattoir and prepared a request for Special Fund assistance in the establishment of a pilot tannery.

Duration of mission	man/months	1967	1/2
Estimated cost	\$3,800		
Account No.	9-050-318		

Group 6. Light Industries (continued)

A. Field activities - Pulp, paper and wood-processing industries

1. Regular Programme

Africa

Africa regional ED-439

An adviser on chemical forest industries assisted in the development of forest industries, including the manufacture of containers, furniture, and pulp and paper products. He has advised on studies dealing with feasibility, investment, and construction on a country and sub-regional basis and on the preparation of technical papers in the field of forest industries for meetings and committees of the Economic Commission for Africa and for countries in the region.

Duration of mission	man/months	1967	1/3
Estimated cost		\$24,000	
Account No.		5-050-900	

Latin America

Jamaica ED-951

A furniture production engineer has been provided as an advisor to the wood-working Industry for the Productivity Centre within the Industrial Development Corporation and also as a consultant to the wood and bamboo craft industry. He has indicated ways to improve the efficiency of furniture factories and scheduled a programme of lectures on furniture design and production at the Jamaica School of Arts and Crafts.

Duration of mission	man/months	1967	1/12
Estimated cost		\$19,500	
Account No.		5-050-228	

Group 6. Light Industries (continued)

2.UNDP/TA Programme

Asia and the Far East

India

Industrial Investment Survey

The Chief of the Industrial Survey Mission worked with high-level Government authorities of the states of Madhya Pradesh and Mysore. He guided and co-ordinated the technical investigations of mineral-based and forest-based industry projects in the two states that were carried out by the other members of the mission in order to make them suitable for consideration by international and local investors for financial participation.

A second expert reviewed and analysed all pertinent data and developed such additional material as necessary, relating to the possible establishment of wood fibreboard industries to manufacture various types of this product in the states of Mysore and Madhya Pradesh.

A third expert reviewed and analysed all pertinent data made available to date and developed additional material relating to the feasibility of establishing pulp and paper industries.

Duration of mission	man/months	1967	3/21
Estimated cost		\$40,000	
Account No.		8-050-204	

Western Samoa XBO-382

Under the associate expert scheme and in co-operation with the Government of Denmark, UNIDO continued to render assistance to Western Samoa in furniture and cabinet-making.

Duration of mission	man/months	1967	1/12
Estimated cost		\$13,098	
Account No.		9-050-590	

Group 6. Light Industries (continued)

Middle East and Europe

Yugoslavia 294-57

An expert in panel production paid a one-month visit to Yugoslavia to advise the Wood Industrial Company "Lim" in Ivangrad on the possibilities of better utilization of raw materials and waste products. Three short return visits are contemplated in 1968.

Duration of mission	man/months 1967	1/4
Estimated cost	\$8,000	
Account No.	8-050-495	

3. Special Industrial Services

Africa

Ivory Coast SIS 66/22 IVCO-1

An expert was sent to the Ivory Coast on an exploratory mission to investigate the possibilities of giving assistance to a paper mill which the Government has decided to set up. He advised on establishment, management and training. His report is currently being evaluated for transmittal to the Government.

Duration of mission	man/months 1967	1/3 weeks
Estimated cost	\$3,000	
Account No.	9-050-225	

Uganda SIS 67/131 UGANDA-1

An expert was sent to study the possibility of establishing a pulp and paper industry primarily for domestic use, and possibly for export. He advised the Government on the selection of the various feasibility studies and offers hitherto received. He has completed his mission.

Duration of mission	man/months 1967	1/2
Estimated cost	\$5,000	
Account No.	9-050-438	

Group 6. Light Industries (continued)

United Arab Republic SIS 67/78 UAR-7

Two experts, with the support of a consulting firm, made in 1966 under SIS a study of the Edfu Pulp and Paper Mill to ascertain why the mill was unable to attain the rated capacity and to produce pulp of a consistent quality. The experts located several deficiencies and made recommendations for further assistance under SIS. As a second phase of the project, one expert is assisting in preparing schedules and plans for the efficient running of the mill and in recommending future courses of action required for its successful operation.

Duration of mission	man/months	1967	1/6
Estimated cost	\$11,000		
Account No.	9-050-450		

Middle East and Europe

Cyprus SIS 66/46 CYP-4

An expert on timber marketing has been provided to advise on the running of a sawmill set up by the Government a few years ago. This sawmill is not operating at present because its products do not find a ready domestic market. It is felt that this sawmill could now be run on a profitable basis if the plant is re-aligned to meet market requirements.

Duration of mission	man/months	1967	1/2
Estimated cost	\$4,000		
Account No.	9-050-111		

Turkey SIS 67/76 TUR-3

An expert was provided to advise on the modernization of the SEKA Pulp and Paper factory, the recovery of waste in the cellulose plant and the utilization of paper waste.

Duration of mission	man/months	1967	1/1
Estimated cost	\$2,000		
Account No.	9-050-435		

Group 6. Light Industries (continued)

Latin America

Dominican Republic SIS 67/77 DOM-1

An exploratory mission was undertaken by a staff member in order to ascertain the possibilities of re-activating the Dominico-Suiza particle board and plywood plant.

Duration of mission	man/months	1967	1/10 days
Estimated cost		\$650	
Account No.		9-050-126	

Peru SIS 67/95 PERU-1

An exploratory mission visited Peru in order to gather information required by the Government to invite bids from specialized consulting engineering firms for a feasibility study of a plant manufacturing pulp and paper from bagasse. The mission's findings were positive, and it is anticipated that the services of a suitable consulting firm will be engaged.

Duration of mission	man/months	1967	2/1
Estimated cost		\$1,700	
Account No.		9-050-339	

4. Fellowships

The individual fellowships and in-plant group training which fall in the area of light industries were distributed among the various regions as follows:

Africa	7
Asia	9
Latin America	8
Middle East	8
Europe	<u>28</u>
Total	60

The distribution of the fellowships by programmes is as follows:

Individual programmes:	47
In-plant group-training programmes:	13

Group 6. Light Industries (continued)

B. Expert group meetings, seminars, group training and workshops

Guidelines for the developing countries on the selection of textile machinery

According to the programme for 1967, a group of experts meeting was convened at the Vienna headquarters on the selection of machinery in the cotton industry on 23-27 October 1967. Nine experts from machine-manufacturing countries participated in the meeting. The experts reviewed and amended the background documents prepared for the meeting:

"Appraisal of available levels of equipment and process sophistication for carded cotton-spinning and weaving",

"Criteria for selection of equipment for cotton-spinning and weaving with special reference to developing countries".

The report of the group will be published early in 1968 (ID/WG/8/1) and distributed to the developing countries to serve as a practical guide on the selection of machinery in the cotton industry; \$7,853 was utilized for consultant fees and for expenses in conjunction with the convening of the meeting.

Ref: ID/B/4, Table 17, page 108.

C. Studies and research

Nine studies on food-processing were included in the 1967 Work Programme; of these, five have been completed. In these papers the authors described up-to-date methods of food-processing relevant to the developing countries and reviewed the data needed to evaluate investment ideas in food-processing industries. These studies will be published by UNIDO as part of a series of technical guidelines oriented to help the industrialist and government officers in solving specific problems related to the food industries. The five completed studies are:

"Information on up-to-date citrus processing"

"Evaporation in modern food processing"

"Milk processing in developing countries"

"Water-saving techniques in food-processing plants"

"Packaging problems in developing countries".

The cost of each study was \$1,000, taken from 1967 consultant funds.

Due to difficulties in finding suitable experts to write the papers in time, the following four studies were postponed:

"Starch production in developing countries"

"Production of foodstuffs and protein-enriched mixture and concentrate"

"Protein enrichment in starch food products"

"Production of dried dates, bananas, figs".

Ref: ID/B/4, Table 18, page 109.



Group 6. Light Industries (continued)

E. Publications

The publication originally planned as a Manual on the Textile Industry was completed in 1967 and published under the title "Technological and Economic Aspects of Establishing Textile Industries in Developing Countries". (ID/7)

Ref: ID/B/4, Table 17, page 108.

F. Special surveys and missions

1. Textile industry

Surveys of the textile industry in developing countries

The original 1967 plan of country studies in the ECA and ECAFE regions has been modified. Such surveys have been and are currently being conducted by United Nations field experts as part of their duties at the request of the governments. They usually fall under the SIS programme.

Ref: ID/B/4, Table 17, page 108.

Missions

Two staff members of the Textile Unit undertook a mission to Morocco and Kenya in 1967 to establish the terms of reference for technical assistance projects:

(a) Morocco - August 1967

The objective of the mission was to follow up the contact which had been established with the Ministry of Industry and Mines regarding a comprehensive survey of the textile industry in Morocco. The survey will be carried out by a United Nations expert under the Regular Programme in collaboration with the Ministry, starting in November 1967.

(b) Kenya - August 1967

At the request of the Government, terms of reference were established for two United Nations experts who will carry out a survey of the textile industry in Kenya, analysing its techno-economic problems and advising the Government on a future course of action, taking into consideration the broader framework of the East African Common Market.

Group 6. Light Industries (continued)

2. Food industry

The following six missions were undertaken:

(a) Algeria

The exploratory mission was geared to advise on possible assistance for re-activation of industries which were idle or working below capacity. On the basis of the findings, technical and managerial assistance under SIS has been recommended for four enterprises.

(b) Bolivia

In the report on the mission, ten SIS projects as well as other technical assistance projects in connection with different branches of light industry were recommended.

(c) Columbia

Five projects of assistance under SIS for the meat processing industry were discussed and agreed upon.

(d) Ethiopia

The meat-processing plant in Malge Wondo has been visited and an appropriate technical assistance project recommended.

(e) Iran

The possibilities of agro-industrial food production have been elaborated and ten UNDP/SIS projects recommended.

(f) Morocco

A team including two FAO experts visited the fish protein plant in Agadir and studied the entire Moroccan food industry as well. Four SIS projects were recommended.

INDUSTRIAL SERVICES AND INSTITUTIONS DIVISION

Group 7. Industrial Legislation, Patents and Licensing

General remarks

During 1967, UNIDO intensified contacts with the established organizations in the patent field with a view to developing a joint programme of assistance to developing countries in this area. These contacts were furthered by participation of a UNIDO staff member at the Stockholm Conference on Intellectual Property.

A. Field activities

1. UNDP/TA Programme

Asia and the Far East

Nepal 183-65

An industrial legislation expert assisted in the legislative structure of Nepal and recommended amendments to rationalize existing legislation.

Duration of mission	man/months	1967	1/4
Estimated cost	\$9,000		
Account No.	8-050-297		

2. Fellowships

No fellowships were awarded during 1967 in the area of industrial legislation, patents and licensing.

B. Expert group meetings, seminars, group training and workshops

Technical meeting on patents

During 1967 some research and contacts with other interested international organizations were undertaken with a view to organizing in 1968 a technical meeting for the review of existing systems and practices in developing countries on the use of patents. It is expected that negotiations and arrangements for the holding of an advisory meeting of experts in industrial patents for developing countries will commence in the first quarter of 1968.

Ref: ID/B/4, Table 22, page 132.

Group 7. Industrial Legislation (continued)

C. Studies and research

Industrial legislative series

During 1967 some material was collected and compiled for an industrial legislative series. As the "series" will not be limited exclusively to legislation, but will include also pertinent administrative directions, executive orders and other regulations affecting the various subject categories, the operations of ILO's Legal Section were studied by a member of the staff in order to gain from their long experience in this field. Furthermore, discussions were held with BIRPI and the Department of Economics and Social Affairs on possible co-operation in the preparation of material pertinent to the publication of patent and investment laws.

Ref: ID/B/4, Table 22, pages 132-133.

Group 8. Industrial Research, Standardisation and Quality Control; Industrial Information

General remarks

In this field UNIDO was concerned in 1967 with assistance to developing countries in setting up and supporting their national or regional machinery for standardisation activities, in co-operation with the existing international agencies, namely the International Organisation for Standardization (ISO) and the International Electro-technical Commission.

A. Field activities under the various programmes of technical assistance

1. Regular Programme

Asia and the Far East

Regional ED-1083 Rev.6  
ED-1084 Rev.1

The services of a regional standards adviser have been made available on request to member governments in the region. More specifically, the expert is advising on: (a) surveys to be undertaken to initiate standardisation activity, (b) organisation of appropriate programmes to train specialist personnel, (c) development of appropriate standardisation programmes, (d) formulation, issue and implementation of industrial standards, and (e) introduction of comprehensive programmes of standardisation at various levels - company, national and international.

Duration of mission	man/months	1967	1/5
Estimated cost	\$12,000		
Account No.	5-050-925		

Group 8. Research, Standardization and Quality Control (continued)

2. UNDP/TA programme

Africa

Libya

Under the responsibility of the director of the Industrial Organization Department, Ministry of Industry, an expert serving as head of the Specification and Standardization Section is responsible for the Section's work programme and operational activities and is advising the Ministry on various problems related to industrial standards.

Duration of mission	man/months	1967	1/2
Estimated cost	\$16,000	(Funds in Trust)	
Account No.	9-050-258		

Asia and the Far East

Afghanistan 155/63 Rev.1

An expert on the metric system is assisting the Ministry of Industries in the introduction and implementation of the metric system to promote the use of metric standards in commerce and industry.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-006		

Burma 1-57

An expert has advised the Standards Department of the Burma Applied Research Institute on the selection of metrological equipment, the training of personnel in metrology and the operation of metrological services. This project is also reported under Industrial Technology.

Duration of mission	man/months	1967	1/12
Estimated cost	\$7,200		
Account No.	8-050-060		

Group 8. Research, Standardization and Quality Control (continued)

Singapore 203-67

A senior industrial research adviser was attached to the Economic Development Board during 1967 to review industrial research facilities and recommend measures to improve them.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-297		

Thailand 82-57/Rev.1

An expert is assisting the Industrial Standardization Unit in the Ministry of Industry to set standards for locally manufactured products, to improve facilities for testing, controlling and certification and to institute a laboratory for repairing, building and calibrating testing instruments and scientific apparatus.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-420		

This project is also reported under Policies and Programming Division - Group 12.

Latin America

Barbados 87-63

An industrial standards adviser has assisted the director of the Economic Planning Unit in the Office of the Premier. The expert has prepared summary proposals on the development of systems and procedures for the elaboration, application, review and dissemination of standards; specifications and testing methods for industrial raw materials and products, as well as engineering; and manufacturing standards. A plan for the establishment of a national standards bureau has been also worked out by the expert.

Duration of mission	man/months	1967	1/11
Estimated cost	\$22,000		
Account No.	8-050-042		

Group 8. Research, Standardization and Quality Control (continued)

3. Special Industrial Services

Latin America

Guyana SIS 67/213

Two experts advised the Government on setting up guidelines for the establishment of a national industrial standards organization.

Duration of mission	man/months	1967	2/2 weeks
Estimated cost	\$1,200		
Account No.	9-050-180		

Trinidad and Tobago SIS/67/87 TRTO-2

Two experts in industrial standardization have advised the Government on guidelines for national standardization organization, the establishment of which is considered as a matter of great urgency by both Government and industry.

Duration of mission	man/months	1967	2/1
Estimated cost	\$2,000		
Account No.	9-050-429		

4. Fellowships

The individual fellowships which fall in the area of industrial research, standardization and quality control and industrial information were distributed among the various regions as follows:

Asia	12
Latin America	3
Middle East	2
Europe	<u>8</u>
Total	25

No fellowships were awarded under in-plant group training during 1967.



Group 8. Research, Standardization and Quality Control (continued)

B. Expert group meetings; seminars; group training and workshops

1967 Standardization Conference

UNIDO sponsored fifteen representatives from developing countries, not members of the International Organisation for Standardization (ISO) to participate in the Development Conference (DEVCON) and other meetings in connection with the 1967 General Assembly of ISO which was held in Moscow on 14-28 June 1967. This Conference discussed ways and means of promoting standardization activities in the developing countries. The representatives also observed the operations of ISO, technical committee and national and company standards activities in the USSR and other countries on their return journey.

Ref: ID/B/4, Table 20, page 113.

C. Studies and research

1. Country studies on standardization

An ad hoc consultant for the ECAFE region was commissioned in August 1967 to make a study of the industrial standardization needs of the developing countries in this region. The consultant is expected to complete the study in 1968 and to submit then his recommendations for the organization of national bodies in the region for the development of standardization practices and for a more effective programme of United Nations assistance.

Ref: ID/B/4, Table 20, page 113.

2. The proposed studies of quality control practices in two selected countries in the Middle East were postponed.

Ref: ID/B/4, Table 20, page 113.

Group E. Research, Standardization and Quality Control (continued)

E. Publications

Industrial organizations and administration

In continuation of UNIDO's activities, a number of field projects related to the establishment and/or strengthening of industrial organizations were supervised in 1967. Furthermore, contacts were maintained with national and international industrial private organizations, and the following two reports were finalized and reproduced in mimeographed form in 1967:

"The Role of Manufacturers' Association in Industrial Development" (ID/WG.1/DP.3);

"Trade Union Contribution to Industrial Development: Varieties of Economic and Social Experience." (ID/WG.1/DP.16).

The total cost of the reports (200 copies each) in mimeographed form in English amounted to an estimated \$100.

Group 9. Industrial Consulting Services; Industrial Organization and Administration

General remarks

UNIDO efforts in this field in 1967 concentrated on the support of operational projects in developing countries. In addition, considerable efforts were devoted to the preparation of the International Symposium and especially to the arrangements and supervision of the UNIDO Industrial Promotion Service which operated concurrently with the Symposium in Athens.

UNIDO continued its work in the area of industrial research by supervising technical assistance to the research institutes for which it is responsible in Africa, Asia, the Middle East and Latin America under the various UN Assistance Programmes. Preparations continued in 1967 for the feasibility studies which UNIDO will undertake in several developing countries in 1968 to determine whether or not it is possible to establish industrial research institutes there, what services they should provide and what the most suitable organization and type of management would be.

