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The International Year of Development

INDUSTRIAL DOCUMENTATION UNIT

1974

INTERNATIONAL YEAR OF DEVELOPMENT

INDUSTRIAL DOCUMENTATION UNIT

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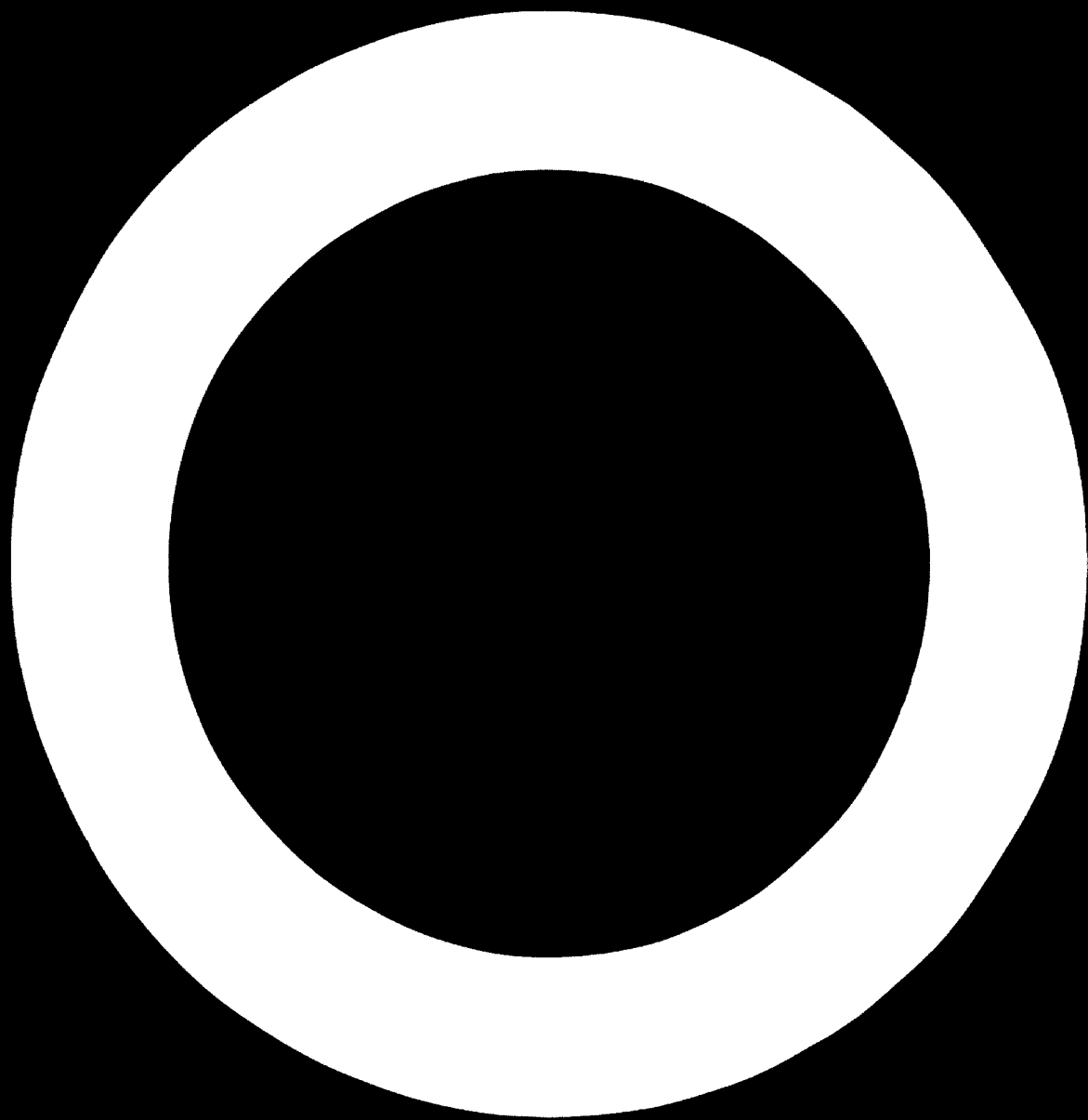
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SUMMARY OF FINANCIAL AND IMPLEMENTATION

1. The objectives as set forth in the original Plan of Operations were appropriate.
2. The Project faced many initial delays in implementation, caused both by the Executing Agency and the Government, leading to frequent extensions of Phase I. It has by now achieved most of the objectives set forth in the plan of operations.
3. The UNDP inputs were in line with the needs of the Government.
4. Government inputs exceeded, by far, the commitments foreseen in the early stages of Phase I.
5. The Industrial Studies and Development Center (ISDC) has recruited a strong staff and has, in addition, recruited expatriate staff and consultants out of its own budget. It is a well organized and relatively efficient institution. Consequently, it is held in high regard and is being relied on by other organizations and ministries in the country.
6. The Project Document for Phase II was found to generally respond to the needs of the situation. Modifications were necessary in order to better reflect the new tasks of the ISDC. The level of funding was maintained but the duration of Phase II was reduced from 3 years to 2 1/2 years, beginning 1 August 1974.
7. It is therefore recommended that the Phase II Document, which has been revised by the Mission and agreed to by the various interested parties, be approved as expeditiously as possible so that there is no need for yet another amendment or extension of Phase I.
8. However, the Mission feels that it is imperative that a Project Manager be engaged at the earliest possible moment and that any additional experts, beyond those authorized for the completion of Phase I, should only be recruited after the government has selected the new Project Manager, who was to have taken over the Project on 16 April 1974.

## INTRODUCTION

9. The Ministry of Commerce and Industry of the Kingdom of Saudi Arabia requested, in January 1965, UNDP assistance for the establishment of a Center for Industrial Studies, Services and Development Institute. The request was approved by the Governing Council of the Special Fund in June 1965. The financial operation was opened on 14 February 1966 and the project became operational on 1 March 1966. The statutes establishing the Industrial Studies and Development Centre (ISDC) were promulgated on 5 March 1967.
10. The original duration of the project of three years (1 March 1966 - 28 February 1969) was extended to the end of 1969 under Adjustment Advice No. 1 and to the end of 1970 under Adjustment Advice No. 2. Then, on the project was originally to continue under Amendment No. 1 until the end of 1973. Two revisions extended the project until 31 July 1974.
- 10a. A draft Project Document had been prepared by the Project Manager in close consultation with the management of the ISDC asking for a continuation of assistance for an additional three years beginning 1 January 1974. This draft document was forwarded to the Executing Agency (UNIDO) on 7 October 1974 requesting that a UNDP/UNIDO Mission be sent to Riyadh to review the work accomplished up to the present and to assess the overall validity of the continuation of the Project as reflected in the draft project document for Phase II. For the complete text of the terms of reference, see ANNEX I.
11. The Mission, consisting of Professor Lee Nehrt, Consultant representing UNDP, and Mr. Werner Behrens, representing UNIDO, stayed in Riyadh from 1 to 12 April 1974 (with the exception of 8 April 1974, when it had consultations in Jeddah). On 2 and 3 April the Mission was assisted by Mr. Abdalla Abdelwahab, UNIDO Senior Industrial Development Field Adviser. Interviews were held with the key individuals in each of the institutions which, along with the Industrial Studies and Development Centre, are concerned with the industrialization process of the Kingdom of Saudi Arabia. For the complete list of persons interviewed see ANNEX II.
12. The Mission wishes to express its appreciation to the assistance provided by the UNDP Office in Riyadh, and especially to Mr. Frank Church for his continual close support of the Mission. Particular gratitude is felt for the generous way in which His Excellency Abdulaziz Al-Zamil made himself available, at all hours, to the Mission. Finally, the Mission feels that a special note of appreciation and congratulations are due to Dr. Abdelsalam Osman, whose guiding hand, as Project Manager, from the conception of the project through to the visit of the Mission, was to a large extent responsible for the obvious success of the project and of the Industrial Studies and Development Centre. Very best wishes are extended to him in his retirement.



## PART I. EVALUATION OF PHASE I

## A. PROJECT FORMULATION

PROJECT PERFORMANCE OBJECTIVES

13. The purpose of the project, as stated in the Plan of Operation of 14 July 1966, was to assist the Government of Saudi Arabia in the establishment and initial operation of the ISDC in Riyadh, which was to perform the following functions:
- (a) To provide the responsible authorities with advice in the preparation of the country's industrial policy and programme and the coordination of these activities in this respect;
  - (b) To provide assistance in carrying out and commissioning industrial feasibility studies;
  - (c) To advise on the establishment of new industries and on financing and implementation of such industries; and
  - (d) To assist in the planning and establishment of industrial estates and advise on their management and operation.
14. The project also provided for the establishment and initial operation of a model industrial estate to be located at Jeddah. A branch office of the ISDC was to be established within the central facilities of the industrial estate in order to serve as the nucleus for the future extension service to industry.
15. The functions of the ISDC were defined in its Statute promulgated in March 1967, as follows:
- (a) Carrying out research and studies necessary for preparing sound industrial policies and programmes and submitting to the authorities concerned suggestions and recommendations in this respect as well as for harmonising cooperation among the various authorities whose functions relate to industry;
  - (b) Conducting or commissioning researches and studies relating to the establishment of new industries including the feasibility of industrial projects, their priority, methods of financing and the assistance and privileges which the Government may extend to them;
  - (c) Carrying out researches and studies relating to the implementation of industrial projects and submitting recommendations and providing assistance as necessary in this respect;
  - (d) Providing technical assistance to existing industrial establishments regarding all aspects of their operation and expansion schemes; and
  - (e) Supervising the planning, construction and management of industrial estates.

SOCIO-ECONOMIC PERSPECTIVES

16. At the time the project was conceived, the country was still overwhelmingly rural in character. About 50% of the population was still nomadic or semi-nomadic.

Most of the rest were small or medium size villages, all dominated by a tribal structure. This structure, however, reflected in the break-down of GNP which showed that 70% came from the petroleum sector and only 8% from agriculture. The largest employer and source of capital in the country was Aramco, which employed 13,000 people, of whom 10,000 were Saudi nationals. But the important factor in 1965 was that only 1% of GNP came from manufacturing (other than petroleum refining). There was a felt need to diversify the economy, to increase the importance of industry and decrease the dependence on oil.

17. However, a major difficulty was a lack of resources and infrastructure upon which to base industrial development. There were almost no natural resources other than petroleum and gas upon which to base heavy industry. There was no heavy industry around which light industry might develop. There was almost no agriculture upon which agroindustry might be based. The number of people in the money economy was quite small. There were few entrepreneurs with capital to invest in new industry. There were no development banks and the commercial banks would not lend for industrial investment.
18. A survey carried out by the ISDC soon after its inception, but based on 1966 data, showed that there were only 49 industrial non-petroleum establishments in the country, employing more than 5 workers. This was a small base from which to start industrial development. In addition, there were few skilled or educated Saudis, and these few preferred to work in the government. The unskilled Saudis tended to avoid menial labor, and therefore industry had to import both unskilled and skilled labor, and managers.
19. Nor was there an industrial policy or legislation for the encouragement, protection, registration and regulation of industry.

#### INSTITUTIONAL SETTING OF THE PROJECT

20. At the inception of the project the Central Planning Organization had recently been formed but was still getting organized. (The first Plan was not launched until 1970). The Ministry of Commerce and Industry (under whose aegis the ISDC was formed) played a passive role and was primarily interested in commerce. As noted above, there were no sources for industrial financing, nor any governmental legislation or institutions to encourage industrial investment. Petromin, a government corporation, had been formed several years earlier, but was primarily concerned with the foreign marketing of a small amount of crude oil.
21. It is clear that there was an overwhelming need for an institution with the purposes and objectives of the ISDC. There was a need to determine policy, create legislation, develop institutions and regulations, promote investment, train managers and workers, and provide assistance to the existing and new enterprises.

