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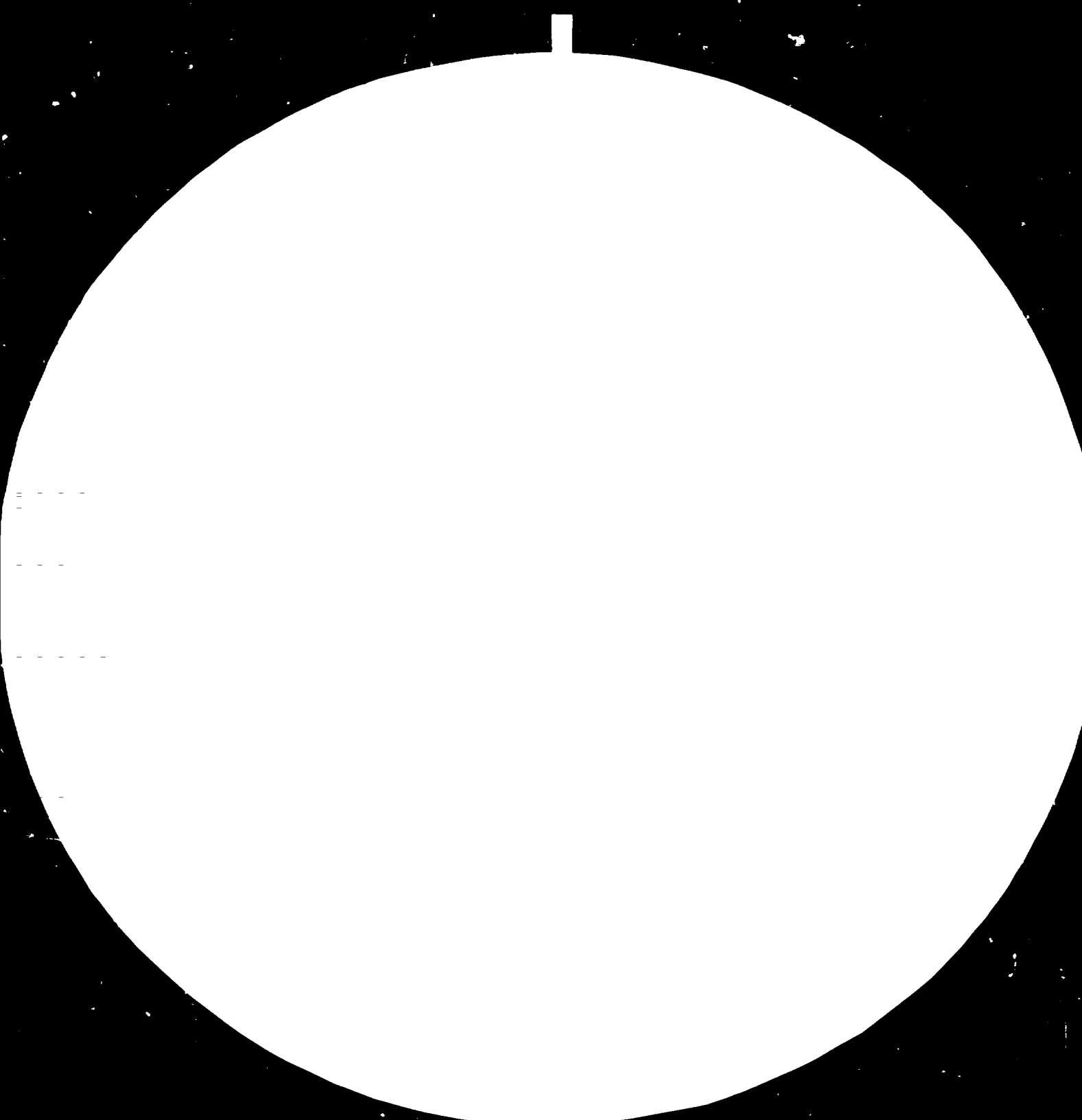
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CONFERENCE ON THE ECONOMY OF THE

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THE WORLD IN THE 1980S

(1979-1980 - 1981-1982)

IN

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EDITED BY

BY

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RESTRICTED

PROJECT NUMBER : UF / LIB / 79 / 002

T E R M I N A L       R E P O R T

TRIPOLI

SEPTEMBER 1ST., 1980

(SOCIALIST PEOPLE'S LIBYAN ARAB JAMAHIRIYA)

RESTRICTED

PROJECT NUMBER : UF / LIB / 79 / 002

T E R M I N A L R E P O R T  
ON  
ONE-YEAR U. N. ASSIGNMENT  
( SEPTEMBER, 1979 - SEPTEMBER, 1980 )  
AT  
THE SECRETARIAT OF HEAVY INDUSTRIES  
IN  
SOCIALIST PEOPLE'S LIBYAN ARAB JAMAHIRIYA

PREPARED  
BY  
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TRIPOLI

SEPTEMBER 1ST, 1980

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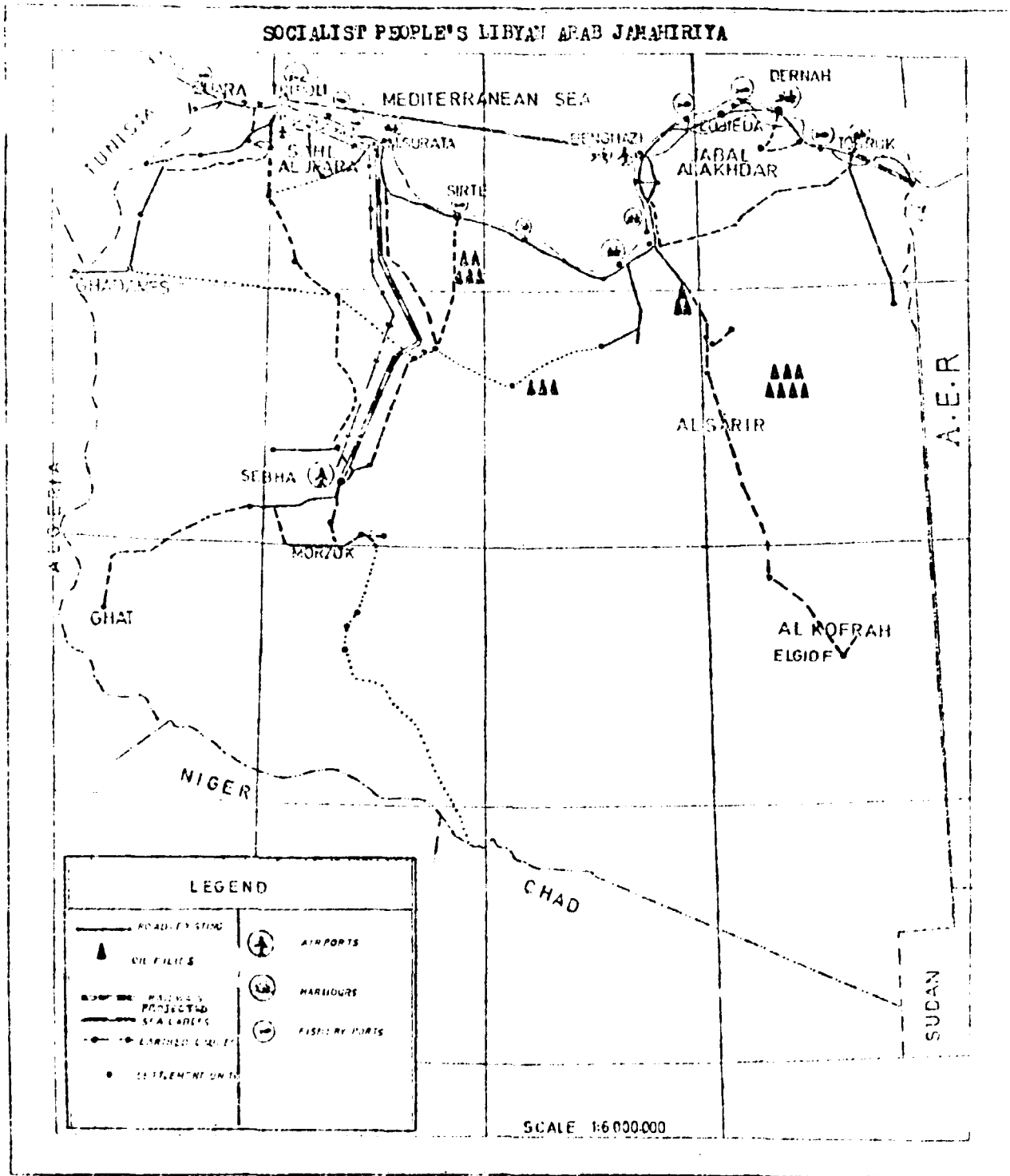
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MAP