In the area of industrial consulting services UNIDO undertook initial research and promotional activities during 1967 with a view to establishing, in co-operation with interested agencies (UNDP, IBRD and others) a roster of industrial consultant organizations.

UNIDO continued to enlist scientific, industrial and professional bodies throughout the world as voluntary contributors to its industrial inquiry service, thus providing ad hoc replies to about 250 specific inquiries on technological and business management subjects in 1967.

The planning of the establishment of a central industrial information service for developing countries has progressed in 1967 and will be completed in 1968.

Group 9. Consulting Services (continued)

A. Field activities

1. Regular Programme

Latin America

Trinidad and Tobago ED-860

UNIDO has provided the services of an industrial development adviser to review the policies and programmes of the Industrial Development Corporation and its present staffing and organisational pattern and to submit specific recommendations concerning the improvement of the programmes and organisational structure.

The expert completed his report, which was submitted to the Government in November 1967.

Duration of mission	man/months	1967	1/6
Estimated cost		\$11,550	
Account No.		5-050-429	

This project is also reported under Policies and Programming Division - Group 12.

2. UNDP/TA Programme

Africa

Nigeria 10/61/Rev.1

An expert to serve as director of the Federal Institute of Research has been provided to the Government. His functions include the definition of the Institute's policies, subject to the approval of its Governing Body and the National Ministry of Industries. He is co-ordinating the work of the Institute with related research and extension programmes in other fields, e.g. agriculture; to plan and direct the execution of approved research programmes, and to provide industry in general with technical and other relevant information.

Duration of mission	man/months	1967	1/6
Estimated cost		\$11,000	
Account No.		8-050-315	

Group 9. Consulting Services (continued)

Asia and the Far East

Thailand

82-57/Rev.3

An industrial economist (market survey) is advising a local expert group on economic analysis and appraisal of applied scientific research and projects with special reference to potential industrial applications and training local staff.

Duration of mission	man/months	1967	1/1
Estimated cost	\$2,000		
Account No.	8-050-420		

3. Special Fund Projects

Africa

Sudan

12

Industrial Research Institute. The objective of the project is to promote industrial and economic development through the application of industrial research and technology and provide assistance and professional advice on processes, standards and efficient techniques of industrial production.

During the year, the Institute conducted investigations, appraisals and surveys of many public and private projects. It began elaborating standards for Sudanese industrial products and organized a course on statistical quality control for counterpart staff, including individuals from Government and private industry.

The project, approved by the Governing Council in June 1963 for a duration of five years, includes the provision of expert services of 21 man-years and fellowships for 10-3/4 man-years. The total cost of the project is \$1,422,900 comprised of the Governing Council earmarking of \$748,900 and Government counterpart contribution of \$674,000.

Group 9. Consulting Services (continued)

Asia and the Far East

Thailand

16

Technological Research Institute. The objective of the project is the establishment and initial operation of an institute for technological research as the first of a number of specialized research organizations of the Applied Scientific Research Corporation of Thailand. The project aims to provide the scientific and technical basis for the improvement and expansion of existing industries and the development of new industries in that country.

During the year research was carried out in the following fields: natural perfume and flavour materials, processing of medicinal plants, industrial iodization of crude salt, industrial utilization of minerals, including metals extraction, building materials evaluation and utilization of textile fibres. Training programmes were also undertaken in association with the Commonwealth Scientific and Industrial Research Organization (CSIRO) laboratories in Australia, and regular fortnightly aid in the form of weekly seminars on current research in organic chemistry have been instituted.

The Technological Research Institute has been developing its work in close co-operation with the Small Industries Services Institute (ILO), and the two groups are collaborating in work on foundry practice and electroplating.

The project was approved by the Governing Council in January 1964 for five years at a total project cost of \$3,013,300 comprising the Governing Council earmarking of \$846,300 and the Government counterpart contribution of \$2,167,000. It provides for twenty man-years of expert service and eight man-years of fellowships.

Middle East and Europe

Israel

11

Industrial Research Centre. The purpose of the Centre is to promote the application of the findings of basic research to production as a means of accelerating industrial development. It concentrates on medium- and long-range industrial research for application to new or unproved products and processes and provides assistance to industry by consultation, by dissemination of scientific and technological information, and by technical and economic analysis of new and promising technological products and purposes.

Group 9. Consulting Services (continued)

In accordance with the Plan of Operation, the association between the Centre and the Institute for Fibres and Forest Products Research as well as with the Institute for Research and Development, Israel Mining Industries (IMI), has been established, thus ensuring the unification of research management methods. Industrial research activities were carried out during the year in conjunction with these two affiliates as well as by the Food Technology and Plastics Technology divisions of the Centre and steps were taken towards the commercialization of some of IMI's proprietary technology.

The project was approved by the Governing Council in January 1964 for a duration of five years at a total cost of \$5,236,500 which is comprised of the Governing Council's earmarking of \$1,266,500 and the Government counterpart contribution of \$3,970,000. It provides for approximately twenty man-years of expert services and approximately twenty man-years of fellowships.

Latin America

Colombia

7

Institute for Technological Research. The purpose of the project is to expand the facilities of the Institute for Technological Research in order to provide more effectual assistance to small and medium-sized industries in developing operating techniques for improved utilization of raw materials and equipment as also to assist private and public agencies to attain higher productivity through the establishment of quality-control systems.

The project was due for completion at the end of June 1967 but was extended until 31 December 1967.

During the year the Institute continued its activities by conducting techno-economic studies in various fields and has completed industrial studies pointing to investment opportunities of approximately \$219 million since it became operational. In addition, eight new Colombian industrial plants with a combined cost of \$32.8 million are being built following feasibility studies which the Institute has carried out.

As a result of the positive achievements of the project a Phase II project which will strengthen the Institute's activities in fields of potentially high economic growth and provide additional training for counterpart staff, has been recommended for the approval of the Governing Council in January 1968.

The project was approved by the Governing Council in December 1960 for four years at a total project cost of \$1,071,700 comprising the Governing Council earmarking of \$558,700 and the Government counterpart contribution of \$513,000. It provides for approximately sixteen man-years of expert services and three man-years of fellowships.

Group 9. Consulting Services (continued)

Paraguay

8

National Technical Standards Institute. The objective of the Institute is to prepare standards of quality and methods of quality control with particular reference to major export products such as meat, timber, vegetable and essential oils, hides, skins and cotton.

During the year the temporary laboratories were completed and the Institute began its laboratory work in various fields as well as beginning the preparation of some standards. A quarterly "Institute Technical Journal" has been initiated, and a technical library is being added to the standards library. The eleven standardization committees, cooperating with the Institute, whose members are drawn from industry, the Government, the university and local testing laboratories, have been put in full operation.

The project was approved by the Governing Council in May 1962 for five years at a cost of \$908,900 comprised of the Governing Council earmarking of \$543,900 and the Government counterpart contribution of \$365,000. It provides for twenty man-years of expert services and five man-years of fellowships.

Regional

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The Central American Research Institute for Industry (ICAITI)

Phase II

The functions of ICAITI are to provide research and technical services in the field of industry to the Member Governments and private enterprise in Central America and to investigate the utilization of the natural resources and raw materials of the region.

ICAITI has continued to establish product quality standards for the whole Central American area and to carry out economic and marketing studies for the location of new public and private industries as well as technological research and the industrial use of raw materials and geological and mining surveys essential for the economic integration of the region. ICAITI obtained a grant of \$50,000 from the Inter-American Development Bank to study industries of regional interest which might be located in Honduras.

It is anticipated that the project will be completed by 30 June 1968.

The project was approved by the Governing Council in June 1965 for a duration of three years at a cost of \$1,529,500 comprised of the Governing Council earmarking of \$832,500 and the Government counterpart contribution of \$697,000. It provides for nine man-years of expert services and twenty-three man-years of fellowships.



Group 9. Consulting Services (continued)

4. Special Industrial Services

Africa

Mauritius

SIS 67/190 MAR-3

A staff member of UNIDO visited Mauritius for three weeks to examine the need for the establishment of an industrial promotion centre, advise the Government of Mauritius on the structure and composition of such a centre, and draft, if required, a request for United Nations assistance for its establishment. This preliminary mission was completed in October 1967 and recommendations were submitted to the Government concerning the structure, functions, organization and administration of the proposed industrial promotion centre and the type of possible United Nations technical assistance in its establishment and initial operation. It is expected that there will be a follow-up in 1968.

Duration of mission	man/months	1967	1/3 weeks
Estimated cost	\$1,600		
Account No.	9-050-620		

5. Fellowships

In the area of industrial consulting services, organization and administrative machinery for industrial development, no fellowships were awarded during 1967.

Group 9. Consulting Services (continued)

B. Expert group meetings, seminars, group training and workshops

1. Workshop for managers of industrial research institutes

UNIDO organized in Athens from 4 to 8 July 1967 a training workshop for managers of industrial research institutes. The workshop was attended by nineteen participants (managers or directors of various industrial research institutes in Africa, the Middle East, Asia and the Far East and Latin America), eight experts and 24 observers from the host country. UNIDO supervised the preparation of nine papers and six studies which were submitted to the workshop. Statements from eighteen countries were presented and discussed. A number of recommendations were prepared by working committees and unani- mously adopted. The report of the proceedings and recommendations of the workshop has been completed and will be published and distributed in 1968.

The total cost of the workshop, including travel and subsistence for the experts and participants, amounted to \$52,000.

Ref: ID/B/4, Table 22, page 131.

2. Preparation for regional workshop for employers of consultants

During 1967 research and the establishment of the necessary contacts were undertaken with a view to holding a regional workshop for employers of consultants in 1968.

Ref: ID/B/4, Table 22, page 131.

3. Workshop for the managing staff of local consulting establishments

During 1967 research and promotion were undertaken for a regional workshop for the managing staff of local consulting firms and offices, thereby bringing to light problems of their profession and examining ways and means of providing more effective help to industry. These preparatory activities in 1967 have been estimated at \$5,000 in consultant funds.

Ref: ID/B/4, Table 22, pages 131-132.

Group 9. Consulting Services (continued)

4. Technical meeting on industrial co-operatives

The Expert Group Meeting on Industrial Co-operatives was held in New York from 6 to 15 November 1967. The meeting considered the different aspects of industrial co-operatives related to technical feasibility and planning, financial viability, productivity, marketing, standardization and quality control, industrial advisory services, and technical assistance. The report on the proceedings and recommendations of this expert group meeting will be made available in the first quarter of 1968. Its cost was about \$18,000.

Ref: ID/B/4, Table 22, page 133.

5. Advisory service on the supply of industrial equipment

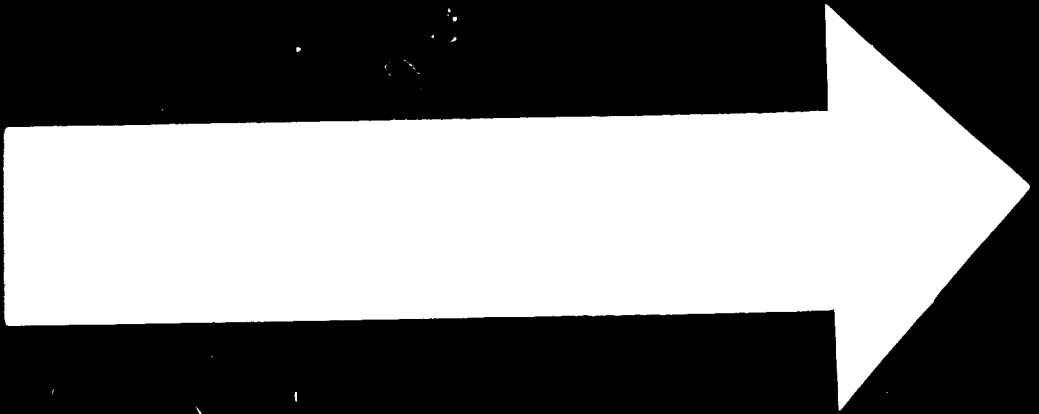
The expert group meeting, which included representatives of both suppliers and users of industrial equipment, was held in New York in November 1967. The group explored ways and means for the collection, analysis, classification and dissemination of information on industrial equipment with a view to establishing an advisory service in UNIDO for such a purpose. The recommendations of the meeting are expected to assist UNIDO to organize in 1968 a suitable advisory service which will be of value to both the industrialised and industrialising countries. The estimated cost of the meeting is \$13,500. About two man-months of UNIDO staff time were devoted to this activity.

Ref: ID/B/4, Table 22, page 133.

6. Seminar on industrial information

Research and negotiations were undertaken in 1967 with a view to holding a seminar on industrial information for participants from developing countries in 1968. The seminar will identify problems of organization of industrial information services in developing countries, serve as a forum for the exchange of views and discuss technical assistance in this field. Negotiations are under way with a possible host country.

Ref: ID/B/4, Table 22, pages 133-134.

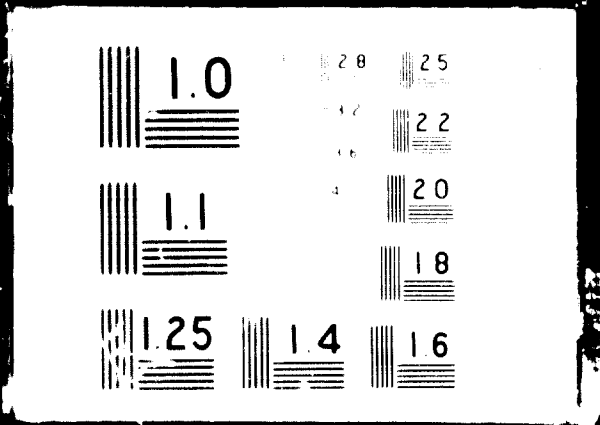


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Group 9. Consulting Services (continued)

7. Seminar on the organization of industrial services in Africa

In continuation of previous plans UNIDO and the African Training and Research Centre in Administration for Development (CAFRAD) organized jointly the scheduled seminar on the organization and administration of industrial services in Africa, which was held in Tangier, Morocco, from 14 to 30 August 1967. The seminar was attended by 22 government representatives, 8 expert consultants and 19 observers from various international organizations and United Nations agencies. The seminar adopted recommendations to be transmitted through UNIDO to the various African Governments. The recommendations include suggestions concerning technical assistance in the area of industrial services and ways of strengthening and improving the organization and administration of these services. UNIDO contributed \$13,000 to the costs of this seminar to supplement \$30,000 supplied by CAFRAD.

Ref: ID/B/A, Table 22, page 134.

8. Industrial co-operation

UNIDO conducted a technical meeting on industrial co-operatives in November 1967. This meeting was designed to study and explore the most practical approach to utilizing United Nations Technical Assistance programmes for strengthening industrial co-operatives.

C. Studies and research

1. Industrial Research and Development News

Two issues of the "Industrial Research and Development News" were prepared in 1967, one being published early in 1967 and the other early in 1968. This periodical is a continuation of the "Industrial Research News" and it is designed mainly as a communication medium among industrial research institutes throughout the world. The estimated cost of the two issues of 9,500 copies is \$14,600.

Ref: ID/B/4, Table 22, page 131.

Group 9. Consulting Services (continued)

2. Industrial inquiry services

This service, already established, continued throughout 1967. It aims to assist industries in developing countries to gain access to industrial information of possible use to them.

Ref: ID/B/4, Table 22, page 133.

3. Directory of industrial agencies

UNIDO collected additional data in 1967 from various regions of the world on agencies engaged in industrial development, with a view to publishing an industrial agency handbook in 1968. The directory will include information on the functioning of industrial agencies as well as administrative procedures for the establishment of industries.

Ref: ID/B/4, Table 22, page 133.

4. Central industrial information service

UNIDO began to collect material and sought advice for the planning and organization of a Central Industrial Information Service for developing countries to operate at UNIDO's headquarters in Vienna. A detailed report on the equipment and staff, as well as on the methods of operation to be adopted by this service in order to assure effective day-to-day performance was elaborated and will be finalized in the first quarter of 1968.

5. Industrial co-operatives

UNIDO finalized and reproduced in 1967, in mimeographed form, in English and French, the report on the "The Nature and Role of Industrial Co-operatives in Industrial Development" (ID/WG.I/DP.2). This report is based on a study by an outside consultant in 1966 and was used as part of the material submitted to the seminar in Tangier on the Organization of Industrial Services in Africa.

Group 10. Industrial Management and Training

General remarks

In the past year UNIDO has given strong emphasis to efforts to meet the needs of the developing countries in the fields of industrial training and management. The activities in the field of training initiated in 1966 were considerably increased in 1967. A limited build-up of activities in the industrial management field was initiated in the same year.

Several industrialized host countries as well as developing countries have expressed their interest in repeating and increasing the number of in-plant training programmes on an annual basis. Many of these programmes have been financed so far on an ad hoc basis from savings from the expanded and regular programmes of technical assistance. If, however, the group in-plant training programmes are to be continued and their effectiveness greatly enhanced, it is highly desirable that more regularized financing be provided for them.

The work of UNIDO in the field of industrial management is still in its early stages. Emphasis is being given to building up a managerial capability to deal effectively with problems of fuller utilization of human and material resources in the manufacturing plants of the developing countries and at the same time to deal with the need for a large number of trained executives and managerial personnel.

During the past year, the work of UNIDO in the field of industrial management has been primarily concerned with provision of direct expert assistance to the manufacturing enterprises in the developing countries.

A. Field activities under the various programmes of technical assistance

Ref: ID/B/3, Chapter V, pages 142-207.

1. Regular Programme

Asia and the Far East

China

ED-599/Rev. 4

Already reported under Technological Division, Group 4.



Group 10. Management and Training (continued)

2. UNDP/TA Programme

Africa

Ghana 46-61/Rev. 1

Four OPEX experts in industrial production, marketing development, industrial management planning and financial control and planning respectively, are assisting the State Enterprises Secretariat in the establishment of systematic methods of planning and implementation of production targets.