#### PROJECT DESIGN

22. The objectives and functions of the ISDC, as laid down in its Plan of

Operation and its Statute, have remained valid during the past eight years, although some activities have gradually diminished, reflecting the development of industry and the growing role of the ISDC as well as the increasing demand for its services.

23. The ISDC was established as an autonomous body under the authority of the Ministry of Commerce and Industry, vested with authority for carrying out the purpose of the project. The Government was to provide appropriate legislation regarding the ISDC's administration, including staff and salary scales, appropriation of funds and other administrative matters, with the provision of the Plan of Operation. The Government was furthermore requested to take measures for the promotion of industrial estates established in the model industrial estate, including fiscal and financial concessions.
24. In accomplishing its objectives as laid down in the Plan of Operation it was envisaged that the ISDC would advise the Government on matters related to matters of industrial development and on the coordination of these activities in this respect. Particular cooperation was expected with the Central Planning Organization on all matters relative to policies and programmes of industrialization, as well as with the Industrial Bank (when established) on all matters relative to industrial financing.
25. The Plan of Operation did not specify whether the operations of the project and of the ISDC would be limited to the non-oil sector of industry and to small and medium-sized industrial establishments only. Nor was any mention made of Petromin and the need to cooperate with this organization in the field of industry.
26. The Plan of Operation entrusted the Project Manager, as the leader of the team of internationally recruited experts, with the function of the Chief Industrial Adviser to the Ministry of Commerce and Industry, to the Director of the Centre and to the Board of Directors.
27. Adequate provision was made for experts, short-term consultants, fellowships, equipment and supplies for the general service workshop of the model industrial estate and for the documentation and information unit as well as for miscellaneous items such as secretarial assistance. The same observation is valid for the Government contribution of counterpart staff, land and buildings for the ISDC and the model industrial estates, equipment and miscellaneous items such as transport.

## B. PROJECT IMPLEMENTATION

### NEGOTIATION OF THE PLAN OF OPERATION

28. In January 1965 the Government submitted a request to the Special Fund for assistance in the establishment of the "Industrial Studies and Development Centre." The request was for a 4 year support with a Special Fund contribution of \$734,000 and Government contribution of \$3,290,400. The Governing Council

of the Special Fund approved a 3-year allocation (in June 1966) of \$521,400 and the Plan of Operation was signed by all parties on 14 February 1966. The Plan of Operation provides for a Special Fund contribution of \$317,700 and a Government contribution of \$2,057,100. The project termination date was set as 28 February 1969.

#### UNDP/UNIDO MAN-POWER UTILIZATION

29. The Project Manager designate was already in the field in September 1965 and the project became operational on 1 March 1966. The first expert joined the project in September 1966. Two more experts arrived in November 1966.
30. By early 1968 it became clear that the Project would not have accomplished its objectives nor expended its funds by the termination date, so Adjustment Advice No. 1, dated 25 June 1968, extended the life of the project to 31 December 1968 and increased the UNDP contribution to \$367,400. By 1969 it was apparent that another extension was desirable, so Adjustment Advice No. 2, dated 21 October 1969, extended the project to 31 December 1970 and increased the UNDP contribution to \$628,000. Under-expenditure of funds permitted the project to continue to 15 May 1972 when Amendment No. 1 extended to \$1,115,000 and the government contribution to \$12,064,400. A Project Revision Form on 6 April 1973 increased the UNDP contribution to \$1,122,600 and changed the government contribution to \$11,420,800. Because of a delay in sending the joint UNDP/UNIDO Evaluation Mission, a second Project Revision Form extended the assignment of the Project Manager and 3 experts to 31 July 1974. These stages, through which the project developed, are summarized in ANNEX III.
31. As indicated earlier, the first expert joined the project in September 1966. The assignment of all experts is summarized in ANNEX IV, which shows that 445 man-months will have been provided by 31 July 1974. This compares with commitments to provide 450 man-months.
32. The next major input was UNDP fellowships. The Plan of Operation plus Adjustments, Amendments and Revisions anticipated the utilization of \$34,200. By the termination date the ISDC will have utilized \$24,400. A summary of these is given in ANNEX V, which shows the name and specialization of each Fellow, plus the subject, location and dates of his fellowship.
33. The commitment of \$89,000 for equipment was primarily to equip the technical services workshop in the industrial estate in Jeddah. This equipment was purchased in 1970 and 1971 and shipped to Jeddah. However, due to delays in obtaining final governmental approval for location of the estate, followed by delays in the municipality providing an access road and some of the utilities, it became apparent that much more rapid progress could be made at Riyadh. The decision was made to establish the model industrial estate in Riyadh, and the equipment was transferred there from Jeddah. The government committed itself, in Amendment No. 1, to supply a similar set of equipment for the workshop at Jeddah industrial estate. The expenditures from Special Fund/UNDP allocations, by year and by category, are summarized in ANNEX VI.

## GOVERNMENT CONTRIBUTIONS

34. Although the project became operational in March 1967, the ISDC was appointed on a part-time basis by the Government of Jordan not until May 1967 on a full-time basis. The Director was appointed by Royal Decree in March 1967. The first professional staff was appointed until August 1967. The Director has worked very effectively, rapidly and resolutely in carrying out its mandate, and in expanding its commitments far beyond original expectations.
35. The increases in counterpart and administrative expenditures of 145 at the time of this Mission, are shown in Table 1 of ANNEX VII. The ISDC not only utilized UN relief funds, but also provided additional fellowships and scholarships, and also scholarships for post-graduate education abroad, all from its own funds.
36. By mid-1969 a modern building had been constructed which has since been expanded to include 1100 square meters of office space, an auditorium to accommodate 96 persons, a library, a conference room, a reproduction center. A new building with a total floor area of 1000 square meters has been designed and land has been purchased for its construction. Construction should start in May 1974. Finally, the ISDC has designed and constructed three industrial estates (Riyadh, Jeddah and Medina) providing land, infrastructure and common buildings.
37. The expenditures of the government, by year and by category, are given in ANNEX X.
38. Another government input which, however, was not counted as counterpart contribution to the ISDC was the group of 6 expatriate experts under direct management with the ISDC (their background and specializations are given in ANNEX I) and a group of 15 expatriate staff, also on direct-hire by the government.

## IMPLEMENTATION OF ACTIVITIES

### Problems

39. Already mentioned in the report of the UNDP/UNIDO Evaluation Mission, which visited the ISDC in October 1971, particular problems in initiating the project were caused by circumstances for which both the Executing Agency and the Government have to be held responsible. Without going into the details, the present Mission would only like to summarize that the implementation of the objectives of the project was seriously hampered prior to July 1968 due to an unrealistic programming of the recruitment of international experts, the appointment of the Director-designate 15 months after the signature of the Plan of Operation, the difficulty and delay in recruiting counterparts, and the impossibility of operating the project on a provisional basis before the ISDC legally created by the Government in March 1967.

The Project Manager had less than 4 experts available in 1966-67 could consequently only get the project started.

40. After the inception period (1967-68), the project started to perform normally and with much success. By the end of 1971 a total of 418 man-months of expert services had been utilized, as against 200 man-months foreseen in Standard No. 1, which was prepared in Fall 1967 by the above mentioned UNDP/UNRWA Evaluation Mission. An additional 27 man-months will have been utilized prior to 31 July 1972, bringing the total up to 445 man-months.
41. Nevertheless, the posts of the Industrial Economist and Expert in Project Evaluation and Implementation remained vacant during 1973 and up to the time of the Mission despite enormous recruitment efforts on the part of the Executing Agency, this leading to several revisions of both job descriptions. Particularly, the repeated rejections of candidates submitted for the replacement of the Industrial Economist while the professor was still in the field caused much concern on the part of the Executing Agency. Over 110 candidates files were reviewed by the substantive section leading to 69 evaluations of which 22 were positive. After careful selection, 6 capable candidates were officially submitted to the government and 2 unofficially. None, however, were selected.
42. A similar effort was undertaken to find 8 suitable candidates for the Expert in Project Evaluation and Implementation, all of which were rejected by the Government and the Project Manager, as it was felt that their CV's did not show the multifaceted qualifications expected. The Mission wonders whether the rejections of UNIDO candidates were really justified.
43. Another problem faced by the project was the frequent uncertainty about the continuation of UNIDO assistance. The project more than once seemed to be phasing out, as can be seen from the periodic decrease of experts as well as from the several extensions of the assistance rendered.

#### Assets

44. The provision of appropriate and modern office facilities, as of mid-1969, certainly facilitated the operation of the ISDC. Logistical support (e.g. transport, office supplies and equipment) was fully adequate.
45. Another significant government contribution which enabled the ISDC to recruit relatively more Saudi graduates than other Government Agencies was the adoption of a flexible salary, promotion and fellowship policy. Although the base salary is the same as for other government agencies, the ISDC can pay a 50% bonus on overtime as against 25% elsewhere. ISDC staff is eligible for promotion already after 2 years, which is unique for government departments. Another significant governmental contribution which accelerates the growth of the ISDC's reputation as an attractive employer was the provision of sufficient funds for fellowships mainly used for advanced

university study abroad. Fellowships for university study are normally obtained after 2 years and for regular training for a limited period of employment with the ISDC.

46. Finally, it should be mentioned that the provision of approximately 10 million funds for the acquisition of land for the industrial estate, 10 million for the construction of infrastructure facilities, has been made possible by the willingness of the business community to accept the wider range of services of the ISDC. These government contributions are well within those foreseen by the Plan of operation. The effect of these large financial expenditures were enhanced by the very fortunate situation of the ISDC, its strong and devoted leadership from its former and present Directors-General and their Deputies.