## I N T R O D U C T I O N

1. The Socialist People's Libyan Arab Jamahiriya lies in North Africa with about 2000 Km. of coast on the Mediterranean Sea. To the East lies the Arab Republic of Egypt; to the South lie the Republic of Soudan, Chad, Niger and Algeria; to the West Jamahiriya is bordered by the Algerian and Tunisian Republics. The total area of Jamahiriya is about 1,175,500 sq. Km. and its population is approximately 2,939,200 most of whom live in the towns, villages and rural areas of the coastal belt.

### SECTION 1 - LIBYAN ECONOMY

2. Before the exploitation of its mineral resources, the traditional agriculture and industry were the main activities of the Libyan population. The agricultural sector was mainly based on olive-trees, date-palms and some vegetables. The industrial sector consisted of traditional industries based on agricultural and animal resources with some small industries, handicrafts and workshops.
3. During the recent two decades, the exploitation of oil resources has achieved an accelerated progress in the Country. The annual growth rate of the Gross Domestic Product (GDP) in current prices has reached 25%, one of the highest in the world. This is due mainly to the large contribution of the oil sector, while the industrial sector represents less than 2%. Such unbalance in the structure of the GDP has always adverse effects on the development of the national economy.
4. In order to build up a sound and strong economy, the Libyan Government has adopted, since 1970, a new planning strategy so as to achieve a balanced diversification in the structure of the Libyan GDP.
5. According to this planning strategy the projected structure of the GDP in year 2000 is expected to be quite different of the structure of the GDP in 1975 as indicated in the following table:

TABLE  
STRUCTURE OF THE GDP ( AT FACTOR PRICES IN 1975 ) UP TO YEAR 2000  
(L.D. MILLIONS)

SECTORS	1975	1980	1985	1990	2000	PERCENTAGE	
						1980	2000
Gross Domestic Product	3674	5288	6035	7027	9337	100.0	100.0
composed of :							
1. Oil & Natural Gas	1961	2620	2360	2100	1700	49.5	18.2
2. Non-oil Sectors :							
2.1 Agriculture, Forestry & Fishing	83	119	156	224	329	2.3	3.5
2.2 Industry	66	180	443	820	1485	3.4	16
2.3 Public Services	432	798	951	1129	1542	15.1	16.5
2.4 Other Sectors	1132	1571	2125	2754	4281	29.7	45.8
Total of (2)	<u>1713</u>	<u>2668</u>	<u>3675</u>	<u>4927</u>	<u>7637</u>	<u>50.5</u>	<u>81.8</u>
Grand Total (1 + 2)	3674	5288	6035	7027	9337	100.0	100.0

( Source : Secretariat of Planning )

SECTION 2 - INDUSTRIAL DEVELOPMENT

6. The industrial sector, as shown in the above table, is still in the earliest stage of development and its contribution in the formation of the GDP is very modest. Its share in the GDP is only 1.8% in 1975 and it is estimated to be around 3.4% in 1980. The value added per capita deriving from the manufacturing sector in 1975 was around 87 U.S Dollars only, which is very low in comparison with some developing countries (500 to 1000 U.S Dollars per capita) and developed countries (1000 to 3000 U.S Dollars per capita).
7. Although the financial resources, primarily from oil exports, raised the gross national income per capita during the recent two decades, from U.S \$ 35 in 1952 to U.S \$ 4,600 in 1975, this situation cannot last indefinitely, as there is a limit to the extent of oil resources available. Besides, the unbalanced growth of the Libyan economy had the very sudden beginning in 1962 with the development of oil sector. Petroleum exploration and oil export activities over - shadowed almost all other sectors of the national economy and have become the main source of the national revenue.
8. In this context, and in order to ease the adverse implications of a mono - sectoral economy and reduce the dependence on the petroleum sector, the Libyan Government introduced the development planning for the first time and formulated its First Five - Year Development Plan (1963 - 1968) for the purposes of reducing the unbalanced growth in the national economy and promoting the development of more productive sectors.
9. After the September 1, 1969 Revolution, the Government re-assessed the First Five - Year Development Plan and adopted in 1970 a new strategy based on :
  - (i) The restriction of petroleum production,
  - (ii) The diversification of economy with special emphasis on productive activities and particularly on the industrial sector.
10. In the line with this new strategy, the Revolutionary Government formulated a Three - Year Development Plan (1973 - 1975) followed by a Second Five - Year Development Plan (1976 - 1980).
11. The basic objectives of these development plans are to :
  - (1) Achieve balanced and rapid economic growth.
  - (2) Diversify the national economy which is still relying very heavily on oil export.
  - (3) Attain self-sufficiency in a number of agricultural and industrial commodities.

(4) Improve the industrial productivity.

(5) Strengthen the technical manpower.

SECTION 3 - PLANNING IMPLEMENTATION

12. During the last two decades, many developing countries, and Jamahiriya in particular, have embarked on planning for economic and industrial development and have devoted a good deal of thought, consistency and precision in planning their industrial and economic development, without, however, giving a similar attention to the coordinated planning implementation. Industrial development is a continuous activity of which the formulation of the plan is only the beginning. The momentum must be maintained through all stages: project identification, detailed feasibility study, project evaluation, programming of industrial development, planning implementation and project execution.
13. In implementing development plans and projects, Jamahiriya has been experiencing serious economic, technical and managerial shortcomings.
14. Although these shortcomings can be observed in all types of development programmes, they are particularly acute in the implementation of industrial projects for which the planning process is urgently required. The Libyan Government has, in fact, clearly identified those development problems and has given highest priority to project formulation and evaluation, planning machinery and manpower development.
15. On the basis of these identified problems, the Government sent a request to the United Nations Industrial Development Organization (UNIDO) for a high level Industrial and Economic Planning Adviser for a period of one year.
16. Considering the scope and urgency of the Libyan Government request, a project entitled ECONOMIC AND INDUSTRIAL PLANNING ADVISER has been approved by UNIDO under the Project Number UF/LIB/79/002 and considered suitable for a project to be formulated under UNDP funding.
17. I took up my new U. N. assignment as a Senior Industrial and Economic Planning Adviser at the Secretariat (Ministry) of Heavy Industries on the 30th of September, 1979 and for a period of one year, up to the 29th of September, 1980.
18. The purpose of this Terminal Report is to give a detailed description of the project activities and the extent of achievement of its objectives,

and to set out my findings and formulate my recommendations for further development of the project results.