Duration of mission	man/months	1967	4/48
Estimated cost		\$66,200	
Account No.		8-050-162	

This project is also reported under Policies and Programming Division - Group 13.

Zambia 139-65

A senior industrial adviser has been assisting the Government since 1965 in the following matters: advice and co-operation with the Planning Authority on industrial planning and programmes; selection of projects; advice on the need for and commissioning of feasibility studies; sources of finance, public and private; industrial law; including an investment law; the development of African entrepreneurship; the setting up of industrial estates; standards and standardization problems; marketing and export production.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		8-050-498	

Asia and the Far East

China 29-57

This project has been already reported under Industrial Technology Division - Group 1.

India 37-57

This project is included under Industrial Technology Division - Group 1.

Group 10. Management and Training (continued)

Indonesia 43-57

This project has been already reported under Industrial Technology Division - Group 1.

Iran XBO-713

This project has been already reported under Industrial Technology Division - Group 5.

Republic of Korea XBO-66

This project has been already reported under Industrial Technology Division - Group 3.

Malaysia 19-66/Rev. 3

A management expert has been rendering advisory services to Malaysia's indigenous enterpriss. These services are expected to continue through 1968.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-270		

Latin America

Chile 130-57

An industrial adviser advised enterprises on management problems on matters related to production, planning, inventory policy, programming production sequence and quality control, with particular emphasis on the production and maintenance of capital goods.

Duration of mission	man/months	1967	1/3
Estimated cost	\$5,500		
Account No.	8-050-084		

Group 10. Management and Training (continued)

3. Special Industrial Services

Africa

Ethiopia                      SIS 67/105 ETH-2

The services of a management accounting expert have been provided to the Ethiopian Investment Corporation (EIC). The expert is examining and assessing existing accounting systems and the managerial organization of some of the EIC's industrial undertakings. On the basis of this survey he will also make the necessary recommendations for improving the managerial efficiency, especially the development of modern and effective costing and accounting services.

Duration of mission	man/months	1967	1/3
Estimated cost		\$7,000	
Account No.		9-050-141	

Ghana                              SIS 66/2 GHA-2

The team consisting of three experts recruited under the SIS programme is assisting - as OPEX personnel - the Fibre Bag Manufacturing Corporation in Kumasi in running its plant efficiently. This is a wholly government-owned enterprise that makes jute bags from imported raw materials. The factory was operating at only about 50 per cent of capacity.

Duration of mission	man/months	1967	3/30
Estimated cost		\$40,000	
Account No.		9-050-162	

Middle East and Europe

Yugoslavia                      SIS 67/202

Two UNIDO staff members undertook an exploratory mission to investigate the possibilities of better use of equipment and improve quality control in the management of several projects, and in promotion of exports.

Duration of mission	man/months	1967	2/1
Estimated cost		\$600	
Account No.		9-050-495	

Group 10. Management and Training (continued)

4. Fellowships

The individual fellowships that fall within the area of Industrial Management and Industrial Training only were distributed among the various regions as follows:

Africa	1
Asia	2
Latin America	1
Europe	<u>5</u>
Total	9

No fellowships were awarded under the in-plant group training programme during 1967.

B. Expert group meetings, seminars, group training and workshops

1. In-plant group-training programmes

UNIDO organized, in 1967, seven group in-plant training programmes in specific branches of industry in co-operation with six industrialized countries. One hundred and fifteen engineers and technicians from the developing countries participated in the 1967 training programmes, conducted in the following countries and fields: USSR, iron and steel; Sweden, electrical industries; Italy, metallurgical industries; Italy, textile machine manufacturing; Yugoslavia, non-ferrous industries; Poland, textile technology; France, prevention of corrosion. The USSR and Swedish in-plant training activities are a continuation of previous programmes; the others represent new activities for 1967. The total cost of UNIDO in conducting the seven in-plant training programmes in 1967 amounted to an estimated \$184,000.

Ref: ID/B/4, Table 21, page 120.

2. In-plant training in the developing countries

In the past year, UNIDO has continued its activities leading to the establishment of centres for in-plant training of engineers and specialists in the developing countries. These centres are envisaged as permanent organizations to provide in-plant training to a wide range of industrial personnel. Two members of the UNIDO staff visited Turkey and Singapore in connection with two such Special Fund training projects to be considered by the UNDP in 1968. Estimated cost of the project: \$44,000.

Ref: ID/B/4, Table 21, page 121.

Group 10. Management and Training (continued)

3. Preparation of in-plant training manuals

A "Training Manual for Engineers and Technicians in the Textile Industry" was prepared in 1967, and it is planned for publication in 1968. The manual will be used as a practical guide in organizing and conducting in-plant training programmes for engineers in the developing countries. The cost of preparing the training manual was \$5,000.

Ref: ID/B/4, Table 21, page 121.

4. Ad hoc meeting of directors of in-plant group training

In November 1967 UNIDO convened an expert group meeting on in-plant training for engineers and technicians. Training directors of the in-plant training programmes in the industrialized countries as well as a few consultants and members of the staff participated in the meeting. Eleven working papers were prepared for the meeting by UNIDO, the training directors and international consultants. The expert group meeting was concerned with: (a) providing guidelines for more effectively organizing future programmes in the industrialized countries; (b) formulating ways and means of adapting the in-plant training programmes for implementation in the developing countries themselves; and (c) outlining suggestions and recommendations for orienting the future work programme of UNIDO in the field of in-plant training.

Ref: ID/B/4, Table 21, page 121.

5. Evaluation and analysis of fellowship reports

This project will be carried out in 1968.

Ref: ID/B/4, Table 21, page 121.

6. Industrial consultation workshops

An industrial consultation workshop was conducted by UNIDO in Belgrade, Yugoslavia from 2-12 October 1967. Twenty-seven executives from industries in the Belgrade area were among the participants. The workshops provided a forum for the top executives in the developing countries to review their problems with specialists and operating executive personnel from the industrialized countries. The workshop, the first of its kind in Yugoslavia, was sponsored by the Belgrade Chamber of Economics and the Yugoslavian Economic Research Institute. Subjects related to industrial organization, production planning and control, short and long-term planning and marketing were discussed by the Yugoslav participants and UNIDO consultants and staff. The programme also

Group 10. Management and Training (continued)

included two visits to industrial enterprises in the Belgrade area, and the findings of these were used as examples for discussion in the workshop. The cost of conducting the consultation workshop was approximately \$10,300. The Yugoslav Government has requested UNIDO to organize two additional industrial consultation workshops in 1968.

Ref: ID/B/4, Table 21, page 121.

7. Implementation of recommendations of the interregional working party on training of economic administrators in industrial development

In 1967 staff of UNIDO initiated a survey of the activities of several national economic training and research institutes with the view to selecting those institutes which could be expanded, with UNIDO assistance, into regional or sub-regional training institutes. Such institutes would be capable of organizing, jointly with UNIDO, the training programmes for economic administrators in industrial development recommended by the expert group on the subject, convened by UNIDO in Paris, in September 1965. Cost: \$2,000.

Ref: ID/B/4, Table 21, page 121.

8. Training programme for industrial administrators in the ECAFE region

The Asian Institute for Economic Development and Planning, the principal organizer of the training programme, decided to postpone the course until 1968.

Ref: ID/B/4, Table 21, page 122.

C. Studies and research

1. Collection of training materials in industrial maintenance and plan engineering

A study on "Problems of Industrial Maintenance in the Developing Countries" was prepared at a cost of \$2,000. The study will be used as teaching material for the industrial consultation workshops organized by UNIDO.

Ref: ID/B/4, Table 21, page 122.

2. Survey on industrial design and production planning

3. Case studies on materials management and inventory control

Group 10. Management and Training (continued)

4. Studies on production planning and control

5. Studies on management planning and control of financial activities

These proposed studies were deleted from the 1967 work programme to permit resources to be concentrated more heavily on operational activities in accordance with the guidance given by the Industrial Development Board in ID/B/20.

Ref: ID/B/4, Table 21, page 122.

6. Information systems: system analysis and design operation research, computer application and quantitative decision-making

The following study was prepared in 1967 with the assistance of an expert at a cost of \$2,000: "Nature, Collection and Use of Data for Decision-making in Industrial Enterprises in the Developed Countries". The study will be used as training material for practical training programmes and industrial consultation workshops organized by UNIDO. Total cost: \$4,000.

Ref: ID/B/4, Table 21, page 121.

7. Survey in domestic marketing

Deleted from 1967 work programme. See explanation under items 2 - 5.

Ref: ID/B/4, Table 21, page 123.

8. Survey of current activities in industrial management training

Two questionnaires have been prepared and circulated in 1967 one to leading institutes, schools and associations dealing with management development in developed countries, and the other to a similar group in developing countries. As a result, an international survey of current management development activities was prepared by an expert consultant at a cost of \$1,000. As a next step, the adequacy of management activities and facilities will be judged in the light of the needs of a given group of countries. This will be one of the tasks of a planned meeting of experts to be convened with the view to evolving an approach for evaluating needs and formulating national and international programmes to meet the management needs of the developing countries. Total cost: \$6,100.

Ref: ID/B/4, Table 21, page 123.

Group 1. Management and Training

I. Co-operation with the Government

1. Training programme for industrial administrators in the past year

NIDA conducted an expert study on the training of industrial administrators in the Government of India organized at Tokyo by the United Nations Institute for Economic Development and Planning and the Economic Commission for Africa in 1970. The training programme was one of the most important for economic development, including technical and administrative training for industrial manpower requirements. The cost of travel and per diem for the expert amounted to approximately \$1,000.00.

2. Co-operation between NIDA and leading universities

In the past year, members of NIDA staff visited several universities in the United States to explore the possibility of co-operation between NIDA and these institutions. An expert report is being prepared on the design of ways and means of effective co-operation with a cost of approximately \$1,000.

F. Publications

1. Studies on training of economic administrators in industrial development, and estimation of managerial and technical personnel requirements in selected countries

The following NIDA publications in the field of industrial training were prepared for publication in 1971 and will be printed in 1972:

Training for Industry Series, No. 1 - Training of Economic Administrators in Industrial Development.

Training for Industry Series, No. 2 - Estimation of Managerial and Technical Personnel Requirements in Selected Industries.

The former publication is expected to be used as a guide in organizing and conducting practical training programmes in industrial development for economic administrators in the developing countries.

The latter publication will be used as the principal working document for a seminar on the subject planned for 1972. It is expected that the publication will also be useful to international and national experts working on problems of planning for manpower requirements at the industry level, as well as to experts conducting training programmes in this field.

Estimated cost of publications: \$14,000. Professional staff time utilized: 4 man-months.



Group II. Special Problems and Institutions for Small-Scale Industry,  
Including Industrial Estates

General remarks

UNIDO's programme of work for 1967 in the field of small-scale industry (ID/B/4, Chapter XII) was largely carried out, emphasis continuing to be given to operational activities.

In recent years, the shortage of experts in the areas of small-scale industry and industrial estates has been a major and increasing difficulty in the implementation of technical co-operation projects. As a first step to remedy this situation a programme to improve the recruitment and qualifications of experts was initiated in France, with the co-operation of UNIDO, and similar programmes are to be organized in other countries for English-speaking and Spanish-speaking experts.

A key project carried out in 1967 was the Interregional Symposium on Technical Services and Facilities for Small-scale Industries, held at Vedbaek, near Copenhagen, from 26 June to 8 July 1967. Research studies were completed or undertaken during 1967 for submission to forthcoming conferences, in particular in the field of financing of small-scale industry. Other studies related to industrial estates and technologies appropriate for small-scale industries. A publication entitled "Industrial Estates and Industrial Areas in Europe and the Middle East" was prepared for publication and will be printed in 1968 (ID/4). Other publications were deferred to 1968.

Group 11. Small-scale Industry (continued)

A. Field activities under the various programmes of technical assistance

1. Regular Programme

Africa

Cameroon

ED-340/Rev.3

An industrial engineer attached to the Ministry for Economic Affairs and Planning is preparing for the Government the industrial feasibility studies required for the implementation of the second four-year development plan (1966-1971). In co-operation with other experts he is carrying out market surveys for each of the anticipated projects in order to ascertain suitable economic outlets.

Duration of mission	man/months	1967	1/2
Estimated cost	\$6,000		
Account No.	5-050-069		

Congo (Democratic Republic of) EC-1064/Rev.2

An expert in small-scale industry is advising the Government on the formulation and implementation of the general development programme of small-scale industry, especially in indigenous enterprises. He is also advising on the organization and strengthening of the department in charge of small industry development, and is undertaking a techno-economic study for the organization of an industrial estate at Kinshasa.

Duration of mission	man/months	1967	1/6
Estimated cost	\$11,600		
Account No.	5-050-099		

Group 11. Small-scale Industry (continued)

Dahomey ED-868

A post of industrial economist has been filled since 1 June 1966, and at the request of the Government has been extended until December 1968. The expert is advising on industrial policy and organization and assists in evaluating industrial projects and in carrying out surveys required for the utilization of the country's natural resources.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		5-050-117	

Nigeria ED-548/Rev.3

A two-man team consisting of an industrial economist (small-scale industries) and an industrial engineer (small-scale industries) assisted the Government of the former northern region in a survey of types of small-scale industries offering prospects of development and made recommendations, in the light of this survey, for improving the existing Training and Service Centre and for the establishment of new services and institutions for the promotion of small-scale industries. They indicated the type of support to be given by the Government to these projects and made recommendations on further international assistance which is required in this field.

Duration of mission	man/months	1967	2/6
Estimated cost		\$14,000	
Account No.		5-050-315	

Africa regional ED-439

An adviser on small-scale and medium-scale industries whose duty station was originally the ECA Headquarters in Addis Ababa has been assigned to the West African Sub-Region to develop a sub-regional small-scale industries project in Niamey, Niger.

Duration of mission	man/months	1967	1/12
Estimated cost		\$24,000	
Account No.		5-050-900	

Group 11. Small-scale Industry (continued)

Asia and the Far East

India ED-404

An expert in lens grinding has been advising in the improvement of the efficiency of production and training staff and upgrading their skills in assisting manufacturing units. Through his efforts new enterprises manufacturing various types of optical instruments have started operations.

Duration of mission	man/months	1967	1/1
Estimated cost	\$2,000		
Account No.	5-050-204		

Latin America

Trinidad and Tobago ED-860/Rev.4

The Government received the services of an expert in small-scale industries to assist the Industrial Development Corporation in the preparation of development plans to stimulate and assist the small-scale sector. The expert prepared feasibility studies for cassava starch, coir bristle fibres, coir yarns, coir spun curls, black bolts and nuts, insecticides and frameless mirrors. He also indicated a number of handicrafts and cottage industries suited to local conditions.

Duration of mission	man/months	1967	1/6
Estimated cost	\$11,000		
Account No.	5-050-429		

2. UNDP/TA Programme

Africa

Mauritania 9-66/kev.1

An industrial engineer has advised the Government, in particular the Minister for Development and the High Commissioner for Planning, on the types of industries which could be established in Mauritania during the second four-year development plan 1967-1970. The expert made recommendations of measures for stabilizing the costs of power and transportation and on credit, customs and training policies. He proposed the establishment of an industrial

Group 11. Small-scale Industry (continued)

promotion agency and carried out eight feasibility studies for small-scale and medium-scale industries.

Duration of mission	man/months	1967	1/10
Estimated cost		\$16,000	
Account No.		8-050-282	

Rwanda 217-63/Rev.3

Since 1963 an expert in small-scale industry has been advising the Government on policies and programmes for the development of small-scale industries. He prepared feasibility and pre-investment studies on the establishment of a bicycle manufacturing plant and a cement factory, formulated the project to set up a pilot plant for the processing of pyrethrum for which assistance is being given by UNDP (Special Fund) and other industrial development projects.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		8-050-375	

Senegal 180-65

An industrial economist (small-scale industry) is advising the Government on the formulation of a policy and related programme for the development of small-scale industry. He is also advising on the establishment of an agency to promote it.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		8-050-381	

Group 11. Small-scale Industry (continued)

Asia and the Far East

China 29-57/Rev.2

In July 1967 a financial adviser submitted his appraisal of the financing problems encountered by Taiwanese medium- and small-scale businessmen. He recommended measures to be taken by both the public and private sectors on programmes for the promotion of medium-sized and small businesses.

This project is also reported under the Policies and Programming Division - Group 13.

Duration of mission	man/months	1967	1/6
Estimated cost	\$10,000		
Account No.	8-050-087		

India 37-57

This project has been already reported under Industrial Technology Division - Group 1.

Laos 60-61

An expert in small- and medium-scale industries is attached to the Ministry of Economy. He assisted the Government in facilitating the development of small-scale industries using local raw materials.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-246		

Malaysia 19-66/Rev.3

Since June 1963 an expert in industrial design has been advising native craft industries in manufacturing, marketing, design and expansion. Under his direct guidance and supervision the MARA Handicraft Development Centre has been established in Kuala Lumpur. His assignment has been extended through 1968.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-270		

Group 11. Small-scale Industry (continued)

Singapore 203-67/Rev.1

An expert in physical planning assisted the Government of Singapore in producing a comprehensive plan for the Jurong Industrial District and in outlining a programme for phased development of the area.

Duration of mission	man/months	1967	1/1
Estimated cost		\$2,000	
Account No.		7-050-391	

Western Samoa XBO-382/Rev.1

Under the associate expert scheme and in co-operation with the Government of Denmark, assistance was given to Western Samoa in furniture- and cabinet-making. One associate expert is engaged in a training programme for carpenters of the public workshop.

