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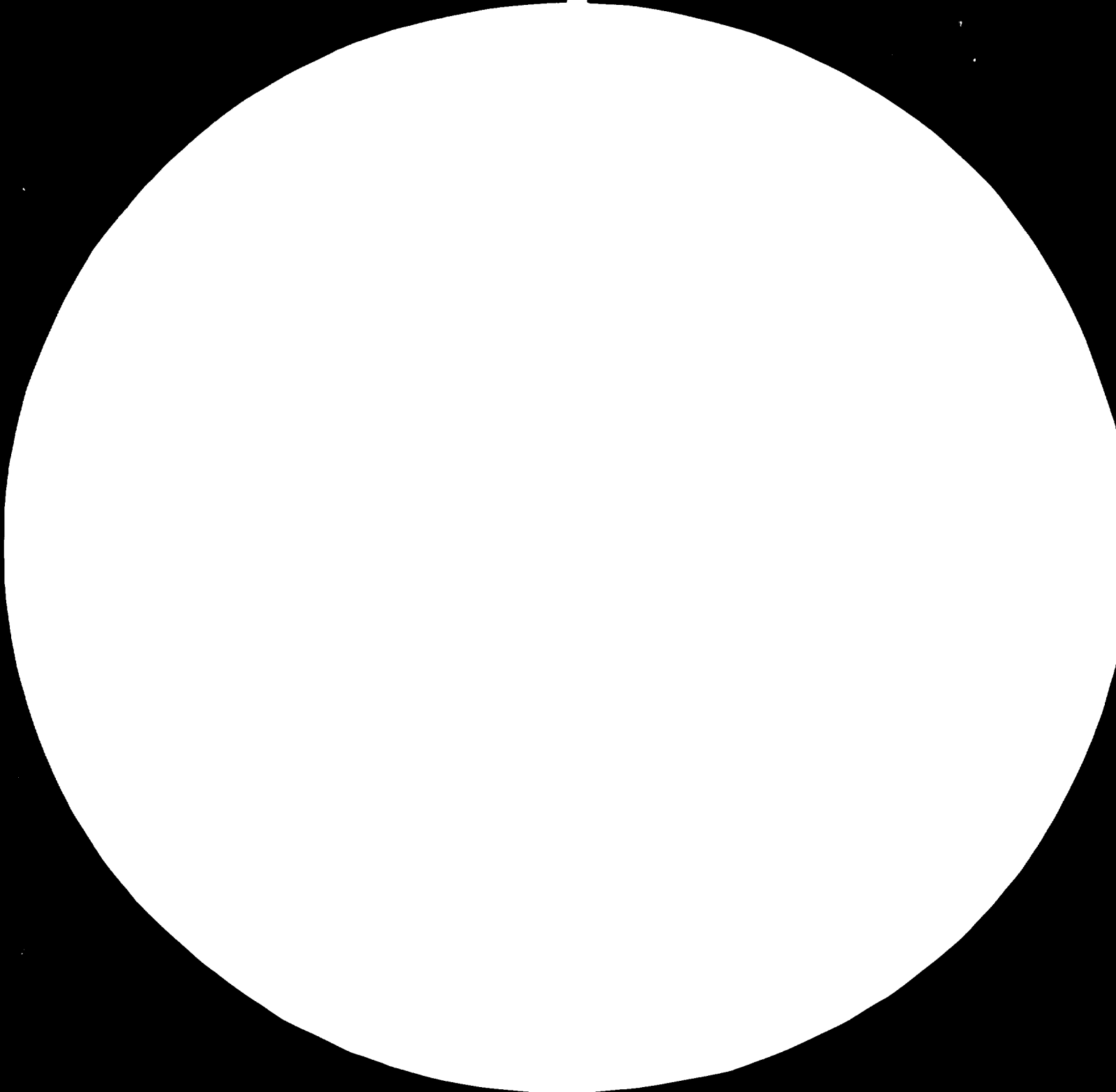
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McBride, R. J. (1987). *Resolution Test Targets*.  
New York: Wiley.

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ASSISTANCE TO CONSOLIDATE AND DEVELOP THE BENGHAZI CEMENT FACTORY, *Libya*

TF/LIB/75/002

LIBYAN ARAB JAMAHIRIYA

Prepared for the Government of the Libyan Arab Jamahiriya  
by the United Nations Industrial Development Organization

Based on the work of A.M. Afify, building materials adviser

Explanatory notes

References to tons (t) are to metric tons.

References to dollars (\$) are to United States dollars.