19. These items are treated in the following FOUR Parts :

PART ONE - PROJECT OBJECTIVES.

PART TWO - PROJECT ACTIVITIES.

PART THREE - PROJECT RESULTS.

PART FOUR - FINDINGS AND RECOMMENDATIONS.

CONCLUSION

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20. The project objectives are usually derived from the project job description and project document. However, for the purpose of a more realistic approach, a review and evaluation of the present industrial sector and the existing development machinery and strategy are pre-requisites for the formulation of concrete objectives to be achieved.

21. The identification of project objectives is carried out in the following THREE chapters:

CHAPTER I - Project job description.

CHAPTER II - Review of the industrial sector's present situation.

CHAPTER III - Identification of project objectives.

#### CHAPTER I

##### PROJECT JOB DESCRIPTION

22. The project job description was prepared in December, 1978. According to this document, the Industrial and Economic Planning Adviser shall be attached to the Office of Planning, Follow-Up and Statistics in the General National Organization for Industrialization (GNOI) and specifically will:

- 1) Participate in the formulation of industrial development and project ideas.
- 2) Design and develop a monitoring and follow-up system for plans and projects implementation.
- 3) Advise on the preparation of techno-economic feasibility studies.
- 4) Assist in training the Libyan nationals on the above mentioned activities.

#### CHAPTER II

##### REVIEW OF THE INDUSTRIAL SECTOR'S PRESENT SITUATION

23. I took up my U. N assignment in Tripoli (Socialist People's Libyan Arab Jamahiriya) on the 30th of September 1979 and started by a detailed review and evaluation of the existing situation of the industrial sector, including petroleum industries. This review was aimed at examining the industrial trends in the Country and identifying constraints and bottlenecks encountered in the implementation of projects, plans, strategies and policies.

24. At the same time, I studied the various economic and statistical data and reports prepared by the various Secretariats and governmental institutions on the economic and social development of the Country.

25. The main reports and documents reviewed and examined are:

- 1) The Three-Year Development Plan (1973 - 1975) and the progress reports on its implementation.
- 2) The Second Five-Year Development Plan (1976 - 1980) and the progress reports on its implementation.
- 3) Follow-Up reports on the production of existing industries.
- 4) Statistics on Trade, Agriculture, Population, etc.
- 5) Geological surveys for oil and mineral resources.

### CHAPTER III

#### IDENTIFICATION OF PROJECT OBJECTIVES

26. The study of the project document and job description was not enough to determine the objectives of the project. New changes and development had occurred since the preparation of these documents. I informed the Industrial Operations Division in UNIDO about these changes in my preliminary Report dated 10 November 1979 under reference 15/S-L and in my First Progress Report of 20 March, 1980 and Number 33/S-L.

27. The main changes affecting the project objectives are analysed in the following THREE sections :

- SECTION 1- The new government organizational structure.
- SECTION 2- The urgent need for technology transfer.
- SECTION 3- Project objectives.

#### SECTION 1 - THE NEW GOVERNMENT ORGANIZATIONAL STRUCTURE

28. Before April, 1979, the General National Organization for Industrialization (GNOI) was responsible for the industrial sector as a whole.

29. According to a decision of the General Popular Committee dated 25 April, 1979, the responsibility of the industrial sector is divided between two new Secretariats (Ministries), the Secretariat of Heavy Industries and the Secretariat of Light Industries.

30. The Secretariat of Heavy Industries has been assigned all matters related to the following industries and activities :

- 1) Oil Refining and Oil Processing.
- 2) Chemical Industries.

- 3) Petro - Chemical Industries.
- 4) Metallurgical Industries.
- 5) Building Materials Industries.
- 6) Technical and Vocational Training Centres.
- 7) Participation in Electric Power Production.
- 8) Distillation Plants.
- 9) Participation in the companies to be formed and related to the activities of Heavy Industries.

31. All these industries and activities are part of the public sector in Jamahiriya and under the full responsibility of the Secretariat of Heavy Industries as from the evaluation process up to the execution stage and during their operation life.

32. With this new institutional structure all the medium and small-scale industries are of the Secretariat of Light Industries' jurisdiction.

#### SECTION 2 - THE URGENT NEED FOR TECHNOLOGY TRANSFER

33. In its Third Five-Year Development Plan (1981 - 1985), Jamahiriya will be embarked on a gigantic industrial programme aimed at establishing basic industries such as Iron and Steel, Aluminium, Metallurgy, Building Materials, Chemical and Petro-Chemicals. The attainment of the industrial programme development objectives requires, as pre-requisites, the transfer of modern technology, its adaptation to the local requirements and training of Libyan nationals on the new technological operations.

#### SECTION 3 - PROJECT OBJECTIVES

34. The Libyan Government has been expecting from its planning approach not only fair distribution of income between the different sectors of the national economy but also the achievement, in the long term, of a diversified and balanced economic growth.

35. It is within the framework of this long-term strategy that a high level industrial and economic planning adviser has been requested and his general functions listed in the project job description.

36. Since the job description was prepared, a major change happened by the creation of two separate Secretariats (Ministries), the Secretariats of Heavy and Light Industries.

37. In view of this structural change, I was attached to the General Director of the Planning and Follow-Up Division in the Secretariat of Heavy Industries. The Deputy General Director of this Division was to be

my counterpart, but practically I had been working without any counterparts because of the pressing executive jobs required from the Deputy General Director and due to the lack of any other Libyan Officers in this Division.

38. In this new institutional structure, the scope of the project has been confined to the heavy industries only instead of the whole industrial sector.

39. Two types of objectives are expected from the project :

- 1- The long-term objectives.
- 2- The immediate objectives.

1- THE LONG-TERM OBJECTIVES

40. Since the project is a part of the government strategy, its long-term objectives should be consistent with the objectives of this strategy which can be summarized as follows :

- a) Diversification of the Libyan economy with emphasis on new productive sectors other than oil and especially on the industrial sector.
- b) Strengthening the complementary relationships between the industrial sector and other productive and consumption sectors.
- c) Systematic transfer of modern technology, its adaptation to the local requirements and training of Libyan technical staff on its sophisticated operations.

2- THE IMMEDIATE OBJECTIVES

41. The immediate objectives should be considered as a basic step towards the achievement of the long-term objectives. In this perspective, the project will :

- a) Review and study the existing industrial sector, its problems and bottlenecks and its relationships with other sectors of the national economy.
- b) Assist in the identification of project ideas and evaluation of project feasibility studies.
- c) Participate in the formulation and appraisal of industrial projects and development plans.
- d) Assist in designing procedures and techniques to monitor and follow-up projects and plans implementation.
- e) Advise on the most efficient ways for technology transfer and its

adaptation to the local requirements.

- f) Assist in improving regular collection and compilation of up-to-date economic and industrial statistics.
- g) Train National Officers on project formulation and evaluation and follow-up projects and plans implementation.

42. The immediate objectives are, in fact, the ultimate results of the project work plan that I submitted to the Industrial Operations Division in UNIDO on the 10th of November, 1979, under reference 15/S-L. This work plan was duly discussed with and approved by the Secretariat of Heavy Industries.