Duration of mission	man/months	1967	1/12
Estimated cost		\$13,056	
Account No.		9-050-590	

Latin America

Brazil 27-59/Corr.2

The State Governments of the northeastern region of Brazil have made plans for the establishment of industrial estates. The Department of Industrialization of SUDENE (Superintendency for the Development of the Northeast) is the technical agency assisting the State Governments in the promotion of small-scale and medium-sized industries. An expert, who is assigned to the Department and began his mission in November 1967, is conducting feasibility studies for industrial estates and industrial areas at alternative locations, taking into account the availability of the local facilities and prospects for industrial development. He is also advising on the organization, management and financing of the estates and on matters such as common services and technical facilities, admission policies and rental or sales policies.

Duration of mission	man/months	1967	1/2
Estimated cost		\$4,000	
Account No.		8-050-054	

Group 11. Small-scale Industry (continued)

Chile 130-57/Rev.2

An expert on the promotion of small-scale industries has been attached since 1963 to the Servicio de Cooperación Técnica of CORFO (the Chilean Development Corporation) to advise on the formulation of policies and the adoption of measures for the modernization, development and promotion of handicraft and small-scale industries. He also assisted in the preparation of a basic law covering the economic, fiscal, financial and tariff aspects of protection and promotion of small-scale industries and handicrafts.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		8-050-084	

Dominican Republic 194-60/Rev.2

An industrial engineer (small- and medium-sized industries) has been assigned to CFI (Industrial Development Centre) to advise on the formulation and evaluation of industrial projects submitted for financing, to provide technical assistance to small-scale and medium-sized industries and to advise on the technical problems raised by the establishment and operation of industries promoted by CFI. The expert has been active in the preparation of plans for an industrial park, part of which is designated as an industrial estate for small-scale industries to be located near Santo Domingo.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		8-050-126	

Netherlands Antilles 100-65

An industrial engineer is advising on the formulation and implementation of a programme of development of small-scale industries. In particular, he is investigating the possibilities for the establishment of new small-scale industries in the field where there is scope for expansion and modernization of existing small-scale establishments, including the possibility of upgrading handicraft enterprises to the small-scale industrial level.

Duration of mission	man/months	1967	1/3
Estimated cost		\$5,400	
Account No.		8-050-672	



Group 11. Small-scale Industry (continued)

3. Special Fund Projects

Africa

Uganda 7

Small Industry Development Programme and Establishment of an Industrial Estate

The purpose of the project is to strengthen and expand the Industrial Division of the Ministry of Industry and Commerce and to enable it to establish facilities for the servicing and developing of small industries and in planning a demonstration industrial estate.

The project has not yet become operational. However, a new draft of the Plan of Operation has been prepared and an industrial economist is being recruited to begin the implementation of the project.

The project was approved by the Governing Council in January 1966 for a duration of five years at a total cost of \$1,875,400, comprised of the Governing Council earmarking \$746,400 and the Government counterpart contribution of \$1,129,000. It provides for 25 man-years of expert services and 3 ½ years of fellowships.

Asia and the Far East

Iran 11

Feasibility studies for the establishment of an industrial estate

The purpose of the project is to encourage and facilitate the development of small and medium-scale industry in Iran by assisting the Government in establishing an industrial estates authority and by providing for the planning, construction and united operation of a demonstration estate at Ahwaz.

Delays attributable to various causes have considerably retarded progress in the building programme of the Ahwaz Industrial Estate. However, the new forecast for completion of phase one of the building works is February/March 1968.

Feasibility studies of products for establishment as small or medium-scale industries on the estate have been prepared, applications for rental of factory space have been received, and recommendations have been made to the Government to offer special fiscal or other concessions that would attract new industries to Ahwaz.

Group 11. Small-scale Industry (continued)

A survey of a site at Tabriz and technical assessments of new areas at Kermanshah, Hamadan, Arak, Shiraz, Isfahan, Rasht and Mashhad for potential industrial estates have been made.

The Norwegian Government indicated its wish to be associated with the development of the industrial Estate at Ahwaz by providing technical services.

The project was approved by the Governing Council in June 1963 for five years at a project cost of \$1,760,500 comprising the Governing Council earmarking of \$637,500 and the Government counterpart contribution of \$1,123,000. It provides for approximately twenty man-years of expert services and two man-years of fellowships.

Middle East and Europe

Turkey 25

Pilot industrial estate at Gaziantep

The Government of Turkey wishes to promote the development of an industrial estate at Gaziantep where small industries may be established in modern and efficient facilities. The programme is supervised by the Ministry of Industry with financial support being provided from a development loan fund which has been established with the Halk Bank.

The project was approved by the Governing Council in June 1967 under preliminary operations in order to maintain the initial momentum gained through the Government's efforts and the assistance of a United Nations technical assistance expert.

These preliminary operations will be used for the purpose of finalizing the selection of the site for the industrial estate and to carry out the initial planning of the infrastructure. These preliminary operations pave the way for the Special Fund project for a small industries development programme which was approved by the Governing Council in January 1968.

The preliminary operations were authorized for \$63,000 to cover the services of three experts for one year each and the cost of three fellowships. Recruitment of these experts has been begun.

Group 11. Small-scale Industry (continued)

4. Special Industrial Services

Africa

Liberia SIS 67/110 LIB-4

A UNIDO special technical adviser advised the Government on the formulation of a policy and programme for the development of a small-scale industry with strong emphasis on the promotion of indigenous entrepreneurship. A major element of this programme is the establishment of an industrial estate. A report was submitted to the Government, and a report requesting UNDP (Special Fund) assistance in establishing an industrial area and an industrial free zone near Monrovia was drafted.

Duration of mission	man/months	1967	1/6 weeks
Estimated cost		\$1,800	
Account No.		9-050-255	

Malawi SIS 66/45 MLW-3

A UNIDO staff member reviewed the Government's small-industry programme, examined existing industries, advised on the plans of the existing industries and proposed industrial areas in Blantyre and made suggestions for further United Nations assistance.

Duration of mission	man/months	1967	1/3 weeks
Estimated cost		\$1,200	
Account No.		9-050-273	

Middle East and Europe

Cyprus SIS 66/47 CYP-5

In a short-term mission, two experts, an industrial engineer and a physical planner, assisted the Government in preparing a plan for the establishment of a free-zone industrial estate attached to the Famagusta harbour and Nicosia international airport. Their report discusses location and layout and contains suggestions for feasible industries and statements of expected costs and returns.

Duration of mission	man/months	1967	2/3
Estimated cost		\$6,000	
Account No.		9-050-111	

Group 11. Small-scale Industry (continued)

Yugoslavia                      SIS 67/117 YUG-1

The services of a UNIDO staff member were provided for a short term mission to Yugoslavia to discuss possible United Nations assistance in the development of industrial estate projects. A report containing proposals for the establishment of industrial parks and industrial development centres was submitted to the Government.

Duration of mission	man/months	1967	12	weeks
Estimated cost		85,000		
Account No.		9-50-117		

Latin America

Bolivia                              SIS 67/127 BOL-1

A UNIDO staff member participating in an SIS mission to Bolivia drafted a request to UNDP (Special Fund) for assistance in establishing an industrial area and an industrial estate near La Paz. He also formulated requests for further SIS assistance in the field of industrial development and industrial financing.

This project is also reported on under industrial policies and programming.

Duration of mission	man/months	1967	12	weeks
Estimated cost		81,000		
Account No.		9-50-127		

5. Fellowships

The individual fellowships which fall in the area of special problems and institutions for small-scale industry, including industrial estates, were distributed among the various regions as follows:

Asia	2
Latin America	1
Europe	2
Total	5

No fellowships were awarded under "in-plant group training" during 1967.

Group 11. Small-scale industry (continued)

B. Expert group meetings, seminars, group training and workshops

1. Interregional symposium on technical services and facilities for small-scale industries

The Symposium, jointly organized by UNIDO, the United Nations Office of Technical Co-operation and the Government of Denmark, was held at Vedbaek, near Copenhagen, from 26 June to 8 July 1967. It was attended by 36 participants from 32 countries and staff members of UNIDO, ILO and FAO, consultants and observers from different organizations. It had before it eighteen discussion papers and eight background papers prepared by UNIDO and consultants and 32 country papers submitted by the participants. The agenda included a review of technical services and facilities in the countries of the participants and general evaluation of experience; assistance at the pre-investment stage; technical counselling; technical servicing; quality improvement; management assistance; marketing assistance; research and demonstration; sub-contracting; training of extension personnel; and co-operation and co-ordination between national agencies and between countries, both on a regional and international basis. The report of the Symposium and some of the papers prepared for this meeting will be published in 1968.

Cost: \$65,000 (Regular Programme) and \$3,500 (consultants).

Ref: ID/B/4, Table 23, page 139.

2. Training of small-industry experts from industrially-advanced countries

Arrangements have been made with the Société d'Aide Technique et de Coopération (SATEC, Paris) and the French General Confederation of Small-scale and Medium-sized Enterprises to organize, in co-operation with UNIDO, training courses for French or French-speaking small-industry experts. The programme was initiated in the autumn of 1967 with on-the-job training in French promotion and servicing centres; it will be expanded in 1968 to include classroom training and study tours and on-the-job training in industrial estates, industrial extension centres etc., in such countries as India, Italy and the United Kingdom. It is planned to organize similar programmes in other industrially advanced countries with the co-operation of UNIDO.

Group 11. Small-scale Industry (continued)

C. Studies and research

1. Promotion of small-scale industry in the developing countries

Publication deferred to 1968.

Ref: ID/B/4, Table 23, page 138.

2. Interrelations between small and large industries:

A study of subcontracting

The analysis of subcontracting carried out in 1967 is to be followed by research on the types of industrial activities lending themselves to the establishment of subcontracting relationships. This study will be published in 1968.

Ref: ID/B/4, Table 23, page 138.

3. Small-scale industry in Latin America

To be published in 1968.

Ref: ID/B/4, Table 23, page 138.

4. Industrial estates and industrial areas in Europe and the Middle East

Submitted for printing under the 1967 publications programme. The publication includes the reports of the two consultative groups on industrial estates and industrial areas held, respectively, in Geneva and Beirut in October and November 1966 and some of the papers prepared for these meetings.

Cost of publication (English): \$6,750

Ref: ID/B/4, Table 23, page 139.

5. The role of small-scale industry in industrialization policies and programmes

Publication deferred to 1968.

Ref: ID/B/4, Table 23, page 139.

Group 11. Small-scale Industry (continued)

6. Financing of small-scale industries

The following three studies were prepared in 1967 for presentation to an interregional symposium on financing of small-scale industries to be organized by UNIDO in 1969:

- (a) Extension service and development finance for small industry.  
The study discusses the two-way relationships between extension service and financing. It contains a comparative analysis of experience gained in several countries, some case studies and examples, and conclusions and recommendations applicable to development programmes for small-scale industries in developing countries.  
Cost: \$1,000.
- (b) Institutions, policies and measures for the financing of small-scale industries. A comparative analysis of policies and measures adopted by public and semi-public financial institutions providing long-term, medium-term and short-term credit to small-scale industries in several countries.  
Cost: \$1,500.
- (c) Financing of exports of small industry products. A study of the financial implications of export promotion programmes based on the experience of Japan.  
Cost: \$1,400.  
Ref: ID/B/4, Table 23, page 141.

7. The future of the traditional industrial sector in a modernizing economy

An analysis of government policies and measures in respect to artisan, handicraft and cottage-industry undertakings, including the scope of a possible transformation of enterprises of this sector into modern small-scale industries. The study will be submitted to a meeting on the development of small-scale industries in the Arab countries of the Middle East, to be held in Beirut in 1968 in co-operation with the United Nations Economic and Social Office in Beirut (UNESOB).

Cost estimate: \$1,000.

Ref: ID/B/4, Table 23, page 142.

Group 11. Small-scale Industry (continued)

8. Industrial estates

A study of the tool room as a common service facility on industrial estates was completed. It provides information and guidelines for the location, design, layout, construction and operation of tool rooms, heat-treatment shops, design offices etc., including technical and cost factors.

Preliminary arrangements were made for organizing in early 1969 a twelve-week group training programme on industrial estates for twenty English-speaking participants from developing countries. The programme will be conducted, in co-operation with the Government of India, at the Small Industry Extension Training Institute of Hyderabad, India. Informal consultations were held with Italian institutions for organizing a similar programme for French-speaking participants. The organization of a programme for Spanish-speaking participants is under study.

The third study discussing the functional industrial estate, including an analysis of the suitable types of production, sponsorship, organization, layout, services and financing, was postponed.

Ref: ID/B/4, Table 23, page 142.

9. Techno-economic studies

A study of the contribution of small-scale industries to the production of bicycles was completed. It provides an analysis of specifications and manufacturing processes of each part and component and discusses methods for organizing the production of bicycles under subcontracting arrangements with large industries and under joint production programmes among small enterprises.

Cost: \$1,500.

Ref: ID/B/4, Table 23, page 142.

10. Export promotion of small-industry products

A study of national measures for the promotion of exports of small-industry products from developing countries, with special reference to the experience in India and Japan, was completed.

Cost: \$1,500.

11. Other surveys

A study of the situation, prospects and problems of small-scale industries in selected countries of the Middle East was undertaken. It will be submitted to the meeting on the development of small-scale industries in the Arab Countries of the Middle East to be held in Beirut in 1968.

Estimated cost: \$2,500.



INDUSTRIAL POLICIES AND PROGRAMMING DIVISION

Group 12. Planning and Programming, Project Formulation, Industrial Location and Regional Development

General remarks

During 1967, the Policies and Programming Division was engaged in a series of technical assistance field activities as well as with other operational and supporting projects in connexion with the industrialization programmes of the developing countries. These activities also included the series of exploratory missions as well as assistance in the field with regard to industrial planning and industrial development programmes.

During the year the division's professional staff was called upon to participate in a number of meetings and conferences and to attend meetings concerning the carrying out of UNIDO assignments to render assistance to the developing countries.

A. Field activities under the various programmes of technical assistance

1. Regular Programme

Africa

Dahomey ED-868

An expert has been counselling the Government on industrial organizational policies, offering direction and guidance with regard to the establishment of new industrial enterprises, assisting in the evaluation of industrial projects and preparing a programme for the utilization for the natural resources of the country.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	5-050-117		

Group 12. Planning and Programming; Project Formulation etc. (continued)

Morocco

ED-82/Rev.1

An industrial economist assigned on this project has been assisting the Government in the final phase of the preparation of the five-year plan (1968-1972). He worked particularly in the following areas: (a) choice of industrial projects proposed for the first year of the plan; (b) the criteria used in the selection of future projects and the sectorial programming regarding industry, power and mining.

Duration of mission	man/months	1967	1/6
Estimated cost	\$10,250		
Account No.	5-050-291		

Niger

ED-362/Rev.5

An industrial economist is assisting in the preparation of a long-term industrial development plan, determining the possible projects that would fit into that plan, assisting in the technical evaluation of the equipment needs of industrial projects including costs, and studying the economic and financial requirements of planned projects.

Duration of mission	man/months	1967	2/3
Estimated cost	\$9,000		
Account No.	5-050-318		

Africa regional ED-439/Rev.5

This project has been reported under Technological Division - Group 4. Identical functions as those already described under Group 4 were carried out by an industrial economist assigned to the Sub-Regional Office of the ECA in Tangiers.

Duration of mission	man/months	1967	1/7½
Estimated cost	\$16,490		
Account No.	5-050-900		

Group 12. Planning and Programming; Project Formulation etc. (continued)

Asia and the Far East

Afghanistan IX-33/Rev.2

A Director of Planning and Project Department is attached to the Ministries of Mines and Industries. He is responsible for the direction and supervision of the Planning and Project Department. He conducts feasibility studies for the establishment of suitable industries, advises on the formulation of technical specifications in contracts of suppliers of plant and machinery, evaluates proposals and bids, and provides advice to established industries. The expert also trains counterpart personnel.

Duration of mission	man/months	1967	1/8
Estimated cost		\$11,500	
Account No.		6-050-006	

Ceylon ID-482/Rev.4

An expert in industrial programming and demand projection assisted in working out long-term industrial demand projections and in preparing a detailed investment programme. Project has just been started with progress already being made.

Duration of mission	man/months	1967	1/6
Estimated cost		\$10,000	
Account No.		5-050-078	

Ceylon ID-482/Rev.4

An expert in industrial project evaluation has been attached to the Ministry of National Planning. He has evaluated specific industrial projects in the public and private sectors for incorporation in the development plan, including their commercial and national economic profitability and the ranking of projects.

Duration of mission	man/months	1967	1/10
Estimated cost		\$12,000	
Account No.		5-050-078	

Group 12. Planning and Programming; Project Formulation etc. (continued)

Asia and Far East regional ID-1083/Rev.6

A regional adviser on industrial economics is advising the countries of the region on industrial development plans and programmes, rendering assistance in identifying industrial projects and conducting field investigations with a view to achieving regional harmonization of industrial development plans.

Duration of mission	man/months	1967	1/10
Estimated cost	\$17,000		
Account No.	5-050-921		

Middle East and Europe

Cyprus ED-503/Rev.2

An industrial consultant is advising the Ministry of Commerce and Industry on problems relating to industrial development and on measures to be taken to attract investment in industrial projects. He is assisted in his task by an associate industrial economist who has been appointed under the OPEX Programme.

Duration of mission	man/months	1967	1/12
Estimated cost	\$16,000		
Account No.	5-050-111		

Iraq ED-281/Rev.2

An expert has been assisting the Government in the preparation of feasibility studies and evaluation of industrial projects such as the possibility of assembling motor vehicles in Iraq.

Duration of mission	man/months	1967	1/12
Estimated cost	\$18,500		
Account No.	5-050-213		

Syria ED-513/Rev.1

This project has been reported under Industrial Technology Division - Group 3.

Group 12. Planning and Programming; Project Formulation etc. (continued)

Middle East regional ED-582/Rev.2

A regional industrial adviser was sent to the Economic and Social Office in Beirut in July 1967. A request for extension of his contract until July 1968 has been approved. He has co-operated with UNIDO's other experts in the area to study general conditions of industry and to evaluate various potential industrial projects. He has taken field trips to Jordan, Kuwait, Saudi Arabia and Syria and his work programme is designed to promote increased regional co-operation in the field of industrial development.