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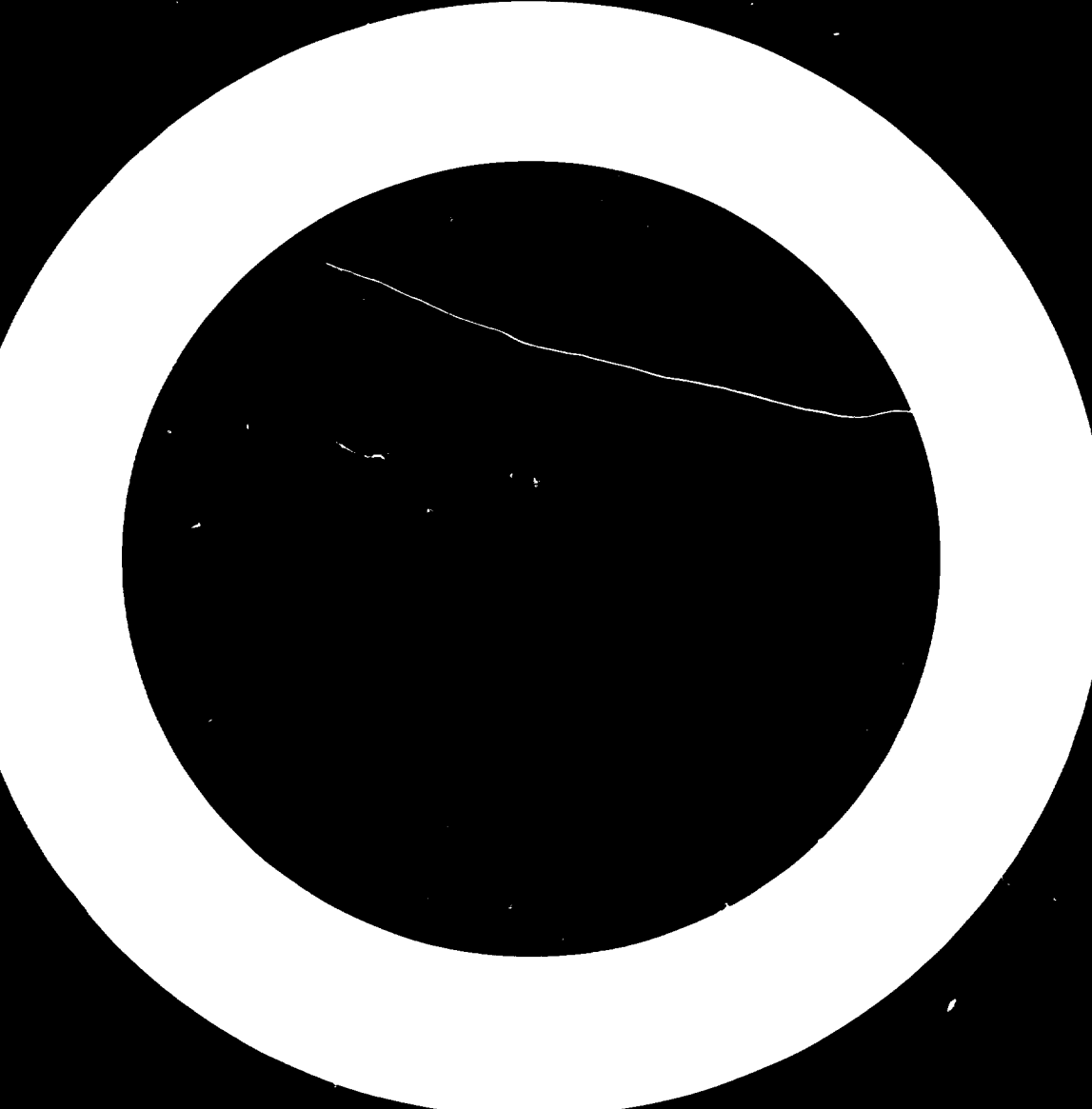
Mention of firm names and commercial products does not imply the endorsement of the United Nations Industrial Development Organization (UNIDO).

ABSTRACT

The present report covers the second return mission of the building materials adviser to follow up on the progress of the project "Assistance to consolidate and develop the Benghazi Cement Factory" (TF/LIB/75/002). The mission started on 11 November 1980 and lasted for one month.

Under the project technical support is extended to a building materials complex of vital importance to the country's industrial development. The project team and the project co-ordinator - in full co-operation with their national counterparts - proceed successfully in the realization of the project objectives. The UNIDO team of specialists has to act as buffer by filling vacant jobs when well-trained nationals leave the work for various reasons. The need for the technical assistance will therefore have to be extended over a considerable time to come. The present number of experts at site is 75 out of 100 originally scheduled.

The major problems are the following: deficiency of accommodation facilities; undesirable departure of specialists after acquaintance with working routine and local conditions; and linguistic barriers faced by non-Arab speaking labour, especially engineers who have to consult technical documentation and follow-up maintenance particulars. It is recommended to make additional flats available, to co-ordinate project activities adequately and to solve technical and social problems. The expert proposes regular co-ordination meetings between representatives of the Libyan authorities, Polservice and UNIDO. As the stand-by list of specialists is almost exhausted, interviews for the selection of 105 stand-by candidates should start without further delay.