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43. On the basis of my review to the present situation of the industrial sector, its problems and difficulties, and within the general framework of the project job description, and taking into consideration the highest priorities of the Libyan Government in terms of diversification of its productive sectors in a balanced economy, I performed a series of activities so as to meet the main objectives of the project.

44. The description of the project activities is carried out in the following TWELVE Chapters :

- CHAPTER I - Governmental institutions.
- CHAPTER II - Review of the existing industrial sector.
- CHAPTER III - Planning and programming.
- CHAPTER IV - Identification and formulation of industrial projects.
- CHAPTER V - Regional co-operation and general studies.
- CHAPTER VI - Industrial and Economic Planning.
- CHAPTER VII - Monitoring and follow-up techniques.
- CHAPTER VIII - Technical committees.
- CHAPTER IX - Regular collection of statistical data.
- CHAPTER X - Organizational activities.
- CHAPTER XI - Executive activities.
- CHAPTER XII - Project activities and major constraints.

#### CHAPTER I

##### GOVERNMENTAL INSTITUTIONS

45. My first activities were devoted to the study of the functions and complementarity of the various governmental institutions in Jamahiriya. These activities are explained in the following TWO sections:

- SECTION 1 - Study of governmental institutions responsibilities.
- SECTION 2 - Visit to governmental institutions.

#### SECTION 1 - STUDY OF GOVERNMENTAL INSTITUTIONS RESPONSIBILITIES

46. I started my U. K assignment by a detailed study of the organizational structure and functions of the Secretariat (Ministry) of Heavy Industries and its substantive Divisions namely: Production, Engineering, Marketing, Steel and Iron as well as Planning and Follow-up Division to which I have been attached.

47. In view of the complementary relationships between the Secretariat of Heavy Industries and other governmental institutions, I did study the responsibilities and functions of other Secretariats and institutions, particularly the Secretariats of Light Industries, Electricity, Municipalities, Economy, Water and Transport, Planning, the Industrial Research Centre, the Vocational and Training Centres and the Statistics Office.

SECTION 2 - VISIT TO GOVERNMENTAL INSTITUTIONS

47. Following the detailed study of the organizational structure of the governmental institutions, I visited these institutions and discussed with their officials and experts the various fields of co-operation with the Secretariat of Heavy Industries. I discussed, specifically, the regular exchange of statistical data and information.

CHAPTER II

REVIEW OF THE EXISTING INDUSTRIAL SECTOR

48. The description of my activities in this field is made in the following two sections :

SECTION 1 - Study of the existing industries.

SECTION 2 - Visit to the existing industries.

SECTION 1 - STUDY OF THE EXISTING INDUSTRIES

49. Although the project activities are confined to the heavy industries only, it was necessary to study the existing situation of the industrial sector as a whole for coordination purposes.

50. I looked into the file of each existing industry and reviewed its feasibility study, the progress reports and the problems encountered during the operation phase. I followed with great concern the remedial action to the various shortcomings and its effectiveness and examined to which extent such solutions will avoid or ease any constraints in the future.

SECTION 2 - VISIT TO THE EXISTING INDUSTRIES

51. I prepared a detailed programme for the visit of the existing industries in order to study in each establishment the industrial organization the marketing aspect, the manpower and its problems, the management, the level of productivity as well as the prospect for future extension and its economic and technical justification.

52. The visit programme was, in fact, an important activity of the project. However, the programme could not be realized as expected for shortage of transport facilities to move from one establishment to another.

53. As a substitute for the visit programme, I studied in detail the annual reports on the operation of each heavy industry with special attention to its problems and bottlenecks. The study of those reports enabled me to examine the trend of activities in each industry and identify common and specific industrial problems. Due consideration was given to such problems in the evaluation of the new projects and the formulation of their implementation programmes.



CHAPTER III

PLANNING AND PROGRAMMING

55. My activities in the field of planning and programming can be summarized in the following TWO sections :

SECTION 1 - Study of the planning documents.

SECTION 2 - Preparatory work to the Third Five - Year Development Plan (1981 - 1985).

SECTION 1 - STUDY OF PLANNING DOCUMENTS

56. The study of the planning documents is dealt with in the following two paragraphs :

1 - General studies.

2 - Libyan development plans.

1 - GENERAL STUDIES

57. Many studies were prepared by planning consultants on the projected development of the national economy. Some of these studies include a forecast up to year 1990 and others up to year 2000. I looked into all these reports, undertook a comparative analysis and evaluation and pinpointed the most realistic projections and their consistency with the long term strategy of the Libyan Government.

2 - LIBYAN DEVELOPMENT PLANS

58. A careful study was made by the project on the two previous development plans : the Three - Year Development Plan (1973 - 1975) and the Second Five - Year Development Plan (1976-1980). I analysed the objectives and evaluated the achievements of these plans with special attention to the projects not implemented and the major reasons for their spill-over. This analysis was aimed at identifying the main constraints and difficulties of the previous development plans.

SECTION 2 - PREPARATORY WORK TO THE THIRD FIVE - YEAR DEVELOPMENT PLAN (1981 - 1985)

59. As preparatory work to the Third Five - Year Development Plan (1981 - 1985), I carried on the following main activities :

1) Collection of statistical data on import and export commodities that might be produced or assembled locally.

2) Analysis of the constraints and problems encountered during the implementation of the previous development plans.

3) Collection of the feasibility studies for project yet to be implemented.

- 4) Classification of spill - over projects according to their complementarity with the existing industries and availability of national resources.

CHAPTER IV

IDENTIFICATION AND FORMULATION OF INDUSTRIAL PROJECTS

60. My activities in this field are analysed in the following FOUR

Sections :

- SECTION 1 - Project Identification.  
SECTION 2 - Pre - feasibility Studies.  
SECTION 3 - Detailed Feasibility Studies.  
SECTION 4 - Project Evaluation.

SECTION 1 - PROJECT IDENTIFICATION

61. Project idea should identify investment opportunities which will be subject to further scrutiny once the idea has been proved viable.

62. In view of the importance of this phase, I prepared to the Secretariat of Heavy Industries a detailed scope of study for a project idea to be used as a reference in the Planning and Follow-Up Division for the evaluation of the opportunities studies.

63. Among the project ideas I identified are the ones related to the building materials, plastics and metallurgical industries.

SECTION 2 - PRE - FEASIBILITY STUDIES

64. The pre - feasibility study is an intermediate stage between the project idea and the detailed feasibility study. I suggested the appointment of a team from National Officers to join me in the preparation of pre - feasibility studies. In view of lack of officers this team has not been formed.

65. As a reference to the Secretariat of Heavy Industries and its various Divisions dealing with projects development, I prepared a detailed scope for a pre - feasibility study in general and for some specific projects in building materials, plastics and chemical industries.

SECTION 3 - DETAILED FEASIBILITY STUDIES

66. The preparation of detailed feasibility studies for industrial projects has been usually commissioned to specialized consultants.

67. I advised for the appointment of a permanent team to join me in carrying out detailed feasibility studies for projects to be implemented by the Secretariat of Heavy Industries. The aim of my advice is to train

Libyan Officers and provide to the Secretariat, at the end of the project, a permanent team for feasibility studies. Because of lack of National Officers this team has not been appointed.