Duration of mission	man/months	1967	1/12
Estimated cost		\$27,550	
Account No.		5-050-935	

Latin America

Trinidad and Tobago ED-860

This project has been already reported under Industrial Services and Institutions Division - Group 9.

Duration of mission	man/months	1967	1/6
Estimated cost		\$8,000	
Account No.		5-050-429	

2. UNDP/TA programme

Africa

Dahomey 177-65/Rev.1

An industrial economist is working with the Government on the following industrialization programmes: industrial policies and industrial organization, counselling regarding problems of existing industry, assisting in project evaluations and studying the possibilities for greater utilization of existing natural resources.

Duration of mission	man/months	1967	1/6
Estimated cost		\$12,000	
Account No.		8-050-117	

Group 12. Planning and Programming; Project Formulation etc. (continued)

Madagascar 1-64

An industrial economist is engaged in the following tasks:

- (a) Examining industrial projects which are in the process of being carried out or proposed in the light of a global programme for industrialization, taking into account the relationship between industry and the other sectors of the economy, notably agriculture;
- (b) Evaluating programmes in order to propose new industrial projects, investigating the viability of proposed projects, the financing needs for industry development, and determining the pre-investment requirements of the country;
- (c) Co-ordinating the investigations and research studies being made by Madagascar organizations concerned with economic development of the country.

Duration of mission	man/months	1967	1/8
Estimated cost	\$12,800		
Account No.	8-050-267		

Mali 6-66

Three experts were assigned to the Secretary of State of the Presidency in charge of Industry and Mines, to counsel the Government with regard to industrial development projects and industrial productivity.

- (a) An industrial counsellor is engaged in preparing industrial project studies, evaluating those already prepared and counselling with regard to policies to encourage investment.
- (b) An industrial economist is effecting studies with regard to the priority of projects, reviewing industrial projects within the overall plan of development and undertaking preliminary studies on possible project opportunities and project implementation.
- (c) A second industrial economist is preparing an inventory of the existing development resources in order to determine what industries may be created or developed.

This project is also reported under Industrial Technology Division - Group 2.

Duration of mission	<u>man/months</u>	
Industrial counsellor	1967	1/11
Industrial economist	1967	1/9
Industrial economist	1967	1/9
Estimated cost	\$48,600	
Account No.	8-050-276	

Group 12. Planning and Programming; Project Formulation etc. (continued)

Tunisia 273-63

The industrial planning engineer assigned to Tunisia is assisting the Head of the Division of Industry, Crafts and Power in the following tasks: economic and technical evaluation and techniques regarding industrial projects in the areas of fertilizers, metallurgy, textiles, machinery, studies of techniques and technologies, procurement of equipment and the training of counterpart personnel.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-432		

Zambia 139-65

A senior industrial adviser has been assisting the Government since 1965 in the following matters: advice, in co-operation with the Planning Authority, on industrial planning and programmes; selection of projects; advice on the need for and commissioning of feasibility studies; sources of finance, public and private; industrial law, including investment law; the development of African entrepreneurship; marketing and export production.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-498		

Asia and the Far East

Afghanistan 155-63/Rev.1

This project has been already reported under Industrial Technology Division - Group 1.

Cambodia 4-60

In co-operation with local authorities in charge of economic development, an expert in industrial planning made inventories of available natural resources. He studied the present utilization of already built production facilities and proposes measures for activating unutilized production capacities. He advised about the necessary decisions for a successful implementation of industrial projects, including measures for financing,

Group 12. Planning and Programming; Project Formulation etc. continued

contracting and supervision. He advised on the organizational set up for industrialization and participated in a UNIDO Mission in the countries of the Mekong Basin.

Duration of mission	man/months	1967	1/11
Estimated cost		\$22,000	
Account No.		8-050-060	

Ceylon 20-57/Rev.5

An industrial economist advised and assisted the Department of National Planning in designing and evaluating industrial projects and programmes in both public and private sectors; in determining the major impediments to the implementation of industrial programmes and recommending methods of eliminating them; and in making recommendations to foster a balanced industrial growth.

Duration of mission	man/months	1967	1/6
Estimated cost		\$11,000	
Account No.		8-050-077	

Iran 220-57/Rev.6

This project has been already reported under Industrial Technology Division - Group 4.

Nepal 183-65/Rev.4

The Chief of the Industrial Feasibility Survey Mission, assigned under EPTA for one year, has been engaged in the evaluation of available industrial feasibility surveys as well as in surveying existing resources and industrial potential.

Duration of mission	man/months	1967	1/12
Estimated cost		\$22,000	
Account No.		8-050-297	



Group 12. Planning and Programming; Project Formulation etc. (continued)

Pakistan 73-57/Rev.3

An industrial economist is assisting the Planning Commission (Industries and Commerce Section) in West Pakistan in reviewing industrial policy; formulating criteria and fixing priorities for development of industries; and preparing and appraising programmes of industrial development projects of public and private sectors. Work has been started and is being conducted in the field of priority development of industry.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-330		

Pakistan 73-57

An industrial economist is assigned to the Planning Department of the Government of East Pakistan. He is engaged in making a survey of the manufacturing sector with a view to advising on the development of new lines of production or the extension of existing industries, preparing industrial development plans for private and public sectors and assisting in conducting feasibility and pre-investment studies for suitable industries. He is also working in pinpointing investment possibilities, particularly in the area of agricultural machinery and forestry utilization.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-330		

Pakistan 73-57/Rev.3

An industrial economist is assisting the West Pakistan Planning and Development Department in the programming of industrial development and in the collection and use of essential industrial information. He will be working in close co-operation with the economic adviser who is being made available under a contract with the Harvard University Advisory Development Service, financed by a grant from the International Bank for Reconstruction and Development and the United Nations.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-330		

Group 12. Planning and Programming; Project Formulation etc. (continued)

Singapore 203-67

An OPEX expert was assigned to the Economic Development Board in the capacity of Deputy Director. Two other senior industrial economists were also assigned to the Economic Development Board during 1967.

Duration of mission	man/months	1967	3/12
Estimated cost	\$60,000 (contingency allocation)		
Account No.	7-050-091		

Thailand 82-57/Rev.1

This project has been already reported under Industrial Services and Institutions Division - Group 8.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-420		

Middle East and Europe

Iraq 168-59/Rev.2

An industrial planning expert has been assisting the Government of Iraq in the preparation of an industrial development programme based on projections of domestic and export demand for manufactured goods in almost all sectors of Iraqi industry.

Duration of mission	man/months	1967	1/11
Estimated cost	\$20,000		
Account No.	8-050-213		

Saudi Arabia 28-61

A UNIDO industrial economist has been working since June 1966 with the Department of Industry in the Ministry of Commerce and Industry in the analysis and evaluation of industrial programmes and projects.

Duration of mission	man/months	1967	1/6
Estimated cost	\$13,300		
Account No.	8-050-378		

Group 12. Planning and Programming; Project Formulation etc. (continued)

Turkey 277-57/Rev.6

A four-man team consisting of: (a) an industrial engineer (Chief Project Officer), (b) an industrial economist (Chief Economist), (c) a chemical and petrochemical adviser, (d) an industrial estates adviser, were assigned in 1966 to the Ministry of Industry to assist in setting up an Industrial Project Office within that Ministry. The services of the experts were required to assist the Ministry of Industry with the following tasks: to prepare or to obtain most suitable quotations on tender-bids for equipment, civil engineering and services; to prepare "bankable projects" for submission to national or international institutions. The first three experts are still in the field and are expected to continue throughout 1968. The industrial estates adviser completed his two-months assignment in January 1967. His final report contained recommendations regarding a suitable site for the establishment of a pilot Industrial Estate at Gaziantep which is presently being implemented under the Special Fund Programme.

Since the services of the expert were originally requested for one year, a five-month return visit is contemplated in 1968, when it is expected that equipment purchased is available in Turkey and the new plant becomes operational.

Duration of mission	man/months	1967	4/48
Estimated cost	\$88,000		
Account No.	8-050-435		

Latin America

Colombia 135-57/Rev.2

An industrial economist/engineer is undertaking, together with an industrial development consultant (see below), to assist in the review, evaluation, selection, and implementation of industrial projects for the Institute de Fomento Industrial (IFI). These include projects in various stages of implementation in fields such as food-processing, chemicals, minerals, metallurgy and metalworking.

Duration of mission	man/months	1967	1/6
Estimated cost	\$11,000		
Account No.	8-050-093		

Group 12. Planning and Programming; Project Formulation etc. (continued)

Ecuador 51-60/Rev.2

Since April 1965, an industrial programmer has been assisting the National Planning Board in the preparation of an industrial development plan and conducting pre-feasibility studies for industrial projects. In addition, at the request of the Ministry of Industry and Commerce, he has made a number of suggestions modifying various aspects of the Industrial Promotion Law.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-135		

Ecuador 51-60/Rev.2

An industrial economist associate expert has been working with an industrial programmer in advising the "Dirección General de Industrias" on the administration of incentives for industrial projects and on the financial and economic evaluation of industrial projects. His task is to survey the country's industrial potential, in the aggregate and by individual industrial sectors, and to evaluate the financial structure of existing industrial projects, with a view to making recommendations as to the advisability and the extent of incentives to be provided.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	9-050-135		

Honduras 24-61

United Nations Technical Assistance (UNTA) and UNIDO have provided the services of an industrial economist assigned to the Consejo Nacional de Economía to assist in the preparation, evaluation and co-ordination of the National Industrial Development Programme. He has participated in evaluating the feasibility study on port development in Southern Honduras, as well as in the work of various committees on the integration of highways, the irrigation of Rio Choluteca and the development of the tourist industry in the northern zone. A preliminary study has been undertaken to define zones of greatest potential for regional development which would in turn form the basis for possible Special Fund financing of a development zone in the northeast.

Duration of mission	man/months	1967	1/12
Estimated cost	\$22,000		
Account No.	8-050-186		

Group 12. Planning and Programming; Project Formulation etc. (continued)

Nicaragua 18-57

This project has been already reported under Industrial Technology Division - Group 4.

3. Special Fund Projects

Africa

Tanzania 10

Industrial Studies and Development Centre

The objective of the project is to advise the Ministry of Industry, Mineral Resources and Power on matters relating to industrial development, serve in a consultative capacity to authorities responsible for economic planning and financing, and undertake feasibility studies.

During 1967 the Centre worked on several projects, some of which resulted in decisions to establish new industries involving an investment, including working capital, of approximately \$2.75 million. The Centre has also provided advice on the regional aspects of industrial development and one result is a negotiated treaty with the East African Common Market which came into force on 1 December 1967.

The Project Manager was invited by the Government to visit Malawi during October to advise on the development of small industries.

The UNDP, noting the impact that this project was having, has indicated interest in sending a reporting mission to visit the project as soon as the investments have been realized.

It is anticipated that the project will be recommended for a Phase II operation.

The project, approved by the Governing Council in January 1965 for three years provides eighteen man-years of expert services and two man-years of fellowships. The total project cost is \$653,400 comprised of the Governing Council earmarking of \$483,400 and the Government counterpart contribution of \$170,000.

Tunisia 15

National Centre for Industrial Studies

The purpose of the project is to assist the Government in the establishment and initial operation of the Centre so as to facilitate the planning and implementation of the country's industrial development programme as well as the practical realization and financing of specific projects.

Group 12. Planning and Programming; Project Formulation etc. (continued)

The project is not yet operational. However, a Project Manager Designate has been appointed and reported to the field in early October. A draft plan of operation prepared by a consultative mission which visited Tunisia in late 1966, is being reviewed by the Project Manager.

The project, approved by the Governing Council in June 1966 for five years with a total project cost of \$1,796,700 comprised of the Governing Council earmarking of \$771,700 and the Government counterpart contribution of \$1,025,000. It provides for 25 man-years of expert services and ten man-years of fellowships.

Regional 78

Centre of Industrial Studies for the Maghreb

The objective of the project is to assist in co-ordinating industrial development on a regional basis in order to obtain maximum utilization of capital investment and resources for economic development and, as a result, harmonize and streamline commercial and trade policies of the four Maghreb countries involved.

Although a consultative mission visited the four countries late 1966 to negotiate the Plan of Operation and to finalize implementation requirements, the project has not yet become operational; however, the Plan of Operation has recently been signed by all four Governments concerned.

The project was approved by the Governing Council in January 1966 for five years at a total project cost of \$2,099,900 which is comprised of the Governing Council earmarking of \$1,454,900 and the Government counterpart contribution of \$645,000. It provides for 41 man-years of expert services and ten man-years of fellowships.

Asia and the Far East

Iran 16

Research Centre for Industrial and Trade Development

The objective of the project is to strengthen the Research Centre for Industrial and Trade Development and enhance its ability to formulate industrial, mining and trade policies and programmes and to prepare and evaluate projects of high priority in these fields.

Although the project is not yet operational, the Project Manager Designate, an industrial economist, and a chemical engineer, have been recruited under advance allocations which were also used to enable the carrying out of evaluations of the Report on the Tabriz Engineering and Metallurgical Plant and the Feasibility Study of the Heavy Electrical Power Equipment Plant by

Group 12. Planning and Programming; Project Formulation etc. (continued)

the National Industrial Development Corporation (NIDC), New Delhi, at a cost of \$37,500. Both the detailed report on the Tabriz plant and the feasibility study on the electrical equipment plant were prepared under bilateral agreements between the Czechoslovakian and Iranian Governments.

The project was approved for five years by the Governing Council in January 1967 at a total project cost of \$2,618,900 comprising the Governing Council earmarking of \$1,058,900 and the Government counterpart contribution of \$1,560,000. It provides for 13 man-years of expert services and 15 man-years of fellowships.

Middle East and Europe

Jordan

13

Centre for Industrial Development

The purpose of the Centre is to advise and assist the Government in the preparation of a programme of industrial development while keeping under review industrial policies as well as the order of industrial priorities. The Centre will also conduct feasibility studies, provide management training and advisory services, establish and improve standards and quality control of products and develop industrial estates.

The project is not yet operational. However, the Project Manager Designate as well as a consultant on fertilizer have been appointed under advance allocation.

In responding to the Government's desire for a project which would help integrate UNDP-financed assistance to industrial development in the country in one consolidated project, an important new step has been taken. Accordingly, the assistance previously rendered by the International Labour Organisation in management training and advisory services has been incorporated into this project by means of a subcontract.

The project was approved by the Governing Council in January 1967 for a duration of four years at a total cost of \$1,685,100 comprised of the Governing Council earmarking of \$1,153,100 and the Government counterpart contribution of \$532,000. It provides for 31 man-years of expert services and six man-years of fellowships.

Group 12. Planning and Programming; Project Formulation etc. (continued)

Saudi Arabia 14

Industrial Studies and Development Centre

The purpose of the Centre is to advise the Government Agencies concerned on matters of industrial development and on the co-ordination of their activities as well as carry out or commission industrial feasibility studies, project evaluation and implementation. It also co-operates with the Central Planning Organization on all matters relative to policies and programmes of industrialization as well as industrial financing and assists in the planning and establishment of industrial estates, their management and operation.

The project has been considerably delayed due to the necessity of ascertaining that there would be no duplication of services between the functions of the Centre and those of Arthur D. Little Inc. with whom the Government of Saudi Arabia had contracted to perform certain services. In addition considerable delay has been experienced regarding the buildings and utilities for the Jeddah Industrial Estate. The progress of the work on this project has fallen well behind the time schedule indicated in the Plan of Operation.

The project was approved by the Governing Council in June 1965 for three years at a total cost of \$2,582,900 which is comprised of the Governing Council earmarking of \$582,900 and the Government counterpart contribution of \$2,000,000. It provides for 17 man-years of expert services and 6½ man-years of fellowships.

4. Special Industrial Services

Africa

Ethiopia SIS 67/70 ETH-1

Advisory services through two experts are being rendered on industrial planning and on industrial project studies in connexion with the preparation of the Third Five Year Plan. The objectives of this project are to complete an overall survey of the manufacturing industry in the country, formulate the industrial aspects of the Third Five Year Plan, set out targets for new capacity as well as expanding existing capacity, define priorities, examine and assess available feasibility studies, and identify and formulate specific industrial projects.

Duration of mission	man/months	1967	2/9½
Estimated cost	\$32,000		
Account No.	9-050-141		



Group 12. Planning and Programming; Project Formulation etc. (continued)

Madagascar SIS 67/160 MAA-5

A UNIDO staff member has studied the present organization of the DEPI (Bureau of Promotion and Industrial Development) and suggested ways and means of improving the efficiency of its various departments.

Duration of mission	man/months	1967	1/2
Estimated cost		\$300	
Account No.		9-050-267	

Malawi SIS 66/44 MLW-2

A high-level industrial adviser was sent to Malawi to explore the needs for technical assistance in the industrial field and to inform various government departments of the technical services available under the SIS programme.

Duration of mission	man/months	1967	1/0.5
Estimated cost		\$1,000	
Account No.		9-050-273	

Asia and the Far East

Ceylon SIS 67/194 CEY-NEPAL

A staff member visited Ceylon and Nepal on an exploratory mission for preliminary discussions concerning industrial projects which could suitably be assisted by SIS funds. As a result of this mission, a number of formal requests have been received, which are now being processed.

Duration of mission	man/months	1967	1/1
Estimated cost		\$500	
Account No.		9-050-078	

Group 12. Planning and Programming; Project Formulation etc. (continued)

China SIS 67/75 China-Malaysia

A UNIDO staff member visited China (Taiwan) and Malaysia in order to discuss a number of proposals for assistance under SIS with the authorities concerned. A number of projects have been subsequently developed on the basis of these initial discussions.