### C. PROJECT RESULTS AND ACHIEVEMENT OF THE MISSION

#### INSTITUTION BUILDING

47. It is clear that the ISDC is a strong and viable institution with the full support of the government. The government has contributed over 11 million dollars to its development. The Industry chapter of the current Five-year Plan (1970-1975) indicates that \$10 million is to be allocated to the ISDC during the plan period. This planning document notes a number of areas in which the ISDC is expected to make a contribution in the industrialization of the country.
48. The ISDC has a sound organizational structure (Shown in ANNEX VIII). Its Board of Directors consists of the Minister of Commerce and Industry (Chairman), the Deputy Minister of Commerce and Industry, Governor of Petromin, Deputy Minister of Labor, Deputy Minister of Finance and National Economy, Director General of Administration in the Ministry of Agriculture, Director General of Technical Education in the Ministry of Education, Director General of Planning in the Central Planning Organization, Director General of Technical Cooperation in the Council of Ministers, and the Director General of the ISDC. This gives the ISDC a high degree of autonomy, support and effectiveness.
49. It will also be noted on the organization chart that the ISDC has established branch offices in Jeddah and Dammam. The latter, located on the industrial estate, has only the Branch Manager plus 4 administrative support personnel. The Branch in Jeddah, however, is located in the city and has 9 staff members, an expatriate expert, plus administrative support personnel. It is able to carry out extension work, support of the industrial estate, plus planning and implementation of an industry fair.
50. The Director General and the Deputy Director General of the ISDC are both very competent. The latter has been with the ISDC nearly since its inception. The Mission was also impressed by the quality of the Directors of the four Divisions.
51. The staff of the ISDC has been significantly strengthened since the last (1971) UNDP/UNIDO Review Mission. Of the 145 employees, 50 are Saudi professional

- staff members to university degrees. Among them, 23 had foreign university degrees before joining the ISDC, 15 have been sent abroad by the ISDC following to study for an advanced degree (2 of them have returned) (3 are still in the process).
52. Out of the 50 professionals, approximately 30 have been with the ISDC for more than 3 years. Also, the attrition rate has been very low, a loss of only 5 professionals since the beginning of the project. Of these 5, one was the former Director General who became the Deputy Minister of Commerce and Industry; and one was the former Director of Technical Services, who became Director of the Industry Division in the Ministry. These have served to strengthen the relationship of the ISDC with the Ministry.
  53. An analysis of the staff of the major departments in the ISDC reveals that the Industrial Research Department has 7 economists, 7 with accounting degrees, one industrial engineer, one chemical engineer and one with a degree in business administration. The Technical Services Department has 5 civil engineers, 3 industrial engineers, 2 electrical engineers, 2 chemical engineers, 2 production engineers, 1 mechanical engineer, 1 metallurgical engineer, 3 chemists, 1 mathematician, 1 agro-economist and one management specialist. This shows a very considerable increase in the number of engineers in the past several years; this had been strongly recommended by the 1971 UNDP/UNICEF Mission.
  54. In analyzing the educational background of the staff versus the posts they hold, it is seen that there are 6 people in posts of Financial Management, all of which are held by Riyadh graduates with BBA's in Accounting-cum-Business Administration. There are 5 posts in Marketing, 3 of which are held by economists, 1 by an accounting major from Riyadh University and 1 with a degree in Business Administration from U.S.A. The Mission feels that 2 or 3 of each group should be sent to the U.S.A. or U.K. to study for M.B.A's in Financial Management and Marketing respectively. Both departments are weak in these areas. They will be particularly needed to staff the coming establishment of a Management Training Unit.
  55. Other than the above, the training seems to have been appropriate for the posts. Also, the current selection of individuals for foreign post-graduate study seems to be quite appropriate. The Mission urges that care be taken not to send people abroad to study for the M.A. and Ph.D., at the same time. Staff members should return after completing the M.A. and, after a number of years, as needed and as deserved, several more can be sent for Ph.D.'s.
  56. In addition to the 50 Saudi staff members, there are 14 expatriate (direct-hire) staff and 6 expatriate (direct-hire) experts. Of the 14 expatriate staff, there are: 3 in financial management; 1 electrical engineer; 3 mechanical engineers; 2 statisticians; 2 economists; 1 industrial engineer; 1 market analyst and 1 documentalist. The expatriate experts (direct-hire) are 1 chemist engineer (Ph.D.); 1 industrial economist (Ph.D.); 1 industrial management specialist (Ph.D.); 1 civil engineer (Ph.D.); 1 economist (M. Sc.) and 1 marketing analyst (B. Com.).
  57. There are 10 more direct-hire staff in the pipeline. The ISDC has advertised for them in Egypt, Lebanon, Syria and Iraq.
  58. It might also be noted that one Japanese expert, a Mechanical Engineer (Maintenance



has been supplied free by the Japanese government foreign assistance agency.

59. The work programme of the ISDC is well organized. Each of the three operative divisions (Industrial Research, Industrial Information, and Technical Services) plus the Belter branch office has a work programme in the form of a bar chart showing each activity and the months during the year that will be devoted to each activity. This is further broken down in another set of bar charts to show the number of man-months that each staff member will devote to each activity.
60. Perhaps the weakest link in this area of institution building is that of on-the-job training of the staff. It appears that some of the experts had no counterparts attached to them; most of them had only one; and, frequently the counterparts were shifted from one expert to another or attached to an expert for only 3 to 6 months. In general it is preferable if 2 or 3 counterparts are attached to an expert and kept with him for a year or more. Also, very little was done in the systematic organization of seminars for the staff, run by the experts or consultants.

#### ADVISING GOVERNMENT ON INDUSTRIAL POLICY AND PROGRAMS

61. In the early days of the project the ISDC participated in the preparation of a draft statement of an industrial policy for the country and presented it to the Government. Although there was frequent follow up by the ISDC, the government did not announce the policy until 18 February 1974. The ISDC also drafted a statute regulating the registration of industrial establishments. Its draft was later modified by merging it with a proposal prepared by the Ministry of Commerce and Industry. The resultant Statute for Commercial and Industrial Registration is now under consideration by the Council of Ministers. A draft statute for Industrial Promotion and Regulation was completed late 1972. The ISDC recently hired an expert to put this statute in final form. The effort was entering its final stages during the visit of the Mission.
62. Also, the ISDC has been encouraging the government to establish an industrial development bank. The ISDC had drafted a statute for such a bank and presented it to the Government. Recently the government hired (direct-hire) an expert to draw up a final draft of the statute. The establishment of the resultant institution was Industrial Development Fund announced just prior to the arrival of the Mission.
63. As far as the ISDC's role in advising the government on its industrial programme is concerned, good results were achieved in as much as the ISDC was made fully responsible by the CPO to prepare the chapter on Industry of the first 5-Year National Development Plan. Very little time was allowed for the actual work. Any criticism on the intensity of the planning effort and on the quality should not be addressed to the ISDC and the project. Presently, the ISDC is actively involved in drafting the industry chapter for the second Plan, which is to be submitted to the CPO by October 1974. The final version will be worked out between then and the implementation date of the new Plan in October 1975.

PREPARING FOR COMMISSIONING FEASIBILITY STUDIES

64. The statement in the Plan of Operation regarding a purpose of the ISDC being able to "provide the responsible authorities ... with assistance in carrying out or commissioning industrial feasibility studies" is extremely vague and general. It would rarely be expected that an institution such as ours do complete feasibility studies. On the other hand, it only takes money to commission a feasibility study.
65. In the early years of the project the Ministry gave a contract to Arthur D. Little to carry out some 60 to 70 feasibility and general studies, and in 1970-71 the ISDC gave a much smaller contract to Stanford Research Institute for the same purpose. These were discussed in the last UNDP/UNIDO Mission report. The ISDC has not contracted for any more feasibility studies as the results did not meet expectations. Instead, they use the funds to hire expatriate staff and experts. In turn, these direct-hire staff and experts permit the ISDC to release the significant number of Saudis for training abroad on short-term fellowships or for study for post-graduate degrees.
66. In practice, the ISDC has carried out a large number and a wide variety of industrial and economic studies; a total of 48 of these are listed in ANNEX IV of the 1971 UNDP/UNIDO Evaluation Mission report. Since then 145 additional studies have been published. These range in type from manuals for industry to industrial specifications, technical memos, and extension service visits to marketing studies and pre-investment studies. Approximately 60 of these are in Arabic.
67. At the time of this Mission's visit, there were 4 prefeasibility studies in process (vegetable oils, sheet glass, electric lamps and soda ash), plus 33 exploratory investment studies (e.g. school benches, vinyl tile, barrels, insecticides, a dairy farm, tin cans, etc.) plus a dozen general studies. A well organized chart indicate which studies are in process and which planned for the remainder of the year, as well as the staff and experts assigned to each. Many were being done by the staff alone.
68. It was found that the Center also sometimes makes use of several local consultants (independent consultants and university professors) to assist the staff teams assigned to various economic studies.
69. In general, the Central Planning Organization and PETROMIN have developed their own capability to carry out economic studies according to their needs and do not request assistance from the ISDC. The studies have, therefore, primarily been at the initiative of the ISDC, some at the request of the Ministry of Commerce and Industry, and in the last several years there is an increasing demand from private investors for assistance on pre-investment studies.
70. When the ISDC does a pre-investment study, it advertises in newspapers and interested parties may obtain a copy against payment of a fee, the fee determined by a formula based on the capital requirements of the investment. For example, where the investment is \$3 million, the fee is \$1500, non-returnable. The party who eventually executes the project then pays a fee of 10 times that amount.

- 71. The Economic Research Department is engaged in other work but its main task is perhaps the most important is that of industrial planning. The ISDC has had discussions in the Central Planning Organization regarding the role of the ISDC is by far the most responsive of the institutions in the country in the preparation of its portion of the Plan. The ISDC worked with the Central Planning Organization in preparation of the Industry Section of the guidelines for the next (1975-79) 5 year Plan. These were recently completed. The ISDC has assigned a team consisting of two direct-hire experts (working with Ph.D.'s) plus 3 staff members, plus two representatives from the Ministry of Commerce and Industry, to develop and carry out the industrial plan. The team began work about a month before the arrival of the Mission and are following a well-conceived schedule to complete the task in a total of 6 months.
- 72. It should also be noted that the ISDC completed, in 1973, a survey of all industrial establishments employing 5 or more workers. Of the 49 industries, 39 responded to the questionnaire. An up-dating of this survey was carried out in 1973, using 1970 as the base year. This re-evaluation provides a benchmark against which to measure the industrialization of the country at the beginning of the first 5-year Plan.

INDUSTRIAL ESTATES

- 73. One of the objectives of the Plan of Operation was to assist the government in planning and establishing of industrial estates. Considerable success was finally achieved in this field if one disregards the fact that the original time limits set were not maintained.
- 74. Three industrial estates are now in operation: Riyadh, Jeddah and Dammam (451,000 , 498,000 and 570,000 m<sup>2</sup>). Due to different starting dates all three have reached varying stages of completion. By the end of 1973 the number of land plots allotted in Riyadh reached 65; these are leased to 31 establishments; 13 factories have already started production; construction work was in progress for 11 others. The corresponding figures for Jeddah were 38, 16, 2 and 6 and for Dammam 19, 10, 1 and nil.
- 75. The ISDC is now looking for more land in order to build a second industrial estate in Riyadh, since even the extension of the first one has already been allotted. The ISDC also participates in the Committee selecting the sites for the future estates in Mecca, Bureida and Hofuf. Additional industrial estates are envisaged for other cities of the country, particularly in the context of a more equal regional development. Proposals have not yet been submitted but it was indicated to the Mission that, in several cases, estates with much less infrastructure were being discussed.
- 76. The planning, development and maintenance of estates is now completely handled by Saudis. Technical assistance is no longer required. However, the operation of the technical services workshops will still need expert assistance.
- 77. Although the Jeddah estate was originally conceived as the model estate, the government decided in 1972 to move the equipment provided by the UNDP

for the technical services workshop from Jeddah, to Riyadh. Also, the Government has not yet received its agreement (L11) from the U.N. No. 1 to order similar equipment for Jeddah. Presently quotations for such equipment are being checked and it is expected that orders will be placed in the foreseeable future. Considering the fact that the Jeddah estate received strong expert assistance as far back as 1967-68, the Mission feels that the completion of the access road and of the telephone services will increase the attractiveness of this estate, which now has 10 power factories in operation than the estate in Riyadh. The Mission's visit of the Jeddah estate revealed the necessity to accelerate the operation of the service workshop. With regard to the service workshop in Dammam, the Mission was informed that its equipment is not yet needed since no metal working industry exists in the Eastern Province of the country.