68. At the same time, I prepared to the Secretariat of Heavy Industries a detailed scope of work for a feasibility study as well as other scope of work for functional studies, such as raw material investigation, market survey, site selection, etc. All these scope of studies would be used as references for the preparation of the scope of works to prospective consultants.

SECTION 4 - PROJECT EVALUATION

69. The evaluation of feasibility studies for development projects is one of the most important activities in my one - year assignment in Jamahiriya.

70. The project studies that I evaluated can be classified into three categories :

- A- Feasibility studies for projects not yet implemented.
- B- Feasibility studies for projects under implementation.
- C- Regional co-operation studies.

A- FEASIBILITY STUDIES FOR PROJECT NOT YET IMPLEMENTED

71. I collected the existing studies of projects not yet implemented and on each of these studies I prepared a Memorandum dealing with an analysis of the study with appropriate comments and recommendations on the conditions required for their implementation.

72. The most important of these studies are :

- 1) Chemical and Petro - Chemical Projects :
  - a- Marada chemical complex for the production of Gypsum, Sodium Chloride, Potassium Chloride, etc.
  - b- Fertilizer complex at Sirte area for Ammonia, Urea, Ammonia Nitrate units, etc.
  - c- Fertilizer complex in Brega area for two Ammonia and two Urea projects.
  - d- Plastic packaging products including fifteen packaging items with a detailed feasibility study on each item.
  - e- Protein producing plant from Paraffine.
- 2) Building Materials Projects :
  - a- Cement project in the Southern region.
  - b- Cellular gas concrete plant.

- 3) Metallurgical Projects :
  - a- Iron and steel complex.
  - b- Aluminium complex.
  - c- Foundry-forge plant.
  - d- Body assembling for transport cars.
- 4) Industrial Housing Projects.

B- FEASIBILITY STUDIES FOR PROJECTS UNDER IMPLEMENTATION

73. I studied very carefully the feasibility reports of projects under implementation and I prepared on each of them a detailed Memorandum dealing with an analysis of the study, the evaluation of the part already executed and whether the remaining part could be executed within the fixed period and my comments and appropriate recommendations thereon.

74. The main feasibility studies I reviewed and evaluated are :

- 1) Chemical and Petro - Chemical Projects :
  - a- Abou Kamash Chemical complex for the production of Sodium Chloride, Caustic Soda, P.V.C, etc.
  - b- Urea project for fertilizers.
  - c- Asphalt project.
  - d- Ras Lanouf Refinery and its petro - chemical complex for downstream products, such as Low Density Polyethylene, High Density Polyethylene, Polypropylene, Butadine, Ethylene, Propylene, etc.
- 2) Building Materials Products :
  - a- Three cement factories of three million tons capacity.
  - b- Lime bricks factory.
  - c- Clay bricks factory.
  - d- Cement blocks factory.
  - e- Extension of existing building materials industries.
- 3) Engineering and Metallurgical Projects :
  - a- Pipes manufacturing industry.
  - b- Iron bars industry.
  - c- Assembling of agricultural equipment.
  - d- Aluminium products.

CHAPTER V

REGIONAL CO-OPERATION AND GENERAL STUDIES

75. This chapter consists of the following TWO sections :  
SECTION 1 - Regional co-operation studies

SECTION 2 - General studies.

SECTION 1 - REGIONAL CO-OPERATION STUDIES

76. Closer co-operation among regional countries can play an important role both in industrialization and in technology transfer.
77. I reviewed and evaluated many regional co-operation studies and I wrote on each of them a Memorandum including a detailed analysis and evaluation of the project and my appropriate comments and recommendations thereon.
78. The most important of these regional studies are :
- 1) Preliminary evaluation on the co-operation of the various Industrial Unions in the Arab Countries.
  - 2) Seminar on Innovation in Engineering Industries (Economic Commission for Europe).
  - 3) Regional Co-operation in the Field of Agricultural Equipment Manufacturing Industry in the Arab countries.
  - 4) Regional Arab Co-operation for establishing Detergents Industry.
  - 5) Copper Project in Akjoujt (Mauritania).
  - 6) African Regional Standardization Corporation.

SECTION 2 - GENERAL STUDIES

79. During the first period of my assignment I reviewed also the following general studies and prepared on each of them a Memorandum with my comments and recommendations thereon :
- 1) The National Physical Perspective Plan up to 2000.
  - 2) The Industrial Planning Perspective in Libya.
  - 3) Evaluation of the Private Consumption in the World and its situation in Libya.
  - 4) The Libyan Petro - Chemical and Gas - Chemical Industry and its International Environment.
  - 5) Action taken on the Conclusions and Resolutions of the Iron and Steel Committee of the International Labour Organization (ILO).
  - 6) Reports of the U. N. Committee for Technology Transfer.
  - 7) Evaluation of Alternative Refining Processing Scheme.

CHAPTER VI

INDUSTRIAL AND ECONOMIC PLANNING

80. On the basis of my analysis and evaluation of specific and general studies, and taking into consideration the previous development trends in the Country, I assisted in the formulation of the main objectives and the

selection of the main industrial projects for the Third Five-Year Development Plan (1981 - 1985).

81. Since the planning is considered as a dynamic process for achieving the development objectives of the Country in terms of economic diversification and balanced growth, I emphasized, for efficiency and co-ordination purposes, the importance of the sectoral planning and, in particular, the planning implementation.

82. These subjects are dealt with in the following TWO sections :

SECTION 1 - Sectoral planning.

SECTION 2 - Planning implementation.

SECTION 1 - SECTORAL PLANNING

83. A good deal of thought has been given to the development planning but not adequate attention was given to the sectoral planning. The industrial project requires some types of inputs which are common to many projects. A number of constraints and bottlenecks could be prevented if a coordinated sectoral planning is adequately formulated.

84. A more complex resource - allocation problem arises when it is necessary to schedule concurrently several projects requesting similar inputs. In such cases, the respective priorities of the various projects and the mobility of resources from one project to another must be carefully considered as well.

SECTION 2 - PLANNING IMPLEMENTATION

85. The planning authorities in Jamahiriya have not given to the planning implementation the attention required. The formulation of an implementation programme for each project and effective techniques for controlling its implementation are pre-requisites for a successful development plan.

86. During my one - year assignment, I stressed on the importance of the planning implementation in order to ensure, among other things, the timely detection of bottlenecks, such as delays or shortages in supplies, manpowers etc... and to co-ordinate project execution. To this end, I initiated adequate follow-up system as from the preparation of the detailed feasibility study up to the implementation stage so as to feed back actual performance results, to evaluate and revise policies as necessary, to reallocate available resources and up-date plans of implementation.

87. In this context, the reporting progress followed by regular visits to the project site is the most efficient way in the follow-up system. I assisted in the preparation of forms for regular and annual progress

reports to be submitted by the implementing agencies as well as by the planning agency itself.

#### CHAPTER VII

#### MONITORING AND FOLLOW-UP TECHNIQUES

88. As a result of a detailed study on the existing follow-up system, I suggested monitoring techniques for three types of projects, as explained in the following THREE sections :

SECTION 1 - Follow-up system for project under study.

SECTION 2 - Follow-up system for project under implementation.

SECTION 3 - Follow-up system for project under operation.