Duration of mission	man/months	1967	1/2 weeks
Estimated cost	\$550		
Account No.	9-050-087		

Mekong SIS 67/71 Mekong Committee

Three experts assisted the Mekong Committee in assessing the industrial development possibilities in the Lower Mekong Basin, taking into account the development of power, irrigation, mineral resources and the improvement of transportation, including that of inland navigation, following dam construction. The experts have completed their mission.

Duration of mission	man/months	1967	3/7
Estimated cost	\$16,500		
Account No.	9-050-920		

Philippines SIS 67/193

A three-man UNIDO staff mission visited the country to formulate terms of reference for a subsequent mission to survey the industrial needs of the country.

Duration of mission	man/months	1967	3/2 weeks
Estimated cost	\$4,000		
Account No.	9-050-420		

Group 12. Planning and Programming; Project Formulation etc. (continued)

Latin America

Bolivia SIS 67/127 BOL-1

A team of UNIDO staff members visited Bolivia for a period of three weeks to identify and report on concrete possibilities of UNIDO assistance with emphasis on the following fields: (a) building materials such as refractory bricks, cement, asbestos panels and reinforcing steel, (b) petrochemicals, (c) fertilizers, (d) food processing industries and (e) metallurgical industries. An expert (one year) is also included in the project to co-ordinate and institute follow-up activity.

This project is also reported under the Industrial Technology and Industrial Services and Institutions Divisions.

Duration of mission	man/months	1967	7/18
Estimated cost	\$18,700		
Account No.	9-050-051		

Guyana SIS 67/68 GUYA-1

A staff member made an investigatory visit to Guyana to advise the Government on the possibilities of assistance under SIS in the development of small and medium-sized industries. As a result of this mission, further assistance in the following specific fields is being explored: a feasibility study for establishing a glass-fibre industry, and assistance to the management of two government-owned enterprises.

Duration of mission	man/months	1967	1/1 week
Estimated cost	\$250		
Account No.	9-050-180		

Mexico SIS 67/132 MEX-1

The services of an expert have been provided for one year to assist in the evaluation of manufacturing projects with special regard to their impact on other sectors of the economy. The expert is being attached to the Nacional Financiera S.A., an autonomous government institution created for the purpose of promoting industrial development through financial and technical assistance.

Duration of mission	man/months	1967	1/6
Estimated cost	\$21,000		
Account No.	9-050-285		

Group 12. Planning and Programming; Project Formulation etc. (continued)

Middle East and Europe

Greece

SIS 67/240

A UNIDO staff member advised the Government on their needs for assistance in the implementation of individual industrial projects and groups of projects and in formulating feasible requests for UNIDO technical assistance.

Duration of mission	man/months	1967	1/1 week
Estimated cost	\$300		
Account No.	9-050-165		

5. Fellowships

The individual fellowships which fall in the area of Industrial Programming and Projects were distributed as follows:

Africa	1
Asia	7
Latin America	2
Middle East	1
Europe	<u>6</u>
Total	17

No fellowships were awarded under "In-plant group training" during 1967.

B. Expert group meetings, seminars, group training and workshops

1. Training workshops on industrial project formulation and evaluation

A three-week workshop in Iran originally scheduled for February-March 1967 was postponed until 1968 because of difficulties encountered in co-ordinating it with technical assistance projects in that country and in completing financing arrangements. Similar training workshops planned for three other countries are also being re-scheduled for implementation in 1968.

The workshop held in New Delhi, 26 December 1966 - 14 January 1967, officially referred to as Ad hoc Group Meeting on Industrial Project Formulation and Evaluation, proved highly successful. This workshop was attended by twenty officials from the Central Ministries of India, fourteen officials from the State Government, twenty-three officials from Public Corporations and other institutions and seven observers from academic, governmental and business organs.

The workshop was followed by an orientation seminar for policy-makers which took place, also at New Delhi, for the period 16 January to 21 January 1967.

Group 12. Planning and Programming; Project Formulation etc. (continued)

The emphasis in this Seminar was on certain selected issues relating to social benefit-cost analysis at the national level and the social rate of discount for intertemporal choice. The seminar was attended by 65 participants, of whom 58 were from the Central and State Governments of India. The cost of this workshop and the Seminar totaled \$18,500, and was financed from the UNIDO consultant funds.

Ref: ID/B/4, Table 6, page 69.

2. Meeting of the second ad hoc working party on industrial programming data

The ad hoc expert meeting originally planned for 1967 has been replaced by a broader operational programme which is to commence in 1968 in the form of an international working party on industrial programming data, drawing upon a semi-permanent scheme of co-operation with the Regional Economic Commissions and the resources connected with technical assistance programmes for various specific governments. The preparatory work which has been done in 1967 will be fully utilized in 1968. Estimated cost: \$10,000.

Ref: ID/B/4, Table 7, page 74.

3. Role of advanced skills and technologies in industrial development

The meeting of an ad hoc group of experts on this subject was organized by the UNIDO Secretariat and convened in New York, 22 - 29 May 1967. It was attended by fifteen international experts and thirteen discussion papers were presented. A summary of the conclusions and recommendations has been submitted for publication in the Industrialization and Productivity Bulletin No. 12, in which a paper "Skill requirements in manufacturing industries", will also be included. Certain other papers selected from those submitted at the meeting have been put together for publication in Industrial Planning and Programming Series No. 3 - Planning for Advanced Skills and Technologies. Cost: \$16,000 plus expert group meeting fund: \$6,500.

Ref: ID/B/4, Table 8, page 77.

4. Training course in industrial development

In collaboration with the United Nations African Institute for Economic Development and Planning in Dakar, Senegal, the preparatory work for this training course has been undertaken. It is designed to give intensive training and to introduce the participants - mainly from the English-speaking African countries - to the current thoughts and techniques of industrial planning. The first course is planned for 1968 in Lusaka, Zambia.

Group 12. Planning and Programming; Project Formulation etc. (continued)

5. Ad hoc meeting of experts on regional industrial planning

The meeting, organized by the UNIDO Secretariat, was held at Geneva, 29 May - 2 June 1967. It was attended by international experts. UNIDO officials served as Chairman and as Secretary-Rapporteur. Thirteen discussion papers were presented. The meeting's objective was to provide guidance for UNIDO operational and pre-operational activities in the field of regional industrial planning. The recommendations and technical contributions of this meeting will be organized, together with those from an interregional seminar scheduled for 1968, into an operational guide to regional industrial planning.

In conjunction with this project a discussion paper entitled "Industrial location planning" was also discussed. Cost: \$14,000 plus meeting funds \$5,000.

Ref: ID/B/4, Table 9, page 82.

6. Interregional seminar on industrial location and regional development

Preparatory work has been carried out for this seminar which will be held in the summer of 1968 in Minsk, USSR, drawing upon funds under the UNDP/TA Programme. Comprehensive documentation has been prepared, as well as additional discussion papers, which are being commissioned to consultants and institutions. Estimated cost: \$3,500 plus Consultant funds, within the year: \$6,500.

Ref: ID/B/4, Table 9, page 82.

C. Studies and research

1. Study on industrial location policies

A comparative study on industrial location policies was prepared for the Interregional seminar on industrial location and regional development to be held in Minsk, Byelorussian SSR in mid-1968. The study is based in part on country papers commissioned by UNIDO. Both the comparative study and the country papers examine the problems faced by policy-makers in the location of industry, the policy measures needed to bring about a desirable pattern of industrial location and regional development.

1967 costs:  
Consultant funds: \$6,300

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

Group 12. Planning and Programming; Project Formulation etc. (continued)

2. Manual on industrial project formulation and evaluation

A comprehensive outline was prepared in the early part of 1967; supporting research was continued partly by consultants and partly by the UNIDO Secretariat staff. It is expected that the complete drafting of the Manual will take another year.

In conjunction with the above work, some 115 technical papers submitted at the Interregional Symposium on Industrial Project Evaluation, Prague, 11 to 29 October 1965, were edited for publication (Industrial Planning and Programming Series No. 5 - Industrial Project Formulation and Evaluation, Volume I).

Cost: \$22,000 plus Consultant funds \$11,000.

Ref: ID/B/4, Table 6, page 66.

3. Manual on procedures for programming and control of implementation of industrial projects in developing countries

The first draft of the manual was completed by the UNIDO Secretariat in April 1967 and circulated to government officials and United Nations technical assistance experts in 26 developing countries for comments. Further elaboration of the manual will await the recommendations of the ad hoc expert group meeting scheduled for 1968, which will evaluate the manual in its draft stage.

Along with this project, a discussion paper entitled "Implementation of industrial projects" was prepared and submitted by the UNIDO Secretariat to the International Symposium.

Also an aide-memoire entitled "Technical assistance and training on implementation and follow-up of industrial projects" was prepared with a view to inviting the attention of government officials in developing countries to the problem and informing them on the scope and mode of technical assistance which UNIDO would be prepared to provide in this specific field. As of October 1967, the copies of this aide-memoire had been distributed to about 25 selected developing countries which had expressed the need for technical assistance in this field. More systematic distribution is currently under way. This aide-memoire so far has resulted in specific government requests from Turkey and four other countries.

Cost: \$17,000 plus Consultant funds: \$6,000

Ref: ID/B/4, Table 6, page 70.

Group 12. Planning and Programming; Project Formulation etc. (continued)

4. Evaluation and reorganization of the catalogue establishment data from France, India, Israel, Japan and Yugoslavia

The collection of primary data for some 700 sample establishments in the five countries was completed by the end of 1967. The editing of these data and their presentation in a special two-page format for publication is nearing completion; about 45 per cent of the data received had been processed by July 1967. The part processed by May 1967 was submitted for printing as Industrial Planning and Programming Series No. 4 - Profiles of Manufacturing Establishments in Selected Countries, Volume I. This part of the study included material on 190 establishments. The rest of the collection is being processed for inclusion in Volumes II and III, the publication of which is planned for 1968.

Meanwhile, partial sample copies of the processed data were made available as much as possible to government officials and United Nations technical assistance experts on the field as they contacted the UNIDO Secretariat for such reference material.

Cost: \$17,000 plus Consultant funds (Swedish Government Grant).

Ref: ID/B/4, Table 7, page 76.

5. Collection, evaluation and dissemination of manufacturing establishment data from additional developing countries

Work is continuing on the collection of primary data to define the characteristics of new factories and enterprises in the developing countries. For Mexico and other developing countries, efforts are being made to obtain active assistance from the relevant offices of the United Nations Regional Economic Commissions. An agreement has been made with the ECLA office in Mexico as to the organization of a special working group in this country. Arrangements are also being made regarding the participation of an Iranian group.

The comparative analysis of the processed profiles data will not be started until late 1968, by which time the data from several additional countries have been compiled.

Cost: \$2,000 plus Consultant funds (Swedish Government Grant).

Ref: ID/B/4, Table 7, page 72.



Group 12. Planning and Programming; Project Formulation etc. (continued)

6. Preparation of reference inter-industry coefficient tables on the basis of existing data in Finland, France, Hungary, Japan and the United States

The reassembling of the basic tables from three countries (Finland, Japan and the USA) with four or higher digit classifications for comparison purposes has been completed. A computer programme for comparative analysis has been established and is in operation. The drafting of the findings will be started early in 1968 for publication under Industrial Planning and Programming Series No. 6 - Structure of Material Inputs in Manufacturing Industries and Inter-industry Relations.

The compilation of detailed partial inter-industry tables for three major industry blocs (textiles, chemicals and metal engineering) was compiled for the French case. This will be incorporated in the above publication.

Cost: \$17,000 plus Consultant funds (Swedish Government Grant) (out of 1966-1967 appropriations): \$6,500.

United Nations computing centre services: \$10,000.

Ref: ID/B/4, Table 7, page 73.

7. Studies of factors affecting the formulation of a general strategy of industrial development

A discussion paper entitled "Role of the industrial sector in economic development" and a background paper entitled "Surplus Agricultural Labour and the development of industry" were prepared by the UNIDO Secretariat with the help of expert consultants and presented to the International Symposium.

Ref: ID/B/4, Table 8, page 75.

8. Industrial programming manual

A preliminary outline of the entire manual has been prepared, including some details for the chapters dealing with individual industries. Several sections of these chapters have been commissioned to outside consultants. A first draft will be reviewed at the meeting of an ad hoc expert group which is planned for 1968.

Cost: \$2,000 plus Consultant funds: \$5,000.

Ref: ID/B/4, Table 8, page 76.

Group 12. Planning and Programming; Project Formulation etc. (continued)

9. Sectoral planning and programming studies

A study on the programming of the iron and steel and metalworking industries has been started in line with those on the chemical industries and the petroleum refinery industry, which were published in the Industrialization and Productivity Bulletin No. 10 and Industrial Planning and Programming Series No. 1. The preparation of basic monographs has been commissioned to consultants.

Cost: \$2,000 plus Consultant funds: \$5,000.

Ref: ID/B/4, Table 8, page 76.

10. Study surveying industrial plans and programmes

An aide-memoire and a preliminary outline were prepared to serve as the basis for the studies. Arrangements have been made to initiate studies in Hungary and Israel, and contacts have been established for commissioning similar studies in Yugoslavia, Mexico and Iran.

Cost: \$3,500 plus Consultant funds: \$7,900.

Ref: ID/B/4, Table 8, page 79.

Group 13. Investment Policies; Industrial Investment Financing; Financial Planning

A. Field activities under various programmes of technical assistance

1. UNDP/TA Programme

Africa

Ghana 46-61

This project has been already reported under Industrial Services and Institutions Division, Group 10.

Asia and the Far East

China 29-57/Rev.(2)

This project has been already reported under Industrial Services and Institutions Division, Group 11.

Middle East and Europe

Kuwait (Funds in Trust) EBO-215

A UNIDO industrial economist is currently advising Kuwait on matters of industrial policy under a funds-in-trust arrangement financed by the Government of Kuwait. In addition to advising the Government of the advantages and effects that specific industrial projects would have on the economy of the country, he has also advised them on the form of their industrial development programme. Government requests for further technical assistance in standardizations and other fields have resulted in part from his work.

Duration of mission	man/months	1967	1/12
Estimated cost		\$23,000	
Account No.		9-050-243	

Group 13. Investment and Financing (continued)

Latin America

Colombia 135-57/Rev. (2)

A consultant on general industrial development is carrying out a general review of current policies and programmes of the Instituto di Fomento Industrial promotion to reassess priorities in the light of the country's needs and the possibility of effective action. He will also assess the organizational structure of IFI and recommend methods and procedures with respect to planning, surveys and implementation.

Duration of mission	man/months	1967	1/10
Estimated cost		\$19,500	
Account No.		8-050-093	

Paraguay 189-57/Rev. (1)

The Government is receiving the assistance of an industrial adviser who has been assigned to the Ministry of Industry and Trade to assist in the promotion of all aspects of industrial development with special reference to fiscal and financial incentives. Special emphasis has been placed on measures aimed at the promotion of light manufacturing industries, bearing in mind balance-of-payment implications.

Duration of mission	man/months	1967	1/11
Estimated cost		\$20,200	
Account No.		8-050-336	

2. Special Industrial Services

Africa

Madagascar SIS 67/148 MAA-2

A UNIDO staff member has assisted the Ministry of Industries and Mines in advising on the establishment and functioning of a centre to promote the flow of investments from foreign sources.

Duration of mission	man/months	1967	1/1
Estimated cost		\$1,500	
Account No.		9-050-267	

Group 13. Investment and Financing (continued)

Middle East and Europe

Pakistan

SIS 67/92 PAK-CEYLON

A staff member made an exploratory visit to Pakistan and Ceylon to advise the governments on possible areas of assistance under SIS.

Duration of mission	man/months	1967	1/2 weeks
Estimated cost		\$400	
Account No.		9-050-922	

3. Fellowships

The individual fellowships which fall in the area of Industrial Policies and Industrial Financing were distributed as follows:

Latin America	1
Europe	<u>2</u>
Total	3

No fellowships were awarded under in-plant group training during 1967.

B. Expert group meetings, seminars, group training and workshops

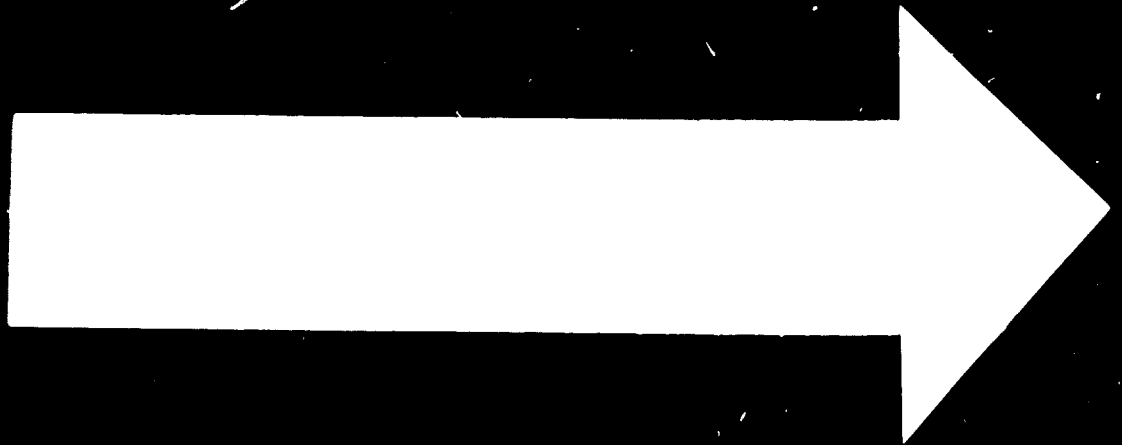
1. Workshops on financial planning of manufacturing enterprises

The two workshops which were to be held in Africa in 1967 were postponed until 1968 because of scheduling difficulties. The preparation of the teaching and study material, together with the documentation, has been completed, however, and will serve as the basis of the workshop presentations and discussions. These workshops are intended primarily for economic planners, promoters, and managers of industrial projects as well as industrial financial analysts.  
Estimated cost: \$3,950

Ref: ID/B/4, Table 5, page 58.