78. The technical services workshop in Riyadh was visited by the Mission. Practically all equipment presently being used was supplied by ISDC. The workshop, which will also be used for upgrading of skills, is the only machine-tool room in the Kingdom. Formerly tools had to be ordered from the Middle East, which was more costly and time consuming. In addition, their quality was rather low.
79. Some additional equipment is still needed to meet the work load expected for the workshop. The making of tools, dies and fixtures for industry is subsidized by the ISDC; the customer pays for the full cost of materials but only 50% of the cost of labor. This costing system seems appropriate, particularly as Saudi workers are undergoing training. A total of 9 workers is employed in the workshop, of which 3 skilled (expatriates), 3 semi-skilled and 3 newly graduated from the Vocational Training School in Riyadh.
80. The ISDC has and will probably retain responsibility for operation of the workshops and for the general maintenance of the estates. Assigned to this task for the Riyadh estate are one U.N. expert engineer, one civil engineer, one mechanical engineer, one utility supervisor, 3 expatriate skilled workers, and 6 Saudi workers. The engineers have an office at the ISDC, however, and are responsible for all three estates.
81. The visit of the Riyadh estate indicated the viability of the industrial estate concept, although a cost-benefit analysis could not be undertaken. At least the benefits are apparent in that, by mid-1973, some \$12 million were invested in establishments built on the three estates.
82. The ISDC is presently planning and designing factory buildings which are to be constructed on all three industrial estates. These buildings will have a standard size (900 m<sup>2</sup>) and will each be leased to one company at a subsidized price which does include interest charges. Possibilities for extensions exist. The decision as to how many such factory buildings are to be erected on each estate will be taken soon.
83. The Mission noted that the idea of providing nascent industry with nursery factories was not viable. Both the Riyadh and Jeddah nursery factories (each one composed of 12 units) were not leased to a number of small establishments. Rather, in each case, one company has leased the entire building. This results from the lack of knowledge about the real needs of the future

losses, during the planning stage. Plans for future industrial estates will have to take this into account.

84. The question of estate management is still under review. The division of responsibilities between the ISDC, the Ministry of Commerce & Industry and a Board of Directors for each industrial estate has been found to be inefficient. The Board of Directors, which is composed of representatives from the ISDC (1), the Ministry of Commerce & Industry (1), the Minister of Commerce (1), the Municipality (1), and the occupants (1), should exercise more authority, so as to make operations more flexible. The managers of the three estates have recently been appointed. Two will receive additional training abroad as of mid-1974. The additional full-time staff to operate the estates has already been hired or will be shortly. One mechanical engineer and one utility supervisor are budgeted.

### TECHNICAL SERVICES

#### Extension Services

85. The concept of extension service was already fully developed and applied when the UNDP/UNIDO Evaluation Mission reviewed the ISDC in 1971. Since then, more in-depth enterprise studies have been undertaken, covering most of the aspects of extension service, such as process analysis, plant layout, quality control, etc. The Director of the Technical Services Department told the Mission that the comprehensive, team consulting approach to extension service has not worked. The result, in most cases, has been a report which is not read, or at least not implemented. The procedure now followed is to respond to individual requests for specific assistance, such as a cost accounting system; plant layout; inventory control, etc.
86. Sometimes problems identified during consulting visits, such as needs for skilled labor or simplification of customs clearance, are followed up with various government departments concerned. A special inter-ministerial committee has been appointed to review requests by new firms for tariff protection. The ISDC as a member of this committee, reviews each request, and makes its recommendations to the committee.
87. Special manuals prepared by the ISDC have been distributed to industrial firms. A UNIDO Expert prepared, for example, "A Guide to Control of Lost Elements," which was published in 3 volumes focusing on the control of material, labor and overhead costs, respectively. One of the direct-hire experts prepared simplified manuals on inventory control, quality control, etc. Others are under consideration.

#### Industry Meetings, Seminars and Training Courses

88. This is another form of the technical services rendered. So far over 10 industry meetings, seminars and courses have been organized and implemented by the ISDC, covering the following industrial subjects: building materials and construction, cement, marble, gypsum, block stones, furniture, aluminum

doors and windows, repairs of building, promotion of local industry through government purchases, economic and commercial performance evaluation of industrial enterprises, and statement accounting. The response to these industry meetings is very encouraging for the continuation of this programme. This programme should be further intensified.

89. During the past year the ISDC has begun to offer training courses for managers. A course in managerial accounting is completed. A course in cost accounting is now in session. It meets 4 evenings per week for 10 weeks. Although this start has been made, a far more comprehensive programme must be developed and offered, within the framework of a Management Training Unit, which was foreseen by the first 5-year Plan, and was to have been established by 1972.

#### Technical Promotion Meetings

90. Technical promotion meetings have been arranged for the staff of the ISDC. During the second half of 1973, 5 such meetings took place, one each dealing with marketing and management, three with specifications and standards. Taking into account that most of these staff training meetings took place in 1972 and 1973, the Mission notes with satisfaction that the ISDC management is paying increasing attention to the training component of the project. Nevertheless, the Mission believes that the number of training meetings for the ISDC staff should be further increased, making better use of some of the UNIDO and the direct-hire experts. A frequency of 1 meeting per week should be envisaged in order to guarantee any lasting impact. The workplans of the UNIDO experts will have to be changed accordingly.

#### Summer Training of University Under-graduates

91. Mention should also be made of a very interesting programme which concerns the training of university under-graduates during the summer vacations. This was first started in 1970. The objectives of this programme are to attract under-graduates for future work in industry, to prepare them for the industrial life and to establish contacts between industrialists and students in order to facilitate future employment. The programme is very well received by all parties concerned and growing in size. It is a very useful innovation and has undoubtedly enabled the ISDC to attract more than its share of good university graduates.

#### Saudi Arabian Standard Specifications

92. Another type of service provided to industry, assisted by a UNIDO expert, dealt with the preparation of Saudi Arabian Standard Specifications. Modern concepts of quality control are applied without being excessively elaborate or sophisticated. These draft standards have primarily concerned the buildings material industry and the furniture industry. All proposals were discussed with the respective industry in order to achieve the greatest possible concensus and to facilitate acceptance and implementation. The

standard specifications are presently being prepared by the Saudi Standards Organization (SASO), and the Mission was informed in a meeting with SASO. They will seek to issue after approval by the Board of Directors.

### Central Industrial Testing and Research Laboratory

93. A short-term consultant prepared lists of equipment to be purchased, building designs and specifications were prepared by a local civil engineer, the company, and tenders were invited for the construction of the laboratory, which is to be put into operation in the second quarter of 1970. The main objectives of this laboratory fall also within the technical services programme of the ISDC: to help industry in improving product quality through testing of raw materials, intermediates and finished products; to solve problems of industrial firms through applied industrial research; to help improve existing processes and adopt known technology to prevailing conditions and to local raw materials; to provide technical data required for the evaluation of new products; and to demonstrate the practical feasibility of manufacturing new products through production on a first plant scale.
94. The Mission discussed the proposed testing laboratory of the ISDC with the Deputy Minister of Commerce and Industry as well as with the Director General of SASO. It became evident that a duplication of facilities will not take place, particularly in view of the fact that SASO's testing requirements will be different from that of the ISDC. So far SASO has neither designed a laboratory nor prepared a list of testing equipment. The Deputy Minister of Commerce and Industry stated that SASO would really not require any testing facilities since it could use the equipment in the labs of the ISDC, the Universities and the Ministry of Commerce and Industry. The latter already has labs in Jeddah and Dammam and is building another in Riyadh for the purpose of testing imported consumer goods. It should also be noted that SASO is attached to the Ministry of Commerce and Industry.
95. Since the creation and operation of the testing laboratory will be a new activity of the ISDC, further reference to this project component will be made in the Project Document for Phase II. See ANNEX XIII.
96. In summarizing, the mission notes with satisfaction that the technical services of the ISDC enjoy high recognition by the business community. Many of these activities are already independently carried out by Saudis, although great need still exists for assistance in the organization and conduct of meetings and seminars, the promotion of productivity in local industry and the elaboration of standard specifications from the industrial point of view.

### INFORMATION AND DOCUMENTATION

#### Information and Documentation Department

97. The Information and Documentation Service of the Centre not only provides

services to its own staff, but also to government departments and agencies, industrial establishments, university staff and students. Due to the growth of the library since 1971, the available office space has become insufficient. By mid-1973 over 3500 books (1971 : 200) and 2000 documents in English, 300 books in Arabic (1971 : 200) and 99 periodicals (1971 : 25) were at the disposal of the users. A small industrial film section has recently been added to the library. The Jeddah Branch has received a nucleus for a branch library; it is presently being extended. The Mission found the library empty of customers but well equipped and organized. The borrowing rate of the library is not very high. The management of the ISDC should start a campaign to better inform the public about the available library services.

98. The Information and Documentation Service is still not well prepared to the specific demand of the ISDC's economic and technical departments for background material for their research and studies. Much work will have to be done in order to update the information gathering and retrieval methods, not to speak of the strong support to be rendered to the recently created Statistical Unit in the Industrial Research Department.

#### Fairs

99. Although the organization of national fairs was originally the task of the Ministry of Commerce and Industry, the first National Industrial Fair in the Kingdom was actually organized by the ISDC. It was held in Riyadh in 1973, exhibited products of 60 local industrial firms, lasted 18 days and was visited by 80,000 persons. The Mission visited the Jeddah Exhibition Grounds and familiarized itself with the preparatory work for the second National Industrial Fair to be held in May 1974. The organization of this fair is again undertaken by the ISDC through its Jeddah Branch. Allocations for the purpose were made in the budget of the ISDC. The Mission noted with satisfaction that the small number of staff available in the Jeddah Branch of the ISDC was fully committed to this priority task. Other National Fairs are planned. This will apparently become a regular activity of the ISDC.



PART II. FINDINGS RELATIVE TO PHASE I

100. The Mission was very much impressed by the organization of the ISDC, its effectiveness in achieving its objectives, the internal planning, the efforts to obtain expatriate staff and experts out of its own funds, and the amount of fellowships provided for post-graduate studies and for short training courses. All these efforts contributed to the high level of activity. The ISDC is held by other organizations and ministries in the country.
101. The efficiency of the ISDC is evidenced by a secret report, issued to the Mission, just issued by the GPO, to indicate the degree of accomplishment relative to specified goals, by each sector and institution, at the end of 3 years of the present 5-year Plan. The ISDC performed better than any other institution or Ministry, accomplishing all goals specified except that the establishment of the Statistical Unit was one year late and the Management Training Unit was not established. However, a whole page in the report indicated the additional tasks carried out by the ISDC, not anticipated in the Plan.
102. One could say, therefore, that the UN project, through its Phase I and many extensions, has achieved its purposes, not only through the help of the UN but also due to the generous and strong support of the government. The Mission seriously entertained the idea of recommending the cancellation of Phase II.
103. However, it is clear that the ISDC has an even larger role to play in the industrialization of the Kingdom and that it has a high potential of absorptive capacity for additional assistance. There is, therefore, an important role which the UN can play in a Phase II, and such assistance can be all the more effective because of the present capability of the ISDC.
104. The Mission also noted, however, a number of short-comings in the Project during Phase I. The major ones are as follows:
  - (a) insufficient training of counterparts, caused by the lack of appropriately trained staff and the low numbers of long-term counterparts assigned to the experts, and by the frequent ineffectiveness or inability of experts to perform this duty;
  - (b) not sufficient in-house training seminars for the ISDC staff;
  - (c) not adequate provision of experts to cover a large extension service programme;
  - (d) lack of assistance to Saudi industry in the area of project implementation due to lack of experts.
105. The objective to advise on the preparation of the country's industrial policies and programmes has been accomplished very satisfactorily. Work will continue in both fields under Phase II. Expert advice will still be required.
106. The strategy of subcontracting feasibility studies to international consulting firms did not prove to be successful. The ISDC itself does not have the ability to do full-scale feasibility studies. The Mission finds that the ISDC need not attempt complete feasibility studies but that it is developing the capability to do quite complete pre-investment studies which, except for several aspects, approach the coverage of a feasibility study. By the end

of Phase II, the ISDC should have this capability, except for the continued need for short-term consultants specialized in certain industries.