#### SECTION 1 - FOLLOW-UP SYSTEM FOR PROJECT UNDER STUDY

89. For consistency purposes, the follow-up procedure should start as from the preparation of the project detailed feasibility study. To this end, I advised the following sequence of procedure :

- 1) A detailed scope of work should be included in the contract of the consultant responsible for the study.
- 2) The contract with the prospective consultant should also indicate the type and timing of progress reports to be submitted regularly.
- 3) A final report should be submitted by the consultant indicating the execution phases and the changes occurred to the scope of work and its justification.
- 4) The implementing agency should evaluate the progress and final reports prepared by the consultant and submit to the Planning and Follow-Up Division appropriate comments and recommendations.

#### SECTION 2 - FOLLOW-UP SYSTEM FOR PROJECT UNDER IMPLEMENTATION

90. A detailed implementation programme is an important part of the feasibility study and should be considered as a general scope of work to the implementing agency.

The sequence of the follow-up procedure for project under implementation is composed of the following steps :

- 1) The implementation programme should be jointly discussed and approved by the planning and implementing agencies.
- 2) A system of reporting progress is to be agreed upon including regular reports to be submitted on the work already done, changes occurred and any problems or bottlenecks.
- 3) Regular visits to the project site by the planning agency so as to obtain visual verification of the reports and to keep in touch with the implementing agency.

- 4) A final report is to be prepared on the project as a whole explaining any changes to the previous scope of work and its implications on the project.

### SECTION 3 - FOLLOW-UP SYSTEM FOR PROJECT UNDER OPERATION

81. The follow-up system for project under operation is very important in order to maintain regular contacts between the planning agency and the project management, and to co-operate together in finding adequate solutions for any constraints or bottlenecks.
82. In this field, I assisted in the preparation of the progress report forms by including the main indicators which can represent the real situation of the industrial establishment.
83. At the same time, I advised for regular visits to be made by the planning agency and a brief report on each visit with appropriate recommendations.

### CHAPTER VIII

#### TECHNICAL COMMITTEES

84. Among my various activities, I have been assigned to participate, as member and adviser, in many technical and ad hoc committees, such as :
  - 1) Committee for the preparation of technical specifications and tender documents for a half million tons capacity cement plant.
  - 2) Committee for the study of problems and constraints in the cement factories in operation.
  - 3) Committee for the rehabilitation of an existing cement industry.
  - 4) Committee for the study of producing various types of cement.
  - 5) Committee for the evaluation of the study of Ras Linnouf Refinery project and its related petro-chemical complex for producing Ethylene, Propylene, Butadiene, Polyester, Polystyrene etc.
  - 6) Committee for the evaluation of "the Regional Arab Co-operation Study" in the field of agricultural machinery manufacturing industry.
  - 7) Committee for the evaluation of the technical manpower required for the Third Five - Year Development Plan (1981 - 1985).

### CHAPTER IX

#### REGULAR COLLECTION OF STATISTICAL DATA

85. In order to perform its functions and discharge its responsibilities efficiently, the Planning and Follow-up Division is in an urgent need for accurate statistics and information on specialized



consultants, suppliers of machinery and equipment, technical partners, etc. For these purposes, I advised on the necessity of establishing and regularly up-dating :

- 1) An Industrial Directory for Heavy Industries.
- 2) A Roster of Consultants.
- 3) A Roster of Technical Partners.
- 4) A Roster of the main suppliers of machinery and equipments.

#### CHAPTER X

##### ORGANIZATIONAL ACTIVITIES

96. Among the activities of the project, the following organizational activities are to be recorded :

1. File classification.
2. Library organization.

##### 1. FILE CLASSIFICATION

97. The Secretariat of Heavy Industries and the Planning and Follow-Up Division are newly established and a file classification is urgently needed to file, classify and compile the various studies, reports and correspondence for easy reference. I prepared, to this purpose, a detailed Memorandum on "File Classification" based on the decimal system which is very flexible and practical to adopt.

##### 2. LIBRARY ORGANIZATION

98. According to the scheme of functions and responsibilities, a general library to the Secretariat of Heavy Industries is to be established and organized by the Planning and Follow-Up Division.

99. To this purpose, I compiled a comprehensive list of important economic, industrial and petroleum periodical reviews and publications for regular subscription and a list of books and reports to be made available.

100. At the same time, I submitted an organizational system for the general library based on index-card method and a classification according to the author, title, subject and language.

#### CHAPTER XI

##### EXECUTIVE ACTIVITIES

101. According to the project document and job description the project has to provide advisory services in industrial and economic planning matters and to train Libyan Officers.

102. Notwithstanding the wide responsibilities and diversified functions of the Planning and Follow-Up Division, its staff is composed of a National Director and its Deputy only with two non-Libyan clerical assistants. The necessary staff is to be recruited yet.

103. In this context, and in order to assist the Secretariat of Heavy Industries in the first stage of its establishment, I was confined to perform executive activities in the most part of my assignment which had affected the efficiency of my advisory functions.

104. It was only after the working hours that I had to achieve my advisory work in terms of the preparation of studies, reports and memorandums.

#### CHAPTER XII

##### PROJECT ACTIVITIES AND MAJOR CONSTRAINTS

105. The project activities carried out during my one - year assignment have not achieved the entire objectives stated in my work plan. The visits to the existing industries and to the projects under implementation, the training of Libyan Officers on industrial development and planning functions are among the activities to be fulfilled yet.

106. The major obstacles which have impeded the complete achievement of the project objectives are :

- 1) Lack of Libyan staff to be charged with the executive functions and responsibilities in the Planning and Follow-up Division.
  - 2) Lack of Libyan Officers to train on the preparation of feasibility studies, project evaluation and follow-up projects and plans implementation.
  - 3) Lack of Libyan counterparts for training on the technical functions of industrial and economic planning.
  - 4) Lack of means of transport to be made available to the Planning and Follow-up Division for its regular visits to the industrial and economic projects.
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107. The industrial and economic planning Project requires the performance of a wide range of activities starting from the identification of project ideas and including feasibility studies, project evaluation, plan formulation, planning implementation and follow-up and monitoring activities.

108. Notwithstanding the constraints encountered in the discharge of my duties and responsibilities, such as lack of Libyan Officers to be assigned the executive duties in the Planning and Follow-up Division, lack of Libyan counterparts, shortage of transport facilities, etc., significant results can be recorded as indicated in the following SIX chapters :

- CHAPTER I - Project results in the field of feasibility studies.
- CHAPTER II - Project results in the field of project evaluation.
- CHAPTER III - Project results in the field of development plans.
- CHAPTER IV - Project results in the field of follow-up projects and plans implementation.
- CHAPTER V - Project results in the field of training.
- CHAPTER VI - Project organizational results.

CHAPTER I

PROJECT RESULTS IN THE FIELD OF FEASIBILITY STUDIES

109. All detailed feasibility studies for heavy industries are commissioned to specialized consultants. I have appraised and evaluated the final reports of many studies submitted by consultants. To this end, I prepared on each final report a Memorandum dealing with a detailed analysis of each part of the feasibility study together with my comments and recommendations thereon.

110. At the same time, I did advise the Secretariat of Heavy Industries to appoint a team of National Officers for the preparation of feasibility studies. This team is to be recruited yet.

111. However, my effective contribution in this field was in the preparation to the Secretariat of Heavy Industries basic documents, such as :

- 1) Detailed scope for pre-investment study and a scope for a comprehensive feasibility study.
- 2) Detailed scope for functional studies (market survey, site selection, etc.).