2. Investment promotion services for industrial development

Two expert meetings on investment promotion of industrial projects for the developing countries were held in New York in 1967: one in June and the other in September. The objective of these meetings was to discuss a methodology for bringing about a greatly increased volume of industrial project investment

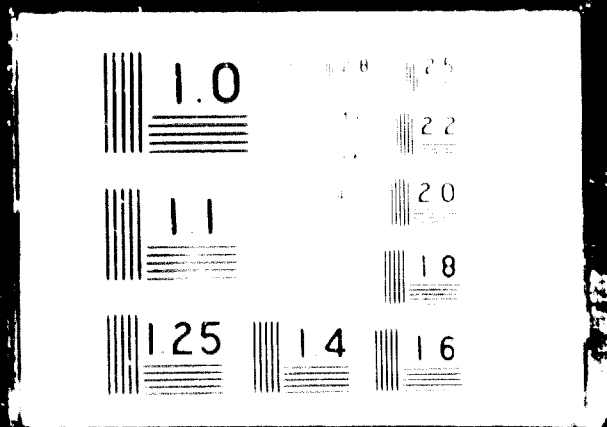


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Group 12. Investment and Financing (continued)

and implementation in the developing countries. Similar meetings are planned for Europe. A training programme in techniques of investment promotion has been developed as a result of these meetings, due to become operational in 1968 with the co-sponsorship of the United Nations Institute for Training and Research (UNITAR). Two studies have also been initiated: (a) The Structure, Scope and Function of Investment Promotion Agencies in Developing Countries; (b) Outline of a Model Industrial Investment Information Manual.

1967 costs:

Consultant funds: \$3,575

Expert Group Meetings: \$2,832

Ref: ID/B/4, Table 5, page 58.

3. Fiscal incentives for industrial development

A comparative study on fiscal incentives for industrial development was completed in the first quarter of 1967. A tentatively scheduled 1967 expert group meeting has been postponed to 1968.

Ref: ID/B/4, Table 45, page 59.

4. Seminar on financial aspects of manufacturing enterprises in the public sector

Research and study preparation for it have been carried out during the year. The objectives of the seminar are:

- (a) To provide a forum for participants from both developing and developed countries regarding the experiences of financial management of public manufacturing enterprises;
- (b) To formulate general guidelines for effective mobilization of both domestic and external resources, their proper allocation in terms of overriding national priorities, and their efficient administration within the operational scope of public manufacturing enterprises; and
- (c) To recommend, for special attention of UNIDO, proposals for further activities, including provision of experts in specific fields, and development of training programmes.

1967 costs:

Consultant funds: \$5,200

Ref: ID/B/4, Table 5, page 59.



Group 10. Investment and financing - continued

1. Studies and research

1. Study on foreign-domestic joint ventures in manufacturing

The study is currently underway and will be completed in late 1968. It seeks to analyse actual cases of industrial joint ventures between foreign enterprises 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 contributions of patents, technical and managerial know-how, training of local personnel, profit-sharing and marketing arrangements etc. The study is being prepared in co-operation with the Columbia University Law School.

1967 costs:

Consultant funds:       \$5,000

Ref: ID/B/4, Table 5, page 60.

2. Co-operation among industrial development finance institutions in developing countries

Three "bulletins" have been prepared containing information on the products and the capacities of manufacturing projects promoted or financed by a number of industrial development finance institutions. These bulletins, which are based on replies received from these institutions, are intended as a reference for institutions seeking information on the planning, implementation, financing and other aspects of the manufacturing projects listed. The bulletins have been supplied to interested development finance institutions. A number of requests have been received from development banks seeking such information, and appropriate action has been taken.

Arrangements are being made in co-operation with the African Development Bank for organizing a scheme of co-operation among development finance institutions in Africa for promoting various activities which these institutions might want to undertake jointly.

Ref: ID/B/4, Table 5, page 57.





Group 14. Export Promotion (continued)

3. Utilization of industrial excess capacity for exports

A study entitled "Utilization of industrial excess capacity for exports" has been completed. Work is continuing on material for a seminar on this subject in 1968 and for initiation of a programme of technical assistance to developing countries for better utilization of industrial capacity.

Estimated cost \$15,300

Ref: ID/B/4, Table 10, page 87.

4. Study of repayment of foreign credits in the form of commodities

Two country studies were commissioned to experts dealing with the specific experiences of Czechoslovakia as a creditor country and of the United Arab Republic as a debtor country. The Czechoslovak study has already been completed and the UAR study is well advanced. An analysis of the advantages and disadvantages of this type of arrangement based on the data being developed is also under way.

Estimated cost \$5,000

Ref: ID/B/4, Table 10, page 88.

5. Export-based industrialization in the Caribbean countries

A study has been commissioned to the Centre for Developing Area Studies at McGill University, Montreal, Canada. This is a study to analyse the pattern of industrialization in small countries that are highly dependent on foreign trade.

Estimated cost \$10,000

Ref: ID/B/4, Table 10, page 87.

6. Foreign aid and industrialization

This study was commissioned to the Centre for Area Studies at McGill University, Montreal, Canada. The study analyses the impact on industrialization of foreign aid in three countries - Ghana, Nigeria and Pakistan.

Estimated cost \$10,000

Ref: ID/B/4, Table 10, page 89.

Group 14. Export Promotion (continued)

Alternative techniques for export-oriented industries

A study was made of selected industrial areas to determine where the question of alternative techniques could be analyzed so that the results would have the most meaningful application for the developing countries. Investigation is being made of the feasibility of basing the study on export-oriented industries in Puerto Rico.

Estimated cost \$15,300

Ref: ID/B/4, Table 10, page 90.

8. Joint export-promotion mission to Central America

A joint export-promotion mission organized by UNCTAD/UNIDO, ECLA and SIECA visited the Central American countries and Panama in September and October 1967. Its purpose was to determine the export potential in manufactures from existing capacity in each country and the needs for technical assistance in this field in the countries of the Central American Common Market.

Ref: ID/B/4, Paragraphs 62-64, page 85 and Table 10, page 88.

ID/B/20, pages 127-128.

9. Study on the usefulness of free-trade zones to developing countries

A study on the usefulness of free-trade zones to developing countries was begun in the beginning of 1967. Material has been collected and the study will be completed during the first half of 1968.

10. Industrial export-promotion advisory service

Preparations have been made for the establishment of an industrial export-promotion advisory service. Contacts with relevant institutions in developed countries have been established and material collected to provide advice to developing countries in the field of export promotion in manufactures particularly in cases which do not require the formulation and implementation of technical assistance projects.

Ref: ID/B/20, pages 128-129.

General Research Projects Established as Continuing Activities

A. Field activities under the various programmes of technical assistance

No reports have been received for projects under this heading.

B. Expert group meetings, seminars, group training and workshops

No reports have been received for projects under this heading.

C. Studies and research

1. Industrial development survey

The first survey has been completed and was presented to the International Symposium on Industrial Development. It reviewed the basic features of industrial progress in the developing countries in recent years and examined the role of the developing countries in terms of world-wide economic development.

Estimated cost \$25,000

Ref: ID/R/4, Table 4, page 54.

The collection of data for the second issue of the survey, and their evaluation, have been initiated. It is expected that it will be published in the latter part of 1968.

Estimated cost \$25,000

Ref: ID/R/4, Table 4, page 55.

2. Country papers on industrial development

Three country studies are under preparation. These country studies will deal with a detailed analysis of the industrial sector of the selected countries, its relation to the general economy, the institutional structure serving industry, and possible approaches for accelerating the industrialization process.

1967 costs:

Consultant funds: \$10,000

Travel expenses: \$10,000

Ref: ID/R/4, Table 4, page 56.

Group 15. General Research Projects (continued)

D. Co-operation with the Regional Economic Commissions

As indicated in the preceding sections, a number of projects in this group has involved very useful co-operation with the Regional Economic Commissions.

E. Publications

The following publications, technical data, circulars and studies were prepared for publication in addition to those prepared for the International Symposium on Industrial Development and for the Industrial Development Board:

The Industrial Development Survey;

Issues No. 11 and 12 of the Industrialization and Productivity Bulletin (ID/Ser.A/11 and ID/Ser.A/12);

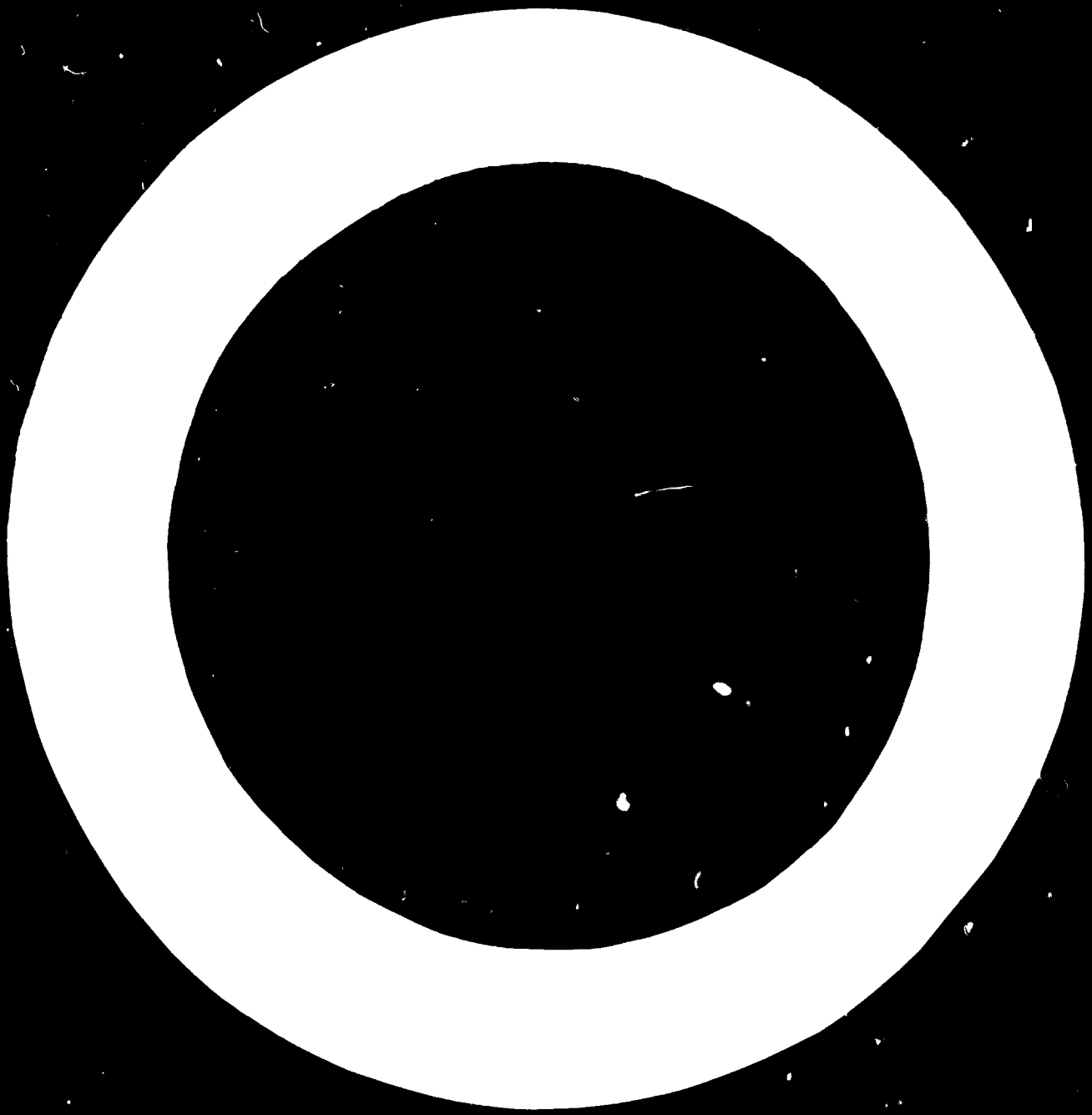
Information Circulars Nos. 1, 2 and 3 which list manufacturing projects promoted or financed by industrial development finance institutions in the developing countries so as to encourage the exchange of experience which may be beneficial to planned programmes;

Summary of the discussions held at the Ad Hoc Meeting of Experts on the Role of Advanced Skills and Technologies in Industrial Development and the discussion papers presented at that meeting;

Report of the Meeting of Experts on Industrial Investment Promotion, New York, June and September 1967;

Industrial Planning and Programming Series, No. 4: Profiles of manufacturing establishments in selected countries, Volume I (ID/Ser.E/4);

Industrial Planning and Programming Series, No. 5: Industrial project formulation and evaluation, Volume I (ID/Ser.E/5).





ANNEX I - IFAA - AGREEMENTS AND SERVICES

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ANNEX 1

ADMINISTRATIVE ACTIVITIES OF UNIDO IN 1967

1. The administrative activities of UNIDO in 1967 were marked by the transfer of the organization from New York to Vienna and the establishment of Headquarters in Vienna simultaneously with the preparation and holding of the Symposium on Industrial Development in Athens. The transfer of the Headquarters necessarily resulted in the splitting of administrative services - one team operating in New York while a second team was working in Vienna.

2. At its First Session, the Board had before it progress reports by the Executive Director of UNIDO concerning the establishment of Headquarters in Vienna (E/67/C.1). The following information elaborates on the previous reports and provides details concerning the actual establishment of UNIDO in Vienna during 1967 and the other administrative operations.

1. Headquarters Agreement and Supplementary Agreements

The Agreement between the United Nations and the Republic of Austria regarding the Headquarters of the United Nations Industrial Development Organization (signed at New York on 14 April 1967) and the Exchange of Notes between the United Nations and the Republic of Austria intended to clarify certain provisions of the Agreement<sup>1/</sup> (also signed at New York on 13 April 1967) entered into force on 1 July 1967, when the Exchange of Notes envisaged in Article XV, Section 4 of the Agreement, took place in Vienna. The relevant provisions of the Headquarters Agreement concerning the privileges and immunities of the Organization and of the staff have been implemented with the co-operation of the competent Austrian authorities. A Supplementary Agreement between the UNIDO and the Federal Government of Austria is being negotiated for the purpose of regulating the exercise of the rights mentioned in Article XII, Section 2<sup>(a)</sup> iii (i.e. the establishment of a Commissary shop) of the Headquarters Agreement. Preliminary action has also been taken for the negotiation of Supplementary Agreements with the Government of Austria concerning the temporary Headquarters of the UNIDO and questions of social insurance and pension insurance for officials of UNIDO.

<sup>1/</sup> A/6715, Annex III, A and B. Printed as Supplement No.15 to the Official Records, General Assembly, twenty-second session.

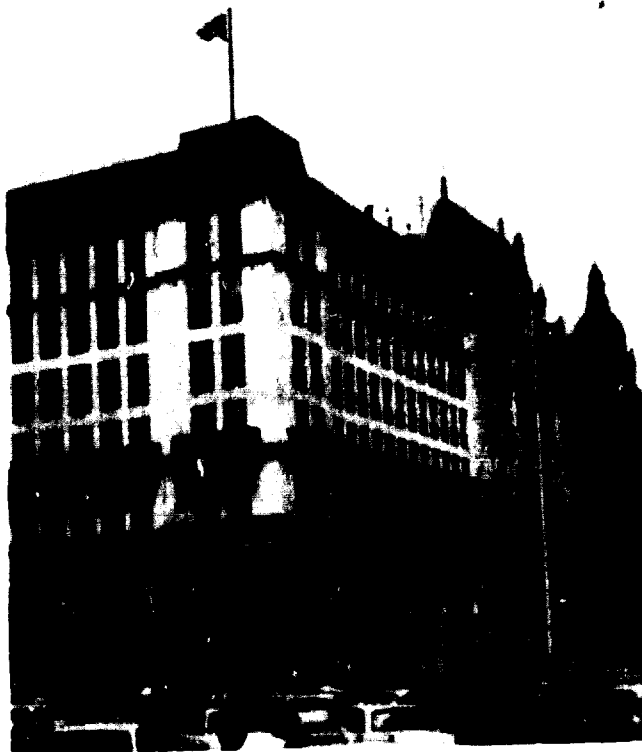
## II Temporary Headquarters

### Felderhaus

4. The Felderhaus, selected as temporary Headquarters of UNIDO, was formally handed over to UNIDO on 7 July 1967. On this occasion the Exchange of Notes on the entry into force of the Headquarters Agreement took place. On behalf of the Federal Government of Austria the Note was signed by the Under Secretary of State for Foreign Affairs and on behalf of the United Nations by the Executive Director.

5. The Felderhaus provides 4050 square meters of usable space and will accommodate approximately 300 personnel. Certain modifications have been necessary, such as the movement of partitions; these alterations are continuing with the gradual acquisition of additional office space elsewhere. It has been planned tentatively that the Felderhaus will accommodate the Executive Director and his office, the Director of the Division of Administration and some of his supporting staff, and staff of the substantive operations.

6. The prefabricated structures referred to below will accommodate almost all of the Division of Administration and those substantive groups which cannot be accommodated in the Felderhaus.