107. The objective to assist in the planning and establishment of industrial estates and to advise on their management and operation was fully achieved. Three estates have started their operations, although at various levels, reflecting their different starting dates. No additional UN assistance is required during the next phase of the project.
108. The technical services workshop in Riyadh is well equipped with machines supplied by UNDP. Additional equipment will be ordered in the near future by the government in order to be able to offer even broader services to industry. The design and making of tools, dies and fixtures will still need UN assistance, particularly in view of the fact that the technical services workshops in Jeddah and Dammam are still to be equipped. Efforts will therefore have to be undertaken by the government to supply, particularly, the equipment for the technical services workshop in Jeddah and, if required, also for the workshop in Dammam. Further assistance in this area should not be needed after Phase II.
109. Initially all manufacturing establishments in Saudi Arabia received short extension service visits so that the ISDC might obtain a complete picture of their needs to improve their technical and economic performance. Later on, the ISDC initiated in-depth studies in selected companies in order to provide more tailor-made technical services covering plant location and layout, material and equipment selection, quality control, etc. Some expert assistance was also provided in the fields of cost accounting and marketing. In general, UN assistance in the field of project implementation was never forthcoming and the ISDC remains very weak and in need of assistance in this area during Phase II. Assistance in consulting services in such areas as accounting, marketing, organization, and financial management was very weak or non-existent. Much more assistance is needed in these areas during Phase II.
110. A number of industry meetings, seminars and training courses were conducted by the Experts for the training of Saudi entrepreneurs. These efforts are laudable but were insufficient. Expert assistance is needed to organize and operate a more elaborate management training programme for local managers. This need will probably continue after the end of Phase II.
111. Some training seminars were held for the ISDC staff. However, the subjects covered were very limited, nor were they organized on a systematic basis. Expert assistance will be required for this effort, even after the end of Phase II. It should be noted, however, that although the first 5-Year Plan calls for the establishment of a Management Training Unit within the ISDC, this issue is not completely settled. There is a possibility that the Council of Ministers may decide that there should be a separate and independent National Management Training Institute. Should the latter decision be made, the expertise developed within the ISDC will be of great assistance to the establishment of such a new Institute. Also, that expertise is still required for extension service, for the training of ISDC staff, and for special courses for small business enterprises.

112. One National Industrial Fair was arranged by the ISDC in 1972. A second one is planned for May 1973 in Bahlah. Preparations are well under way. The staff is capable of performing this function with UN technical assistance.
113. The build-up of the Library has not proceeded as fast as planned so that its facilities are much better utilized by the public and the Library's staff.
114. The retrieval of information received attention but it is felt that much improvement will still have to be done.
115. A much greater effort is needed to gather data on Saudi industry, economic trends of interest to industry, as well as technical and commercial information from foreign countries needed for economic and industrial development. A system of information gathering, storage and retrieval must be established. UN assistance will be required for this effort during phase III.
116. The Mission approached the matter of the need for an industrial testing and development laboratory with a high degree of skepticism. The justification for the labs, given the degree of industrialization which Saudi Arabia will have reached two years hence, and given the current presence of other labs, was not clear. However, it was apparent that the Ministry of Commerce and Industry and the ISDC are convinced of the need for this lab and are determined to go ahead with it, regardless of UN assistance.
117. The translation section consists of two translators, but when this is not sufficient, the ISDC makes use of a commercial translating office in Riyadh.
118. A Central Filing Section has been established and seems to be operating quite efficiently.
119. There are a number of institutions involved in industrial development. But the various efforts seem to be effectively coordinated, in several ways. First, through the CPO and the planning process. Secondly because there are a number of (about 8) inter-Ministerial Committees concerned with various aspects of industrialization, and the ISDC is represented on all of them. Finally, because the Board of Directors of the ISDC come from all of the relevant ministries and institutions.
120. The Deputy Director General wished it to be noted, explicitly, in the Mission Report, his feeling that:
- (a) a system must be developed to make it possible to obtain short-term consultants on a 3-month notice or less.
  - (b) the process of working through UNIDO for placement of fellowships is very slow and laborious.
  - (c) The speed and type of information received from UNIDO's Information Centre is slow and very low level.
  - (d) He looks to UNIDO for top-quality experts. He can get medium-quality experts, at a low cost, on a direct-hire basis.

## PART III. AN ANALYSIS OF PHASE II

### ANALYSIS OF THE PRESENT SITUATION

#### ENVIRONMENTAL SETTING

121. Significant progress has been made in the industrialization of Saudi Arabia since the beginning of Phase I. The recent rapid expansion of oil production and oil revenues is merely an additional impetus to the rapid change which had been taking place in the past 7 or 8 years. The first 5-year Plan, 1970 - 1974 institutionalized change. New statutes which took years to ponder and decide, in the late 1960's, can now be decided on in several months or even weeks. There is a sense of urgency at all levels of the government.
122. Cultural barriers to change and to modern ideas are rapidly disappearing. This is illustrated by the amazingly rapid increase of students enrolled in educational institutions, at all levels, in the past 10 years, and by the even more rapid growth of females enrolled in schools. The first class of women, in the history of the country, graduated from the university last year. Only several years ago was T.V. introduced to the country. The first two cinemas opened, in Jeddah, last year. Saudis are going abroad for advanced university degrees by the hundreds.
123. The administrative environment for industry is, first of all, one of minimum regulations. There are almost no import restrictions and duties are very low or non-existent. Any Saudi is free to invest in industry without approval of the government. The philosophy of the government, as stated in the first 5-Year Plan, and in the government's Industrial Policy Statement which was issued in February 1974, is a free enterprise approach, with a minimum of government interference and investment.

#### INSTITUTIONAL SETTING

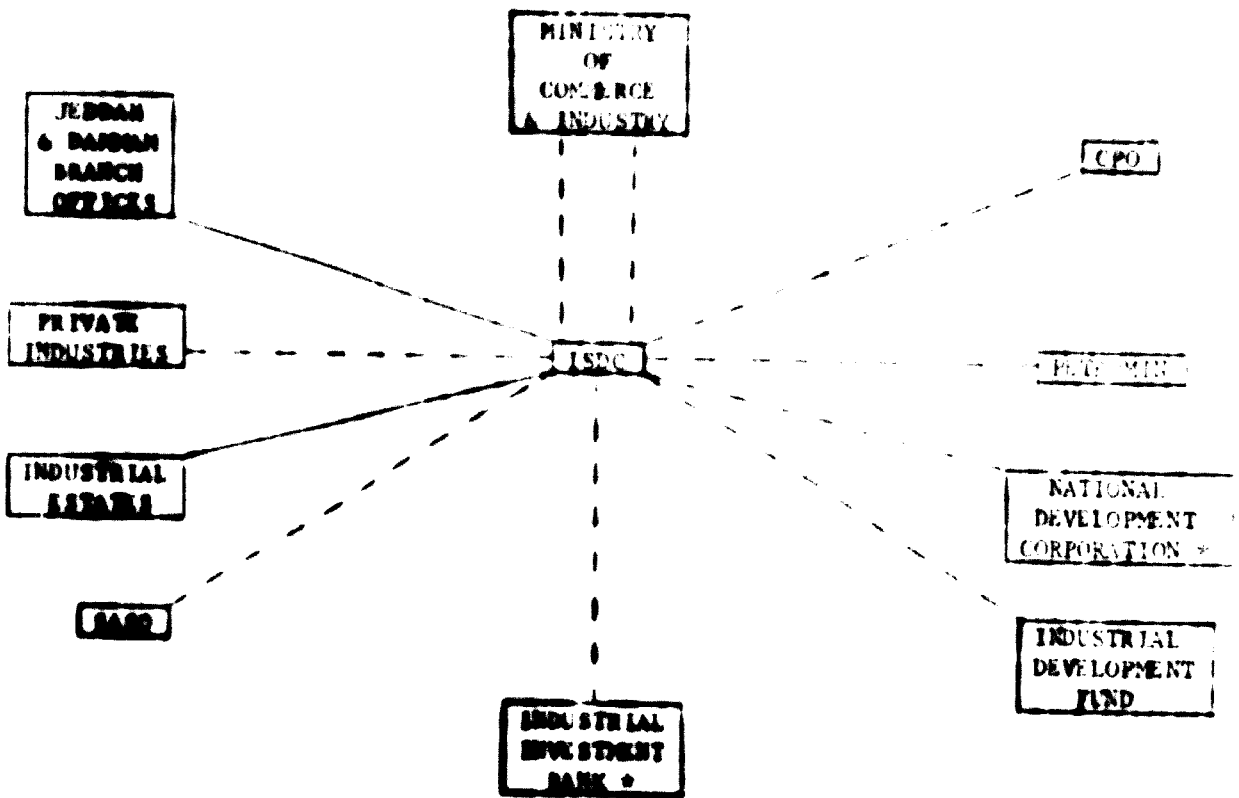
124. However, the government has realized that there is much that it can do to encourage and facilitate industrial growth. The ISDC itself is a manifestation of this role. And, one of its first objectives was to help the government to develop the Industrial Policy Statement and to develop implementing statutes, regulations and institutions. One can think of the various institutions, involved in the industrialization process, which have been developed (or are in the process of being developed) as being a constellation around the ISDC. These are shown in Figure 1.

#### Ministry of Commerce and Industry

125. The Mission was concerned that the Ministry, of which the ISDC is a tutelle, may be wishing to develop its own Planning Unit. Also, there was a concern that the laboratories to be developed by the Ministry for consumer protection testing might conflict with the plans of the ISDC. The Mission found that

FIGURE 1

INSTITUTIONAL SETTING OF THE ISDC



• These two institutions are not yet created but should be within 12 months.

neither of these situations were true. The Ministry will be placing full reliance on the ISDC for economic studies, advice and planning in the areas of commerce and non-petroleum industry. Also, the objectives of the labs being established by the Ministry are clearly separated from that to be developed within the ISDC.

#### Central Planning Organization (CPO)

126. The Mission was concerned that the CPO may, because of the large number (10) of experts engaged from the Stanford Research Institute and from the French Government, be trying to centralize planning and to develop its own capability to do feasibility or pre-feasibility studies. Discussions at the CPO indicate that such is not the case. The policy is one of decentralization, with full dependence on the ISDC to do the necessary economic studies and to draft the commerce and non-petroleum industry section of the 5-Year Plans. Also, the CPO will look to the ISDC to continue to review government policy in the areas of commerce and non-petroleum industry.

#### Petromin

127. The Mission wished to determine the degree to which Petromin might rely on the ISDC to do project identification, evaluation and implementation. It became clear that Petromin will wish to be self-sufficient in these areas and will not request assistance from the ISDC.
128. Also, the Mission was aware that a UNIDO consultant was with Petromin to determine their needs in management training and to develop a programme. Such a programme might conflict with the plans of the ISDC to start a management training unit. Discussions at Petromin indicated that if the ISDC provides management training courses which are appropriate to the needs of Petromin, it will make use of them.