112. All these documents have been used as references for contracts to be signed with specialized consultants.

CHAPTER II

PROJECT RESULTS IN THE FIELD OF PROJECT EVALUATION

113. During my one - year assignment, I evaluated and assessed many industrial and development projects. According to my recommendations, some of these projects have been included in the draft of the Third Five-Year Development Plan (1981 - 1985), and some others would be reviewed in the light of my comments thereon.
114. Among the projects approved for implementation and included in the draft of the Third Five - Year Development Plan are :
- 1) Ras Lanouf Refinery and its petro - chemical complex.
  - 2) Plastic containers.
  - 3) Foundry - Forge plant.
  - 4) Steel and aluminium pipes for irrigation uses.
  - 5) Assembling of agricultural equipment.
  - 6) Electric cables.
  - 7) Building materials industries :
    - i) Lime bricks.
    - ii) Cement blocks.
    - iii) Pre-fabricated concrete components.
    - iv) Cellular gas concrete.
    - v) Cement plants.

CHAPTER III

PROJECT RESULTS IN THE FIELD OF DEVELOPMENT PLANS

115. I assisted the Secretariat of Heavy Industries in the preparation of the Industrial Development Plan (1981 - 1985) and specifically in the following fields :
- 1) Setting up the objectives and policies.
  - 2) Selection of projects and their classification according to their development implications.
  - 3) Preparation of the structure of the industrial development plan.
  - 4) Projection of the manpower requirements.

CHAPTER IV

PROJECT RESULTS IN THE FIELD OF FOLLOW-UP PROJECTS AND PLANS IMPLEMENTATION

116. During my assignment in Jamahiriya, I initiated effective monitoring and reporting techniques so as to co-ordinate the execution of dependent projects, to ensure the timely detection of bottlenecks, to re-allocate resources and up-date plans of implementation.

117. Furthermore, I pointed out to the Secretariat of Heavy Industries that a systematic and effective control of project implementation would enable the collection of valuable information to be used for comparing the execution of different projects with a view to ensuring more efficient implementation as well as more realistic future planning and programming.
118. Special attention was also given to effective follow-up projects under operation. In this field, I assisted the Planning and Follow-up Division in amending the existing progress report forms so as to be more practicable and more suitable to follow up the activities of each type of industries and to detect its problems and constraints.
119. The most efficient part in the follow-up and monitoring techniques is the regular visits to the project site so as to obtain visual verification of the progress reports and also to have a direct contact with the management and a clear discussion on its existing problems and difficulties. However, due to the shortage of transport facilities, it was not possible to, duly, effect these visits.
120. All these activities and their sequence are described in the Memoranda submitted to the Planning and Follow-up Division as references to the prospective staff to be recruited.

#### CHAPTER V

##### PROJECT RESULTS IN THE FIELD OF TRAINING

121. The training activities are very important item in the project work plan. These activities have not been achieved, as expected, because of lack of National Officers in the Planning and Follow-up Division.
122. In order to fill this gap, I submitted many reports and studies, such as scope of feasibility studies, follow-up implementation programme, etc. All these papers are basic documents to enable the Planning and Follow-up Division to adequately perform and discharge its functions and responsibilities.

#### CHAPTER VI

##### PROJECT ORGANIZATIONAL RESULTS

123. With the newly established Secretariat of Heavy Industries, a scheme of functions and responsibilities was drawn up for its substantive Divisions. I formulated my comments and recommendations on the scheme of the Planning and Follow-up Division and its relationships with other Divisions and governmental institutions for efficiency and complementary purposes.

134. Within the Planning and Follow-up Division I initiated a file classification method and a system for the establishment and organization of a General Library.

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126. In the light of my activities during my one - year assignment, and in order to consolidate the project results achieved and to lay down a sound foundation for a diversified economy and a long-term accelerated growth in the Country, I would like, at the end of this Terminal Report, to set out my findings and formulate my recommendations for achieving systematically and successfully the development objectives of the Libyan Government.

#### I - FINDINGS

126. The findings to be set out, following the experience gained from the project, can be recorded under three main topics :

- A- Organizational findings.
- B- Institutional findings
- C- Operational findings.

#### A- ORGANIZATIONAL FINDINGS

127. There is a division of responsibilities between the governmental institutions, as far as the industrial sector is concerned. According to this division of responsibilities which is practically in force, the Industrial Research Centre (IRC) is assigned the responsibility of carrying out feasibility studies through specialized consultants. The other governmental institutions, and especially the Secretariat of Heavy Industries, the Secretariat of Light Industries are considered as implementing and planning agencies.

128. With such division of responsibilities, the following implications are derived :

- 1) The IRC has been, very often, conducting studies without regular consultations with the implementing agency concerned.
- 2) The IRC has been usually commissioning the detailed feasibility studies to specialized consultants without involving the implementing agency in the preparation of the scope of work or in the discussion of the consultant's final report.

Consequently the implementing agency has to spend more time to review and appraise the final report. And if further information are required the IRC might be unable to respond because the contract with the consultant concerned could have been duly terminated.

- 3) The implementing agency, in view of its non-involvement in the first stages of the project study, requires a long time to evaluate the final report of a feasibility study and to decide about its

implementation. This delay makes obsolete the relevant statistics of the study and, therefore, new and up-to-date information are to be collected and a new evaluation for all the parameters is to be carried out.

- 4) Because the executing agency is not involved in the follow-up of the project study, its staff is not trained on the efficient method to collect and compile regularly accurate statistics for project evaluation. Consequently, the implementing agency is always confronted with unrealistic investment costs and unreliable indicators of profitability.
- 5) Many constraints and bottlenecks in the execution stages can be avoided if more co-ordination could be established between studies and implementing agencies.

#### B- INSTITUTIONAL FINDINGS

129. The Libyan Government is deeply concerned in promoting and developing the industrial sector as a major productive sector. However, it is to be noted that the industrial activities, at the present time, are jointly performed, without efficient co-ordination, by various institutions, namely :

- i) The IRC which is in charge with the preparation of industrial feasibility studies.
- ii) The Secretariat of Heavy Industries which is the implementing and planning agency for large industrial projects.
- iii) The Secretariat of Light Industries which is the implementing and planning agency for the medium and manufacturing industries.

130. Following a careful study of the functions and responsibilities of these institutions and their inter-relations, the following findings can be recorded :

- 1) The three institutions mentioned above are responsible of the development of the industrial sector, but each institution is independent and is performing its functions regardless of any co-ordination or complementarity with the programmes and responsibilities of other institutions.
- 2) Each of those three institutions has its own United Nations Technical Assistance Programme and very often, with the same objectives. For instance, the United Nations Feasibility Project is the same in each of those institutions. As a result of such duplication, many United Nations Experts have similar job description.

- 3) The functional studies could be similar for many projects either heavy or light industries. A close co-ordination would avoid expenses and duplication of efforts in conducting such studies.

C- OPERATIONAL FINDINGS

131. The industrial development is a continuous activity in which the plan is only a beginning. The complementary relationships between the various stages of this continuous activity is an important fact to be urgently considered for the success of the industrial planning, and ultimately for the achievement of the development objectives.
132. However, the situation prevailing in Jamahiriya does not correspond to these development principles, and the consequences are as follows :
  - 1) The stages of the industrial projects are performed by independent agencies.
  - 2) The lack of co-ordination between the agencies concerned with the industrial development has been creating many of the constraints and bottlenecks encountered so far.
  - 3) The planning implementation has not been given the attention required. Because of lack of this important activity many projects have been delayed or spilled-over in view of shortage of scarce resources.
  - 4) The implementing and planning agencies have not efficient techniques to follow-up the execution stages of the development project. Nor there adequate control system to feed back actual performance results and update plans of implementation, if necessary, and re-allocate available resources.