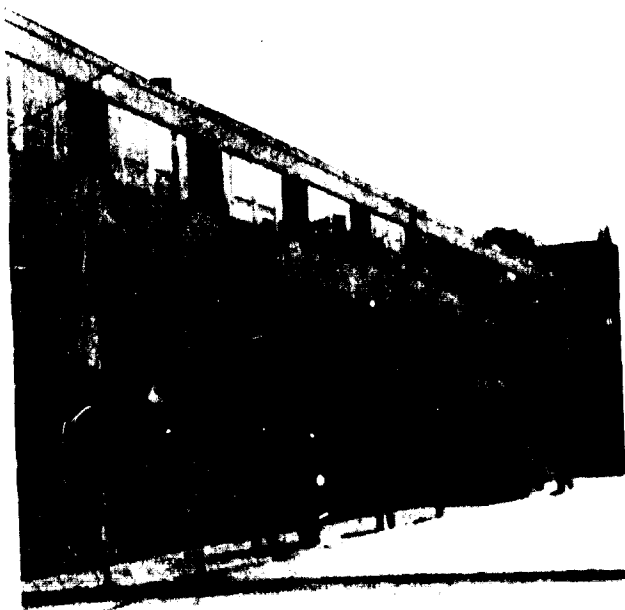


FELDERHAUS, occupied - 7 July 1967

Prefabricated structures

7. On 21 April 1967, the Federal Government of Austria approved the construction of two prefabricated structures within a seven-minute walking distance from the Felderhaus. These consist of two parallel three-storey buildings with a connecting reception hall and cafeteria. The first structure was completed on schedule in October 1967 and formally turned over to UNIDO on 18 October 1967. The net usable space is 1750 square meters, accommodating approximately 140 staff members. There is parking area for 68 vehicles.

8. The second prefabricated building is scheduled for occupancy by mid March 1968; however, completion and subsequent occupancy will probably be prior to that date. This building, of slightly smaller dimensions than the first, will accommodate approximately 135 staff members.



ANNEX "A", occupied - 18 October 1967



ANNEX "B", occupancy mid-March 1968

9. The Felderhaus together with the two prefabricated structures will accommodate a maximum of 575 - 600 staff members, this figure being somewhat less than UNIDO's authorized establishment for 1968, excluding visiting field representatives, consultants and other temporary employees. The Executive Director has therefore requested the Federal Government of Austria to provide a third prefabricated structure in the vicinity of the first two to be completed during the second half of 1968.

#### Hofburg

10. There are approximately 830 square meters of usable space for use by UNIDO, of which 380 square meters are utilized for storing furniture and stationery and the balance of 450 square meters for documents reproduction and sorting. The documents area is adjacent to that of the IAEA and forms part of the Common Services arrangement between UNIDO and the IAEA. Conference or meeting rooms, with simultaneous interpretation, available to UNIDO in the Hofburg, are one room which seats 1200 persons, a second room seating 600 persons, a third room seating 350 persons and some smaller rooms each of which could accommodate between 150 and 180 persons.

#### Rathaus (Townhall)

11. In the Rathaus, which is adjacent to the Felderhaus, approximately 1200 square meters have been assigned to UNIDO for archives and the storage of documents. During 1968 750 square meters will be redecorated and equipped with the most modern mobile shelving on tracks at the expense of the Municipality of Vienna. The balance of the space will be redecorated and equipped with similar shelving during 1969 if required by UNIDO. As immediate temporary archives and documents space, the Municipality has assigned to UNIDO 120 square meters with approximately 900 meters of shelving.

Commissary

12. According to schedule, the Commissary was opened on 2 January 1968; it is accommodated in premises adjacent to the prefabricated structures. Provisional regulations have been issued pending the conclusion of the Supplementary Agreement.



COMMISSARY, in operation January 1968

Communications and records

13. The Austrian Government has provided a modern telephone installation with a capacity of 800 individual extensions. The central switchboard in the Felderhaus connects UNIDO's various temporary locations and the International Atomic Energy Agency. Teleprinters have been installed connecting UNIDO directly with the European Office of the United Nations in Geneva, and thus with the United Nations telegraph network and the international telex network. A central

registry for processing correspondence has been established and UNIDO's files transferred from New York to Vienna. A common UNIDO-IAEA pouch service is in operation between New York and Vienna under UNIDO's responsibility.

#### Security system

14. Security personnel are on duty continuously at the Felderhaus and at the prefabricated structures, including the Commissary. All security personnel have undergone a course of instruction given by the Austrian State Police in addition to the United Nations training. The activities of the security section are co-ordinated with the Austrian State Police.

### III Permanent Headquarters

15. The Board has already been informed of the Donaupark site chosen for the setting up of the permanent Headquarters in Vienna. A series of meetings and consultations with the Austrian authorities were held in the second half of 1967 concerning the schedule for designing and constructing the Headquarters building. It is anticipated that the intensive preparations will continue during the next months and that the detailed schedule for the construction of the building will be finalized shortly.

### IV Financial matters

#### Regular budget

16. In the course of 1967, revised budget estimates were prepared providing for the necessary increased substantive staff, the required administrative organization and the costs of the movement of Headquarters from New York to Vienna. These estimates were subsequently approved by the Advisory Committee on Administrative and Budgetary Questions and the General Assembly.

### Extra budgetary funds

17. The Technical Programmes Management Section began its work in the second half of 1967. Extra-budgetary funds <sup>2/</sup> allotted to UNIDO for its technical assistance programme continued to be administered by the Financial Management Service of the United Nations in 1967. UNIDO's Technical Programmes Management Section worked closely with this unit in order to prepare for the take over in Vienna as of 1 January 1968. This preparatory work involved the training of personnel and the development of operational procedures in relation to those of UNIDO's Technical Co-operation Division and Finance Section and to those of other United Nations technical assistance offices. All arrangements were satisfactorily completed by the end of the year and resulted in the assumption by UNIDO of full administrative and financial management responsibility for technical assistance programmes in the field of industrial development as of 1 January 1968.

## V Staff

### Recruitment

18. On 1 January 1967 the UNIDO staff consisted of 105 staff members in the professional category (including advisers) and 81 staff members in the General Service category. Following the decision to establish UNIDO in Vienna, 35 professional staff members left the Organization. On 31 December 1967 the UNIDO professional staff (in Vienna and New York) consisted of 156 members (of 47 nationalities) of whom 143 were in Vienna.

19. Recruitment of General Service staff in Vienna began in June 1967. Whenever possible, staff residing in the area were appointed. However, linguistic requirements for stenographers and typists made it necessary to recruit such staff also from other European countries. The 182 General Service staff members on duty on 31 December 1967 comprised 90 Austrian nationals and 92 nationals of 14 other countries.

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<sup>2/</sup> Funds-in-Trust, including Special Industrial Services, United Nations Development Programme (Technical Assistance and Special Fund components) and the Regular Programme of Technical Assistance of the United Nations.



20. The work of UNIDO recruitment in 1967 was characterized by the very heavy pressure of applications from all sources for appointments at all levels. Thus, 800 applications for professional posts were dealt with between May and December in Vienna alone (apart from the even greater number handled by the Secretariat Recruitment Service in New York). Approximately 2100 applications for General Service posts were reviewed and 622 candidates interviewed.

21. The staff of UNIDO in Vienna on 31 December 1967 totalled 387 persons in the following categories:

P-5 and above	38
P-1 through P-4	105
Field service officers	10
General service staff	182
Manual workers	<u>52</u>
Total	387

#### Transfer of staff members and settlement in Vienna

22. About 500 persons, consisting of staff members and their families, had arrived in Vienna by December 1967. The removal of their household and personal effects represented a large-scale operation. The usual time-consuming difficulties involving the clearance of these effects were minimized thanks to the excellent co-operation by the various Austrian Governmental offices.

23. The two main problems for staff arriving in Vienna were the provision of housing and educational facilities for their children. As to the latter, 88 children of internationally recruited staff members have registered at the English school, the Lycée Francais, the Russian school and the American school.

24. In the housing sector, intensive efforts were made to explore housing vacancies in Vienna and nearby communities and to assist incoming staff to secure permanent accommodation.

25. To assist staff members and their families in adapting themselves to life in Vienna, a welfare unit was established within the Organization; a post report was issued entitled "Background Reading on Austria with Notes on Living Conditions in Vienna for Staff Members of UNIDO" and a co-operative arrangement was reached with IAEA for the establishment of language classes. A clinic was set up in the Felderhaus under the supervision of the IAEA physician.

26. Regarding a health insurance scheme for UNIDO staff, discussions were held with a number of insurance companies. After the establishment of a comparative analysis of the offers received, it is hoped that a satisfactory scheme can be established early in 1968.

27. Finally, a number of basic studies were undertaken, e.g. the preparation of Staff Regulations governing the conditions of employment of General Service staff in Vienna and a survey on the cost of living conditions in Vienna, carried out under the auspices of the ILO statistical office in Geneva.

28. The establishment of a viable, operating Office of Personnel Services for UNIDO represented in itself a major operation which is still proceeding. Areas of major activity were the development of internal operating instructions for the Office of Personnel Services, arrangements for the transfer of a major part of the responsibility of professional recruitment for Headquarters to Vienna, and forward planning of consultative machinery with the Staff Association. Discussions were underway to define the rôle of the OPS in the recruitment and administration of project personnel assigned under the 200 series of the Staff Rules to UNIDO technical co-operation projects in developing countries.

#### VI Conference Services

29. The Conference Services, after having serviced the International Symposium on Industrial Development in Athens, were sufficiently well established by the end of the year to deal with the preparation of the Second Session of the Industrial Development Board.

30. During the autumn of 1967, the conference co-ordination staff, in co-operation with the substantive divisions concerned, made arrangements for meetings of working groups on copper and aluminium, the selection of textile machinery and of in-plant group training directors.

31. The translators, revisers and interpreters recruited by November were totally committed to the International Symposium. Further language staff was under recruitment by the end of the year. When this stage of recruitment has been completed, the strength of the English and Russian translation staff will be adequate. Owing to difficulties of recruitment, the Spanish and especially the French group will still remain seriously under-manned.

32. The main pre-occupation of the Editorial and Documents Control Section, in addition to the recruitment of staff, was to take over and continue the publications programme already initiated in New York and to establish a reference unit and effective document control procedures. Several major publications were edited and submitted for publication in New York under the 1967 budget; others were prepared for publication from Vienna under the 1968 programme.

33. Reproduction of UNIDO documents is carried out under the "common service" arrangements with the Documents Service of IAEA. Preparations have been made for the purchase of external printing services for the publications programme and for the establishment of a small internal composing facility.

#### VII Common Services IAEA - UNIDO

34. The arrangements concluded with the IAEA for the provision of various services have proven very successful. Prior to, and during the period of establishment of UNIDO in Vienna, the IAEA has very generously shared its entire administrative, financial and other facilities with UNIDO including office space, secretariat assistance, transport etc. during this critical period. The use of common services has already resulted in significant economies for UNIDO.

35. Subsequently, and during the period of installation of UNIDO in the Felderhaus, the possibilities and practicability of common services in certain areas on a more permanent basis were explored and agreements reached for the establishment of such services. More specifically, arrangements are now in force for the provision of common services by the IAEA in such areas as procurement of equipment and supplies, reproduction of documents, medical services, and to a more limited extent, architectural engineering and cleaning services. The general principle adopted by both Organizations for the provisions of these common services is that UNIDO would establish small ancillary or liaison units in its premises with limited facilities and would use the large facilities of IAEA on an agreed reimbursable basis. An agreement has been signed between UNIDO and IAEA on the common use of their respective interpretation services.

36. In addition to the above facilities made available by IAEA, UNIDO staff were granted temporary privileges in the IAEA Commissary and restaurant until the opening of the UNIDO facilities.

VIII Co-operation with and assistance by the Austrian authorities

17. Co-operation between the various administrative services of UNID and the competent Austrian authorities have during the difficult times of UNID's establishment in Vienna been marked by a spirit of mutual goodwill, the desire to achieve satisfactory solutions to all pending issues and active practical co-operation. The fact that the problems connected with the setting up of Headquarters in Vienna could be answered in such an efficient and effective way has been due largely to the assistance granted by all Austrian authorities concerned.

ANNEX

MEMORANDUM OF AGREEMENT ON PROMOTING THE ESTABLISHMENT OF INDUSTRIAL DEVELOPMENT FIELD ADVISERS AT THE COUNTRY LEVEL IN THE PARTICIPATING WITHIN UNDP FIELD OFFICES

1. The purposes of the arrangements described below are:
  - (a) To achieve with respect to the UNDP field staff and activities a desirable degree of co-ordination with and integration within the offices of UNDP Resident Representatives, particularly in respect to efforts aimed at expanding operational activities in the industrial field;
  - (b) To provide, as required, the services of qualified industrial development field advisers (UNIDO) on matters of technical co-operation both to the technical authorities of the recipient Governments and to the Resident Representatives;
  - (c) To assure UNIDO an adequate channel of communications with Member States on matters outside the scope of UNDP sponsored activities, as well as with the regional economic commissions and with other regional and sub-regional organizations.
2. It is intended that the above purposes will be gradually met by the appointment of Industrial Development Field Advisers (UNIDO) to be stationed in the respective offices of UNDP Resident Representatives. The Advisers would be selected by UNIDO and agreed to by UNDP; they would serve under a letter of appointment issued in the joint names of the Executive Director of UNIDO and the Administrator of UNDP; they would be subject to the rules, regulations and administrative instructions applicable to UNDP's field staff and their emoluments would be paid within the UNDP Administrative Budget.
3. The Industrial Development Field Advisers (UNIDO) will be asked to service one or several developing countries as may be required in the light of the needs of the industrial development field programmes of the countries concerned. When Industrial Development Field Advisers (UNIDO) are assigned to several UNDP field offices, the provisions of the present Agreement shall apply separately to their relationship with each Resident Representative.
4. The Industrial Development Field Advisers (UNIDO) would carry the main responsibility for industrial development policy aspects under the general administrative authority and policy guidance of the Resident Representative, and in particular for the following functions:
  - (a) Direct contacts with the technical authorities of the recipient Government in matters of programming, execution and evaluation of UNIDO projects.
  - (b) Contact with and guidance for UNIDO experts.The Industrial Development Field Advisers (UNIDO) would receive instructions from UNIDO and would report directly to UNIDO, copying all of their correspondence to the Resident Representative on matters concerning UNDP. On matters

not concerning the UNDP they would report to UNIDO, keeping the Resident Representative informed.

5. In matters of programming and especially in all negotiations leading to the initiation of new projects, Industrial Development Field Advisers (UNIDO) would keep in close touch with Resident Representatives. If the Resident Representative deems that such negotiations are inopportune at a given moment, either because of general reasons or because he deems the prospective projects to have a lower order or priority, he may request the Adviser to suspend action. The Adviser would in such a case be expected to comply with the request, but he may refer the matter to UNIDO, which, in turn, may raise the question with the Resident Representative directly, or with UNDP headquarters and such action as appropriate would be taken by the two Organizations.
6. Contacts on matters within the sphere of interest of UNDP with the central organs of the recipient Government (Head of State, Prime Minister, Ministry of Foreign Affairs, central co-ordinating authority) would be principally reserved for the Resident Representative. Resident Representatives would associate the Industrial Development Field Adviser (UNIDO) in such contacts when the matter concerns specifically the sphere of activities of UNIDO. The Adviser should, however, not maintain independent contacts with the central organs of the Government, except at the request of the Executive Director of UNIDO and for matters outside the sphere of UNDP.
7. Any local administrative action which would need to be undertaken as a result of contacts between the Industrial Development Field Advisers (UNIDO) and UNIDO experts would be, as far as feasible, entrusted to the appropriate administrative services of the office of the Resident Representative (for instance, secretarial assistance, transportation, customs clearance, housing, identity cards, all matters pertaining to the experts formal accreditation and legal status in the country and to his privileges and immunities).  
While the Adviser must be concerned with the effective administrative servicing of the UNIDO activities, he should as far as possible avoid getting involved in administrative work and should concentrate on questions of programming, execution and evaluation of UNIDO projects in close touch with the Resident Representative and the technical services of the Government.
8. While the Industrial Development Field Adviser (UNIDO) would participate in the planning stage of Special Fund sector projects for which UNIDO is to be the Executing Agency, including the negotiations of plans of operations of such projects, the Project Manager, once he has assumed his duties, will carry the main responsibility for the implementation of the Special Fund projects. While the Adviser would maintain a general oversight of the projects for the purpose of liaison, reporting and evaluation, he would only intervene directly in questions connected with a project on the request of the Project Manager, the Resident Representative or UNIDO Headquarters.

9. The internal status of Industrial Development Field Advisers (UNIDO) in the offices of UNDP Resident Representatives would be assimilated to that of other international staff of equal grades and, therefore, would normally be assimilated to the status of a Deputy Resident Representative. However, in the case of absence of the Resident Representative or during a period before the assignment of a new Resident Representative, the senior non-technical staff member in the office would, for the present, perform the duties of acting Resident Representative.
10. Arrangements will be made to provide Industrial Development Field Advisers (UNIDO) with office space in the offices of the Resident Representatives. These offices will be also responsible for the necessary support of the work of the Adviser (secretarial assistance, local transportation, etc.).
11. Industrial Development Field Advisers (UNIDO) may be entrusted by the Executive Director of UNIDO with certain functions outside the sphere of UNDP-sponsored activities; such functions would be defined as precisely as possible in a letter issued by UNIDO to the Adviser prescribing his terms of reference; a copy of such letter would be communicated to UNDP Headquarters and to the Resident Representative.
12. It is understood that the Resident Representative would continue to be responsible as regards the activities mentioned in this Agreement for all contacts, communications, reports to UNDP Headquarters and to the Governments on behalf of the Administrator of UNDP.
13. Subject to approval by the Governing Council of UNDP, the Administrator will include in the UNDP Administrative Budget beginning with the year 1969 allocations required for the financing of the Industrial Development Field Advisers (UNIDO). Since UNIDO does not have other arrangements for outpostting field staff, it is considered necessary to proceed early with the initial posting of Industrial Development Field Advisers (UNIDO) and, therefore, appropriate temporary arrangements will be arrived at between UNDP and UNIDO for the appointment and financing of a first group of several Industrial Development Field Advisers (UNIDO) in 1967 and 1968.

New York, 3 October 1967

New York, 3 October 1967

(Signed): Paul Hoffman  
Administrator  
United Nations Development  
Programme

(Signed): I.H. Abdel-Rahman  
Executive Director  
United Nations Industrial Development  
Organization





**13.3.74**