#### Saudi Arabian Standards Organisation (SASO)

129. SASO was a department of the Ministry of Commerce and Industry, but is now an autonomous body, under that Ministry. It has 16 staff members, of whom 6 are Saudis and 10 are Egyptians. Its purpose is to determine standards; it is not an executing (enforcing or testing) agency. It has no labs of its own and the Deputy Minister of Commerce and Industry told the Mission that there were no plans to provide labs for SASO; its small need for laboratory equipment would be met by using other labs, such as the one to be developed in the ISDC. There is a UNDP/UNIDO project to supply an expert (12 m/m) to SASO, but the expert has not been found.

Saudi Arabian Industrial Fund

- 130. In February 1974, through the efforts of the Saudi Arabian Monetary Agency (the Central Bank), a Saudi Industrial Development Fund was established. It will be autonomous, but under the tutelage of both the Central Bank and the Ministry of Finance and National Economy. Its capital of rds.500 million will be provided by the government. The Fund will make medium and long-term loans, to private investors, up to 25% of the total capital invested in a project. Loans will be interest-free, but a service fee will be charged. The Fund will have a long-term management contract with a large foreign bank.
- 131. The Fund's objectives as stated in its statute, are, besides giving loans, to extend economic, technical or managerial advice to enterprises whenever necessary and possible. It would also supervise the implementation of projects to see that they go on stream as scheduled. Fund professionals will make inspection visits to clients and might render advice, as required.
- 132. These various areas of potential conflict (or overlap) with the work of the ISDC were discussed with the Chief Adviser to SAMA. His reaction was that the management would, in all probability, place maximum reliance on the ISDC because it would reduce the operating costs of the Fund and require fewer inputs by the foreign bank holding the management contract.

Industrial Investment Bank

- 133. The Mission learned that, also through the efforts of the Saudi Arabian Monetary Agency, an Industrial Investment Bank is under consideration. It will have 55% to 65% local private capital, the remainder being subscribed to by various international banks. This institution will be able to make short, medium and long term loans to industry (charging interest on the loans) and also take an equity interest in the client enterprises. The statutes for such a Bank are now being drafted and contacts are being made with potential partners, local and international. It would appear that from 6 months to a year will pass, however, before this institution is established.

National Development Corporation

- 134. An interministerial committee has been appointed to draft the statutes of a National Development Corporation. The ISDC has primary responsibility for this effort. This corporation would be an autonomous governmental organisation to launch new projects, in the non-hydrocarbon industry sector. It would have the same role in this sector as Petromin has in the petroleum-related industries.

## ANALYSIS OF THE PROJECT DOCUMENT

135. It was found that the Plant Project Document prepared prior to the arrival of the Mission generally responded to the present and future activities of the ISDC. However, the assistance now envisaged for Phase II would not only be wider in scope but also of more depth in order to be able to render the kind of technical assistance which will in the future be required by industry, which is becoming larger scale and more diversified. The Mission therefore agrees that the objectives and functions as laid down in the Plant Preparation (Phase I) and in the Statute of the ISDC remain basically valid, but that some of its activities would change gradually to reflect the progressive development of industry and the increasing demand on the services of the ISDC.
136. The areas in which the Project Document envisages giving assistance to the ISDC can, for ease in analysis, be grouped into four categories:
- (a) Economic studies, including project identification, pre-feasibility, planning, project evaluation, and industrial policy;
  - (b) Extension services, including consulting and project implementation;
  - (c) Management training;
  - (d) Central industrial testing and development laboratory.
137. The Mission agrees with these as the areas of assistance, but feels that a somewhat different selection of experts is consequently required:
- (a) There is a need to split the expert on project evaluation and implementation into two experts -- one for project preparation and evaluation and one for project implementation.
  - (b) There is a need to split the expert on cost accounting/marketing into two experts -- one on managerial accounting and one in marketing, research and marketing. In addition, one should add an expert in financial management. The one expert in accounting/marketing is simply not sufficient to help the ISDC to significantly improve its consulting (extension) service and meet the increased demands for management training.
  - (c) The Mission feels that the plastics industry is one which will become more and more critical to the Saudi Arabian economy; consequently, a long-term expert is highly desirable. Also, agro-industry is one which is of keen interest to the government, for greater self-sufficiency as well as for regional development; this also appears to justify the need for a long-term UN Expert. The buildings industry expert now on the project is highly effective and the construction boom of the country is just getting started; consequently, it is desirable to extend the term of that expert post. Finally, although there is a need to improve the printing industry of the country, it is not a key industry; also, the ISDC can quite easily obtain a direct-hire expert in this field in a nearby country. The Mission consequently feels that that post can be cancelled.
138. The Project Document does not provide for an Expert in export promotion. The Mission entertained the idea that one may be necessary. However, after further consideration it was decided that the direction of industrialization in Saudi Arabia was such that there would be little need for export promotion. Nearly all of the large investments would have foreign partners who would provide access to foreign markets, while most of the small and medium-sized



industry would be strictly for the local market, and that the Mission wished to bring in a short-term consultant to take up this question at a later date.

139. Likewise, the Project Document did not provide for expert services in investment promotion. Given the great need for such services, especially managerial know-how and access to foreign markets, it is felt that such services to the Mission to be highly desirable for the establishment of a development authority in this direction, assisted by an expert. However, it is felt that the Mission that let the industrial bank to be established in Saudi Arabia is knocking on its doors. Also, the industrial bank is going to enter into a management contract with a large foreign bank and will have ready access to potential foreign investors and sources of its clients. Finally, the Industrial Investment Bank will have, as its independent partners, a number of foreign banks, each of which will be able to attract foreign investors. It appeared, therefore, that this bank, when it is established, will be the logical institution in Saudi Arabia to promote foreign investment into such an institution.
140. However, the Mission did feel that several other changes in the Project Document were desirable:
- (a) The \$84,500 budget for purchase of equipment for the industrial unit and its workshop has been cancelled. The government has already requested and received bids on this equipment and is quite prepared to pay for it. This permits an increase in funds available for expert services.
  - (b) The number of man-months for fellowships was reduced. The IIC is capable of arranging for many fellowships on its own and can easily pay for them.
  - (c) As a result of the above, the amount of man-months included for expert services has been increased from 337 to 374.
  - (d) The duration of Phase II was decreased from 3 years to 2½ years so that the number and kinds of experts required and the duration of their assignments could be fitted in with the man-months available. It coincided with the end of the current Country Programme.
  - (e) Changes were made in the duration of experts assignment and in the training so that their use could be more effective.
  - (f) The revised Project Document was finalized only after detailed discussions with the following persons, who fully endorse the Mission's proposals: (1) the Deputy Director General of the ISPC; the Resident Representative of the UNDP; the Project Manager.

PART IV. RECOMMENDATIONS

141. Based on the positive contribution made by the Project during Phase I, and in view of the rapid and diversified industrial development of the country, it is recommended that the Project be continued under a Phase II, in a somewhat modified form from that proposed in the original Project Document.
142. It is recommended that the duration of Phase II be reduced from 3 years to 2½ years, that the proposed allocation for equipment be transferred to an increase in expert services, and that other changes be made as noted in the preceding section and as laid down in the revised Project Document for Phase II (Annex II, Table 1, p. 17).
143. It is strongly recommended that the training of the ISDC staff be much more systematically and vigorously pursued. Seminars and training courses for the staff should be conducted by the Experts on a weekly basis. More of the staff should be sent abroad, on fellowship, for on-the-job training in factories, to acquaint university graduates with the operations of modern manufacturing industry.
144. High priority should be given to the training of ISDC staff, through counterpart relationships and through advanced studies abroad, in the fields of financial management, managerial accounting, and marketing. This is required to deepen and broaden the ISDC's independent capability for extension service and in organizing and conducting management training courses.
145. The Mission recommends that the ISDC maintain very close liaison with the Industrial Development Fund, the Industrial Investment Bank and the National Development Corporation, as they are established and begin operations, to assure that they do not unnecessarily duplicate the efforts and capabilities of the ISDC in the areas of project formulation, evaluation and implementation, and of extension service to industry.
146. The Mission agrees that the Executing Agency continue to recruit the Industrial Economist and the Expert in Project Implementation, as foreseen in Revision C to Amendment No. 1. However, the Mission feels that it is imperative that a Project Manager be engaged at the earliest possible moment and that any additional Experts should only be recruited after the government has selected the new Project Manager, who was to have taken over the Project on 16 April 1974.

## ANNEX I

## TERMS OF REFERENCE

for the  
**Joint UNDP/UNEP Technical Mission to Saudi Arabia**  
 on Project: Industrial studies and development center, 1971

Scope and Purposes of the Review

The primary purposes of the review of the project are:

- a) to evaluate it in order to determine how adequately its immediate purposes are being attained and how effective it has been or is likely to be in helping the Government to achieve the relevant sectoral and/or national development objectives;
- b) to identify the factors which may have facilitated or deterred the achievement of the project's immediate purposes and ultimate objectives; and
- c) to make recommendations for future action.

The mission should feel free to review all steps in the formulation and implementation of the project and make recommendations as to its future.

In reviewing and evaluating the objectives, the implementation and the results of the project to date and appraising the request for further assistance the Mission will in particular:

- a) Evaluate
  - i) the overall objectives of Phase I, and the short-term as well as the long range objectives of the Project;
  - ii) whether the establishment of the project in Saudi Arabia has proven sound;
  - iii) the effectiveness of the implementation of the project, with special reference 1) to the composition and timing of expert services, fellowships and equipment, and 2) to the provision of counterparts, building and other facilities by the Government;
  - iv) the training of counterparts;
  - v) the results so far achieved especially as concerns:
    1. the institutional aspect of the Centre and how, as an institution, it plays its role in the overall Saudi Arabian economy and what impact it has had and might have in future on industrial development;

2. the extent to which the Centre is being utilized by Government agencies and by the business and industrial community;
  3. the studies carried out by the Centre and whether these have resulted in investment and its amount;
  4. the industrial estates in Riyadh, Jeddah and Dammam and their contribution towards the needs of the industrial sector;
  5. the value and use made of the Technical Services Workshops; and
  6. the policy adopted in development of the national manpower of the Centre, the present competence of the various counterparts and the extent to which they are ready to take over various functions of the Centre; and
- vi) the overall objectives of Phase 2 as reflected in the draft project document submitted by the Government.

b) Assess

the overall validity of the continuation of the Project as reflected in the draft project document of Phase 2, particularly as concerns:

1. the impact the Phase 2 assistance would have for a more adequate establishment of the Centre;
2. the suggested duration of the second phase and its components;
3. other activities, if any, which should be included in the second phase and which would make a significant contribution towards further industrial development; and
4. the need for further training of counterparts.

c) In relation to the proposed second phase, the Mission is also instructed, in particular, to:

1. examine the need and justification for the sectoral experts in plastics, printing, building materials and agriculture-based industries;
2. clarify the terms of reference of the industrial economist and assess the possible need for additional economic and financial expertise e.g. an expert in business administration to look into the industrial infrastructure as a whole including industrial credit facilities, license regulations and import controls;
3. define in more detail the role of the expert in project evaluation and implementation;
4. examine the needs for fellowships in the project and make suggestions for any changes that may be appropriate;

5. study the need for an industrial testing unit within the country and suggest measures to ensure that proper co-ordination is maintained between SASO and the Centre;
6. draw-up a work plan in the standard form to be included in the Project Document;
7. clarify the investment potential of the project and all conditions for appropriate follow-up in respect of investment opportunities identified by the project;
8. redraft the existing project document for the second phase as appropriate.

#### Composition of the Mission

The Mission will be undertaken jointly by UNDP and UNIDO with one representative from each organization. The names of the members of the mission will be communicated to the Government in advance of the mission. The Government is invited to associate itself with the work of the mission.