II - RECOMMENDATIONS

133. The project has realised significant results with regard to its immediate and long-term objectives and has, as well, identified the major problems and constraints delaying the effective economic growth in the Country in terms of institutional structure, methods and techniques for feasibility studies, project evaluation and planning implementation.
134. For the purpose of consolidation, further development and utilization of the project results, and in order to strengthen the sound foundation of a long-term balanced growth. it is urgently advisable to formulate the following recommendations:

A- Recommendations related to the activities of the Secretariat of Heavy Industries and its relationships with other governmental institutions.

B- Recommendations for an articulated United Nations Technical Assistance Programme.

A- RECOMMENDATIONS RELATED TO THE ACTIVITIES OF THE SECRETARIAT OF HEAVY INDUSTRIES AND ITS RELATIONSHIPS WITH OTHER GOVERNMENTAL INSTITUTIONS

137. 1) A close coordination should be established between the various stages of the development project. All the agencies concerned are to be involved and to deal with jointly any delays or constraints and to co-operate towards a systematic and regular follow-up implementation.
137. 2) The feasibility study for any industrial project should be prepared in close co-operation with the implementing and planning agencies. The time schedule for its preparation and implementation will, therefore, be strictly executed, and the investment costs as well as the production costs will slightly be affected by prices escalation.
137. 3) The Industrial Research Centre (IRC) should concentrate its activities on the preparation of functional studies, such as geological surveys, mining studies, laboratory and pilot plant tests, etc. rather than on industrial feasibility studies.
138. 4) The Secretariat of Heavy Industries should establish a Statistics Division in order to collect, compile and regularly up-date the various statistical data and information required for feasibility studies, project evaluation and planning implementation.
- In this context, it is urgently advised to establish and keep regularly up-dated the following rosters and registers :
- a) A Roster of Consultants for feasibility studies, recording names, addresses, fields of specialization, experience and previous achievements.
- b) A Roster of Consultants for advisory and supervisory services recording names, addresses, experiences and previous achievements.
- c) A Register for prospective technical partners for each type of project likely to be implemented.
- d) A Register for machinery and equipment suppliers for each type of heavy industry to be executed.

139. 5) The recruitment of Libyan Officers to the Planning and Follow-up Division should be given priority.

B- RECOMMENDATIONS FOR AN ARTICULATED UNITED NATIONS TECHNICAL ASSISTANCE PROGRAMME

140. A United Nations Technical Assistance is still required in Jamahiriya. For an efficient United Nations advisory services the following articulated programme is recommended :

141. 1) Consulting Services Project to the Secretariat of Heavy Industries

This proposed project under the leadership of a Senior Industrial Economic Adviser shall consist of a team of experts (Marketing Expert, Industrial Mechanical Engineer, Chemical and Petro - Chemical Engineer, Industrial Economist, Industrial Production Engineer and Industrial Accountant) with high academic background, professional competence and a long experience in feasibility studies, project evaluation, planning and programming and follow-up projects and plans implementation.

142. This team shall provide to the Secretariat of Heavy Industries Consulting services in the field of industrial development and shall specifically :

- i) Identify project ideas.
- ii) Carry out pre-investment and detailed feasibility studies.
- iii) Prepare functional studies, such as market surveys, site selection, etc.
- iv) Assist in the preparation of the development plans and follow-up systematically projects and plans implementation.
- v) Ensure appropriate technology transfer.
- vi) Coordinate with other governmental institutions, especially with the Secretariats of Light Industries, Planning, Economy, Electricity, Land and Water and with the Industrial Research Centre.
- vii) Study the activities of the existing industries along with their problems and constraints and submit appropriate recommendations.
- viii) Organize a general library for the Secretariat of Heavy Industries.
- ix) Train Libyan Officers on the above functions.

137. 2) Co-ordinating Services Project to the Secretariat of Light Industries

Under the leadership of a Senior Industrial Economic Adviser, this project shall assist the Secretariat of Light Industries in all matters related to the production and development of light industries and shall co-ordinate with the activities of other governmental institutions.

138. 3) Appointment of a Senior Industrial Development Field Adviser (SIDFA) at UNEP Office in Tripoli (Socialist People's Libyan Arab Jamahiriya)

The aim of the appointment of SIDFA is to promote and develop the industrial sector as a whole, to co-ordinate the activities of the United Nations Experts involved in industrial and economic development, to follow-up effectively the United Nations Technical Assistance Projects and achieve adequate technology transfer. To this end, SIDFA should be a Senior Industrial Economic Adviser and shall assume the following functions and responsibilities :

139. 1) Promotion of a Balanced Industrial Growth

Within this responsibility SIDFA will :

- i) Assist in diversifying the national economy and strengthening the industrial sector.
- ii) Identify the technical assistance needs of the various governmental institutions and corporations and assist in the formulation of their requests.
- iii) Prepare progress reports on the U. N. Technical Assistance programme and the difficulties and submit appropriate suggestions for its more efficiency.
- iv) Promote the technology transfer and initiate effective use and adaptability.
- v) Prepare and set up work for short U. N. missions and provide necessary facilities for their success.
- vi) Assist the Libyan Government to participate in UNIDO's Conferences, Seminars, Working Groups, etc.
- vii) Assist in the formulation of the U. N. Technical Assistance to meet the requirements of the Five - Year Development Plan (1984 - 1989).

140. 2) Follow-up and Coordination of UNIDO and UNEP Projects

Within this activity SIDFA will :

- i) Co-ordinate between UNIDO projects and achieve complementarity in their objectives.
- ii) Follow-up the achievements of UNIDO and UNEP projects.

their regular progress and technical reports and formulate appropriate comments and recommendations thereon.

- iii) Co-ordinate the activities of UNIDO with other United Nations Specialized Agencies for industrial and economic development purposes.
- iv) Collect, compile and disseminate studies, publications and statistics of United Nations and International Organizations and related to the industrial and economic development.

147.

3) Promotion of Regional Industrial Co-Operation

For the promotion of a regional industrial co-operation SIDFA will :

- i) Identify the economic advantages of the industrial regional co-operation.
  - ii) Advise on specific industrial projects to be implemented on a regional basis.
  - iii) Assist in the preparation of functional studies for the promotion of regional industrial co-operation.
  - iv) Assist in the formulation and evaluation of regional industrial projects.
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## C O N C L U S I O N

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100. The industrial sector in the Socialist People's Libyan Arab Jamahiriya is being developed rapidly with large and medium size industries and is requesting urgently co-ordinated complementarity, appropriate technology transfer, up-to-date technical know-how and wide range of economic, technical and financial skills.
101. With the project results and the adoption of the recommendations formulated at the end of this Terminal Report, the Country will have a sound foundation for achieving ultimately its development objectives in terms of diversification of the national economy, establishment of a strong industrial sector and a balanced and accelerated economic growth.
102. I would like to avail myself of this valuable opportunity and to extend to the People and Government of Jamahiriya my sincere wishes for progress and very successful Development Plans.

Dr. Youssef Siouffi

SENIOR U.N. INDUSTRIAL & ECONOMIC PLANNING ADVISER

TRIPOLI

SEPTEMBER 1ST, 1980.



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