The mission will maintain close liaison with the UNDP Regional Representative in Riyadh, Saudi Arabia, the concerned agencies of the Government, the Project Manager and other members of the international team of experts and the counterpart staff assigned to the project, as well as the UNIDO field staff in the country.

Although the mission should feel free to discuss with the authorities concerned anything relevant to its assignment, it is not authorized to make any commitments on behalf of the UNDP or UNIDO.

#### Timetable and Report of the Mission

The mission will assemble in Riyadh on 31 March and depart on 11 April 1974. A programme of visits will be worked out in co-operation with the Regional Representative. The office of the Regional Representative will make all necessary travel arrangements within the country for the mission members.

The mission will prepare a report along the lines indicated in the attached outline. The report should be completed as far as possible in the field, so that there is an opportunity for additional consultations as may be necessary. It should be submitted in its final form (not in draft) simultaneously to the UNDP and UNIDO. UNDP and UNIDO, by agreement, will submit the report to the Government.

## ANNEX II

## PERSONS INTERVIEWED BY THE MISSION

Mr. Abdullatif Succar	Resident Representative, UNDP office
Mr. F. C. Thomas	Deputy Resident Representative, UNDP office
Mr. Richard C. Church	Programme Officer, UNDP office
Dr. Abdelsalam Osman	U.N. Project Manager, ISDC
Mr. Abdalla Abdelwahab	UNIDO Senior Industrial Development Field Advisor
Mr. A. Bakr	UNIDO Expert, ISDC
Mr. Otto Berger	UNIDO Expert, ISDC
Mr. N.K. Widhani	UNIDO Expert, ISDC
H.E. Rida M. Abbar	Director General, ISDC
H.E. Abdulaziz Al-Zamil	Deputy Director General, ISDC
Mr. Ibrahim A. Salameh	Director of Administration, ISDC
Mr. Abdullah Al-Hobayb	Director of Technical Services, ISDC
Mr. Siraj Qoutah	Jeddah Branch Manager, ISDC
Mr. Hassan Abu Laban	Librarian, ISDC
H.E. Mahmoud Taiba	Deputy Minister of Commerce & Industry
H.E. Abdul Malik Farash	Deputy General, Technical Co-operation Department, Council of Ministers
H.E. Abdullah Ali Rida	Director General, External Trade, PETROMIN
Mr. William Nashed	UNIDO Consultant, PETROMIN
Mr. Mohamed A. Bakr	Director, Industry Section, CPO
Mr. Bassam Tabr	Manager, Energy and Industry Section, CPO
Mr. Richard Kaynor	SRI Expert, CPO
Mr. Philippe Bourgerie	Expert, French technical assistance to the CP
Mr. Jean Claude Antoine	Expert, French technical assistance to the CP
Dr. Ahmed Qutub	Director General, Saudi Arabian Standards Organization (SASO)
Mr. Said Ahmed	Advisor to the Saudi Arabian Monetary Agency (SAMA)
-----	Plant Manager, Safari Pak, Jeddah Industrial Estate
-----	Plant Manager, Sleep Hi, Riyadh Industrial Estate

ANNEX III

STAGES THROUGH WHICH THE PROJECT DEVELOPED FROM GOVERNMENT REQUEST TO END OF PHASE I

	Government Request	Governing Council Approval	Plan of Operation	Adjustment Advice No. 1	Adjustment Advice No. 2	Amendment No. 1	Project Revision Form
<b>Date</b>	Jan. 1965	June 1965	14 Feb. 1966	25 Jun. 1966	21 Oct. 1969	16 May 1972	6 April 1974
<b>Duration of Project</b>	Yrs. Months 4 -	Yrs. Months 3 -	Yrs. Months 3	Yrs. Months 3	Yrs. Months 4	Yrs. Months 1	Yrs. Months 7
<b>Termin. date of project</b>	-	-	28 Feb. 1969	31 Dec. 1969	31 Dec. 1977	31 Dec. 1979	31 Dec. 1979
<b>Special Fund Contribution</b>	\$ 734,600	\$ 521,400	\$ 557,000	\$ 567,400	\$ 527,000	\$ 1,000,000	\$ 1,100,000
<b>Government Contribution Towards Local Operating Costs</b>	\$ 96,400	\$ 61,500	\$ 67,100	\$ 57,100	\$ 77,900	\$ 21,200	\$ 17,800
<b>UNDP Allocation</b>	\$ 925,000	\$ 582,900	\$ 624,100	\$ 634,500	\$ 604,900	\$ 1,000,000	\$ 1,200,000
<b>Government Counterpart Contribution in Kind</b>	\$ 14,400,000	\$ 2,000,000	\$ 2,000,000	Not specified	Not specified	\$ 1,000,000	\$ 1,000,000
<b>Man-months of Expert Services</b>	377	24	230	220	200	200	200
<b>Man-months of Government Professional Personnel</b>	499		333	37	300	300	300

## ANNEX IV

## PROVISION OF U.N. EXPERTS SERVICES TO THE PROJECT

	Total	1965	1966	1967	1968	1969	1970	1971	1972	1973	1 July 1974
<b>Project Manager</b>	103	4	12	12	12	12	12	12	12	12	-
<b>Industrial Estates Expert</b>	36	-	3	12	12	9	-	-	-	-	-
<b>Industrial Engineer 1</b>	12	-	2	10	-	-	-	-	-	-	-
<b>Industrial Engineer 2</b>	60	-	-	-	6	12	12	12	12	-	-
<b>Industrial Engineer 3</b>	12	-	-	-	-	-	-	-	-	-	11
<b>Indl. Information &amp; Documen. Expert 1</b>	12	-	2	10	-	-	-	-	-	-	-
<b>Indl. Information &amp; Documen. Expert 2</b>	25	-	-	-	1	12	12	-	-	-	-
<b>Chemical Engineer 1</b>	9	-	-	9	-	-	-	-	-	-	-
<b>Chemical Engineer 2</b>	12	-	-	-	4	8	-	-	-	-	-
<b>Indl. Management &amp; Organisation Expert</b>	12	-	-	-	1	11	-	-	-	-	-
<b>Industrial Economist</b>	51	-	-	-	1	12	12	12	12	-	-
<b>Building Materials Industries Expert 1</b>	18	-	-	-	-	-	-	12	6	-	-
<b>Building Materials Industries Expert 2</b>	15	-	-	-	-	-	-	-	-	-	-
<b>Mechanical Engineer (Workshop)</b>	6	-	-	-	-	-	-	2	-	-	-
<b>Adviser, Central Industrial Testing and Research Laboratory</b>	4	-	-	-	-	-	-	-	-	-	-
<b>Indl. Management and Marketing Expert</b>	12	-	-	-	-	-	-	-	-	-	-
<b>Production Engineer (Mechanical)</b>	21	-	-	-	-	-	-	-	-	12	7
<b>Cost Accounting Expert</b>	20	-	-	-	-	-	-	-	1	12	7
<b>Adviser, Date Fruit Industries</b>	1	-	-	-	-	-	-	-	-	-	-
<b>Short-term consultants</b>	1	-	-	-	-	-	-	-	-	-	-
<b>Staff Visits</b>	2	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	445	4	19	53	39	76	48	51	57	71	27



ANNEX V

U.S. FELLOWSHIPS

<u>Name</u>	<u>Post</u>	<u>Subject + Country of Study</u>	<u>From</u>	<u>To</u>
Mr. Abdulasis Al-Jamali	Industrial Engineer	Industrial Estates, SIFT Institute, India	17-1-1969	29-3-1969
- do -	- do -	Industrial Estates in various European countries	1-5-1969	31-7-1969
Mr. Ahmad B. Hibshi	Mechanical Engineer	Basic Engineering Course, Hall Green Technical College, U.K.	6-6-1971	4-1-1972
Mr. Ibrahim A. Ben Saleem	Senior Industrial Researcher	Small Scale Industry Management and Regional Industrial Development, RIVB, Holland	6-7-1973	23-5-1974
Mr. Hussain A. Tashar	Mechanical Engineer	Mechanical Engineering (work shops), Werner Herzog-maschinenbau, West Germany	1-6-1973	30-11-1973
Mr. Anis A. Al-Jadeed	Market + Sales Analyst	Marketing, RIVB, Holland	16-7-1973	30-11-1973
Mr. Ahmad Al-Madani	Mechanical Engineer	Production Engineering (Mechanical)	Being arranged for 1 month (1974) who will please fill-in lines	
Mr. Ali Mohammed Ozaies	Financial Management and Costing Officer	Industrial Financing and Investment Promotion Project Management, Institute of Development Studies, Essex U.K.		
Mr. Ibrahim S. Kanita	Industrial Researcher			
Mr. Hamad T. Al-Masbour	Industrial Researcher			
Mr. Ibrahim A. Ben Saleem	Senior Industrial Researcher	Project Analysis and Management Course, University of Connecticut, U.S.A.	Feb. 1974	June 1974

ANNEX VI

EXPENDITURE FROM SPECIAL FUND/UNDP ALLOCATIONS

U.S. Dollars

	Total Project Costs	Cash Disbursement									
		1965	1966	1967	1968	1969	1970	1971	1972	1973	to 1.7.74
Personnel Services	983900	125000	41100	96700	88600	15100	94200	114000	131000	195000	42500
Fellowships	24400	-	-	-	2500	6900	2000	-	-	10000	3000
Equipment and supplies	99900	-	1900	4800	2700	600	50700	27500	7000	10000	-
Miscellaneous	23200	-	-	-	400	1300	1300	11000	2200	7000	-
<b>Total Project Costs</b>	<b>1121400</b>	<b>125000</b>	<b>43000</b>	<b>101500</b>	<b>91900</b>	<b>154500</b>	<b>153100</b>	<b>154500</b>	<b>133900</b>	<b>213000</b>	<b>45500</b>
Executing Agency Overhead Costs	76700	-	21100	19000	18000	53000	74000	69000	-	-	-
<b>Total Expenditure from S.F. UNDP Allocations</b>	<b>1198100</b>	<b>125000</b>	<b>64100</b>	<b>119500</b>	<b>109900</b>	<b>159800</b>	<b>160500</b>	<b>161400</b>	<b>133900</b>	<b>213000</b>	<b>45500</b>

1965 to 1971      Actual:  
 1972                Calculated on basis of average actual costs  
 1973 and 1974    Estimated on basis of program costs

ANNEX VII

## GOVERNMENT EMPLOYEES, 1942-1953

	As at the end of							
	1942	1943	1944	1945	1946	1947	1948	1949
Senior technical	1	5	8	9	11	17	21	3
Senior administrative	-	1	1	1	1	1	1	1
Other technical	-	3	5	13	14	27	37	33
Other administrative	1	6	19	24	24	32	31	34
Labour and service	8	13	15	17	17	17	15	4
<b>total:</b>	<b>10</b>	<b>28</b>	<b>47</b>	<b>61</b>	<b>66</b>	<b>84</b>	<b>105</b>	<b>74</b>

\* Actual up to the end of 1942

Estimated as at the end of 1953

## ANNEX VIII

GOVERNMENT FELLOWSHIPSShort Courses and Practical Training for University Graduates

<u>Name</u>	<u>Post</u>	<u>Subject of Course/Training</u>	<u>From</u>	<u>To</u>
Mr. M.P. Al-Khatrawi	Market and Sales Analyst	Summer Course on Industrialization, Holland.	9-5-1390	28-6-1392
Mr. Abdulla A. Al-Ajroush	Industrial Estates Officer	Summer Course on Industrialization, Holland.	19-5-1391	29-6-1391
-do-	-do-	Visiting industrial estates in the U.K.	1-7-1391	27-7-1391
Mr. Abdulaziz A. Hanafi	Civil Engineer	Maintenance techniques and specifications used in factory buildings, U.K.	30-7-1391	26-9-1391
Mr. Ahmad S. Al-Twaijri *	Industrial Economist	Industrial Development Planning.	13-9-1391	16-2-1392
Mr. Ibrahim A. Al-Musharraf	Economic Researcher	Industrial Development.	28-5-1392	22-10-1392
Mr. Ibrahim A. Al-Kara'wi	Chief of Industrial Research Department	Industrial Development Course, NVB, Holland.	30-5-1392	22-10-1392
Mr. A.M. Abou Kheshaba	Mechanical Engineer	Machine tools (workshops).	12-7-1392	30-1-1393
Mr. Abdulaziz A. Al-Khatlan	Market and Sales Analyst	Statistics course, Egypt.	18-3-1393	29-4-1393

\* Appointed Director General, Department of Industry, Ministry of Commerce and Industry, on 24-4-1393H (27 May 1973).

GOVERNMENT SCHOLARSHIPS

## Post Graduate education

<u>Name</u>	<u>Post</u>	<u>Degree and Subject of Study</u>	<u>Date fellowship commenced</u>
Mr. Jamil A. El-Jishi	Industrial Engineer	Ph.D. in Industrial Engineering	15-10-1990
Mr. M. Ma'ud Rushdi	Industrial Management and Organisation Officer	M.A. in Business Administration (Industrial Management)	15-10-1990
Mr. Idrees A. Tairi	Financial Management and Costing Officer	M.B. in Business Administration (Cost Accounting)	15-10-1990
Mr. M. F. Al-Khatrawi	Market and Sales Analyst	M.A. and Ph.D. in Economics	15-9-1991
Mr. Ammar T. El-Dabbagh	Market and Sales Analyst	M.Sc. in Business Administration (Cost Accounting)	9-7-1991
Mr. Omair A. Al-Omar	Industrial Management & Organisation Officer	M.Sc. in Industrial Engineering	27-6-1991
Mr. Ahmad B. Hibshi	Mechanical Engineer	M.Sc. in Mechanical Engineering	14-7-1991
Mr. Nasser A. Al-Mufawaz	Administrative Officer	M.A. in Business Administration (Industrial Management)	15-8-1991
Mr. Abdulmajid H. Ajouza	Financial Management and Costing Officer	M.A. in Cost Accounting	1-11-1991
Mr. Fehaid Fahad Al-Sayid	Administrative Officer	M.A. in Business Administration (Industrial Management)	1-11-1991
Mr. Nazeeh H. Nasseeh	Administrative Officer	M.A. in Business Administration (Industrial Management)	1-11-1991
Mr. Abdullah A. Al-Jumayl	Industrial Management and Organisation Officer	M.A. in Business Administration (Industrial Management)	1-11-1991
Mr. Md. A. Al-Ibranic	Industrial Management and Organisation Officer	M.A. in Business Administration (Industrial Management)	1-11-1991
Mr. Abdullah M. Ba-Ramad	Industrial Management and Organisation Officer	M.A. in Business Administration (Industrial Management)	1-11-1991
Mr. A. A. Al-Jabbar	Industrial Management and Organisation Officer	M.A. in Business Administration (Industrial Management)	1-11-1991

ANNEX X

GOVERNMENT COUNTERPART CONTRIBUTION IN KIND

	Total Project Costs	Cash Disbursements*							
		1966	1967	1968	1969	1971	1972 - 1973		
<b>Personnel</b>									
Senior technical	764,000	-	19335	50332	53341	78144	115406	149023	24
Senior Administrative	46,800	-	2397	4378	5951	7716	6534	95	1
Other Administrative	502,500	415	3701	45159	62007	84657	9709	10334	11
Other Technical	529,000	-	4033	11342	25027	50366	79027	14137	21
Labour and service	214,000	4510	11837	14541	16003	23478	34417	5312	45
Sub-total	2,056,000	4725	46034	134752	171031	239212	326712	45637	620
Equipment and supplies	403,000	56160	14321	44322	65454	44333	39317	14300	1
Services	1,196,700	7850	11245	46319	111311	191752	13937	13777	200
Estimated value of buildings, plant, and facilities put in place and/or rental value of buildings, etc., used for the project.	7,606,900	1000	86030	43773	65651	121416	120740	100110	3253
<b>TOTAL</b>	<b>11,268,000</b>	<b>70335</b>	<b>153420</b>	<b>319662</b>	<b>452016</b>	<b>474000</b>	<b>474000</b>	<b>244000</b>	<b>2400</b>

\* Actual up to 1972

Estimated for 1973 and for total project costs, to the nearest \$.

ANNEX III

EXPERTS NOW UNDER DIRECT CONTRACT WITH UNCTAD

1. Economist, appointed on 30/3/72
  - 1958 B.A. Economics, University of Cairo
  - 1959 M.A. Economics, University of Cairo
  - 1966 Ph.D. Economics, London School of Economics
  - 1967 to 1972 United Bank of Pakistan - Research Officer
2. Marketing Expert, appointed on 17/8/72
  - 1950 B.Sc. Punjab University
  - 1962 Part A, Examination of the Chartered Institute of Marketing, U.K.
  - 1965 to 1971 - Marketing Research and Development Officer,  
Saigal Group of Companies, Lahore.
3. Chemical Engineer, appointed 27/3/72
  - 1958 B.Sc. Chemical Engineering, Cairo University
  - 1962 M.Sc. Chemical Engineering, Maryland University
  - 1965 Ph.D. Chemical Engineering, Maryland University
  - 1965 to 1972 - Chief, pilot plant testing laboratory,  
National Research Centre, Cairo.
4. Economist, appointed 1/11/72
  - 1962 B.Com. (Economics), University of Damascus
  - 1964/1965, UN Trainee, Research and Planning Division, E.C.S. Geneva
  - 1970 M.A. Managerial Economics, Gresham College, City University, London.
  - 1966-1972 Head of Investment Division, Industrial Development Bank, Amman.
5. Industrial Engineer
  - 1955 B.Sc. Mechanical Engineering, Cairo University
  - 1969 M.A. Industrial Engineering, Cairo University
  - 1971 Ph.D. Industrial Economics, University of Berlin
6. Civil Engineer
  - 1950 B.Sc. Civil Engineering, Cairo University
  - 1960 M.Sc. Civil Engineering, Cairo University
  - 1970 Ph.D. Civil Engineering, Cairo University
  - 1950 to date, Ministry of Housing, U.A.R.

FEDERAL  
DEPARTMENT OF  
EDUCATION  
OFFICE OF  
GENERAL COUNSEL  
DEPARTMENT OF  
EDUCATION  
OFFICE OF  
GENERAL COUNSEL  
DEPARTMENT OF  
EDUCATION  
OFFICE OF  
GENERAL COUNSEL

EASTERN  
AND WESTERN  
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COUNCILS

EASTERN  
AND WESTERN  
COUNCILS

INDIVIDUAL  
INFORMATION  
AND DOCUMENT  
SERVICES

INDIVIDUAL  
INFORMATION  
AND DOCUMENT  
SERVICES

INDIVIDUAL  
INFORMATION  
AND DOCUMENT  
SERVICES

RESEARCH AND INFORMATION SERVICES SECTION

EASTERN  
PROVINCE  
BRANCH

WESTERN  
PROVINCE  
BRANCH

ADMINISTRATION

INFORMATION  
& DOCUMENT  
SERVICES

EXTENSIVE  
SERVICES

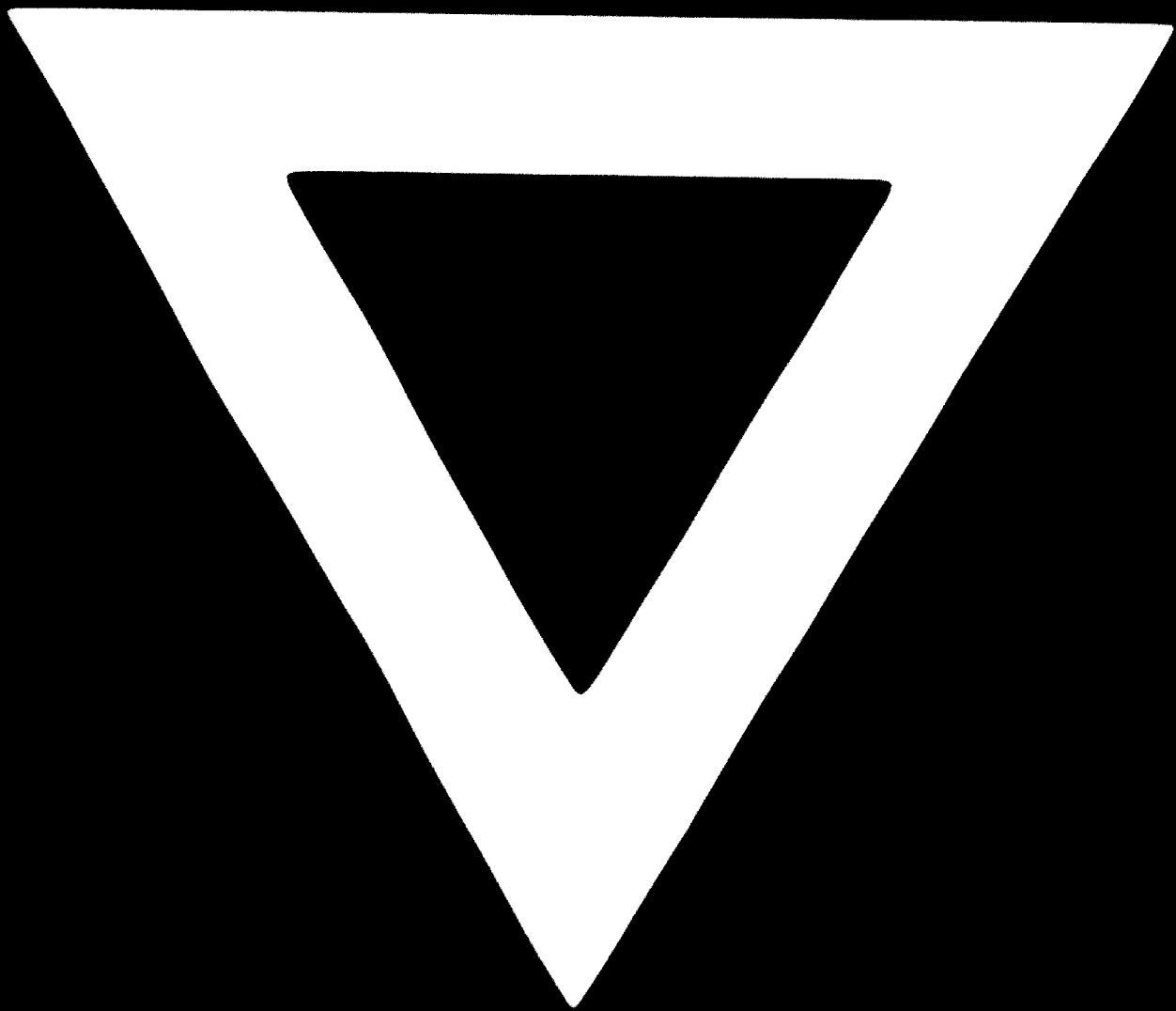
ADMINISTRATION

INFORMATION  
& DOCUMENT  
SERVICES

EXTENSIVE  
SERVICES







**76. 06. 29**