CONTENTS

<u>Chapter</u>	<u>Page</u>
INTRODUCTION.....	6
RECOMMENDATIONS.....	8
FINDINGS AND CONCLUSIONS.....	9
A. Summary of project implementation.....	9
B. Progress of the project.....	13
C. Work programme for the immediate future.....	14
<u>Annexes</u>	
I. Specialists on board, by group of fielding.....	15
II. Specialists repatriated up to 20 November 1980, from all groups.....	19
III. Ninth group of specialists fielded on 27 November 1980.....	21
IV. Anticipated repatriations up to 30 June 1981.....	22
V. Stand-by candidates from interview of March 1980.....	23
VI. General situation of project specialists as of 20 November 1980.....	24
VII. Specialists to be selected to cover requirement and to form stand-by group.....	26
VIII. Model of attendance list for Polish experts.....	28



## INTRODUCTION

The report covers conclusions and recommendations resulting from a mission of the building materials adviser, who was assigned to the project "Assistance to consolidate and develop the Benghazi Cement Factory" (TF/LIB/75/002).

The project started with a short mission of the building materials adviser (February to March 1976) who was then fielded several times, beginning in November 1976, for a total of 36 months, which were financed from the Trust Fund of the United Nations Industrial Development Organization (UNIDO). The adviser was repatriated in February 1980 after a project co-ordinator, A.R. Marei, had been assigned to the project. Following a request of the Libyan authorities, the adviser was assigned again to undertake a one-month mission on 4 May 1980 in order to follow up on the project proceedings followed by the present second one-month return mission which started on the 11 November 1980.

Industrial development in Benghazi began with the establishment of the Libyan Cement Company, which started the first cement production line in 1972 with an annual capacity of 200,000 t. Vast extensions were carried out to increase the capacity of the original factory to 1 million t/a and a new cement factory, Hawari, was completed which further raised the annual cement production capacity to now 2 million t.

The rapid industrial growth and the increasing need for trained personnel initiated the request for technical assistance. The UNIDO project which started with a single expert, the building materials adviser, was expanded by May 1978 to include 52 experts. It has now grown to comprise 75 experts and will expand further to comprise some 100 experts with diversified specializations covering various industrial activities in the field of cement manufacture.

In order to monitor the work of the project experts and the co-ordinator, the building materials adviser has been charged with the following duties and responsibilities:

- (a) Assist the Libyan counterparts in technical and administrative matters related to the project;
- (b) Follow up and control the work of experts assigned to the project and assure their proper performance and punctual proceeding;
- (c) Render day-to-day advice and provide technical and administrative follow-up to the technical assistance team;

(d) Facilitate the implementation of UNIDO technical assistance activities at the duty station;

(e) Report to UNIDO about substantive matters related to the project, including proposals for maintaining the utmost assistance potential.

#### RECOMMENDATIONS

1. Since adequate accomodation of the specialists constitutes a major problem of this project and has led to early departures, surplus flats should be made available for anticipated fieldings of specialists.
2. The project activities should be adequately co-ordinated; technical and social problems which the specialists may encounter should be solved as soon as possible.
3. Attendance should be periodically reported, together with comprehensive information about arrivals and departures and proposals for the substitution of repatriated specialists.
4. Co-ordination meetings between representatives from the concerned Libyan authorities, Polservice and UNIDO should be held at regular intervals. In such meetings appropriate solutions could be found for any problem before it would affect the progress of the project.
5. The project particulars should be regularly updated, preferably within periodic progress reports. Copies of the updated statements should be distributed to all parties concerned.
6. Since the list of stand-by candidates is almost exhausted, interview sessions should be held as soon as possible so as to select an ample number of candidates for immediate substitution in cases of eventual repatriations.

## FINDINGS AND CONCLUSIONS

### A. Summary of project implementation

The UNIDO team of technical assistance proceeded according to schedule. Eight groups were fielded during the period May 1978 to September 1980. Although a considerable number of experts were repatriated because of family reasons and health conditions, the total number of the team is 75 at the present time. For details see annex I.

The technical assistance was originally intended for the operation and the maintenance of the newly started Hawari Cement Plant and for on-the-job training of the national technical staff. It has recently expanded to include assistance to the Benghazi Cement Factory, to the lime factory and to ceramic bricks manufacture.

#### Project activities

At the time of the last updating of the project status in mid-May 1980, 58 experts from the previous six fieldings were on board. Since then two additional groups have been fielded: the 7th group consisting of 19 specialists, of whom 17 arrived at the duty station on 7 August and two on 20 August; and the 8th group of 9 experts who arrived on 25 September.

This would raise the total to 86 fieldings. Between 15 May and 20 November 1980, 11 experts were repatriated bringing the total number on duty down to 75 at the present time. (See also annexes I, II and the following table.)

The consulting firm Polservice is progressively providing field services to the team, the most conspicuous of which are the preparation of lunch at site, the organization of family visits to the duty station and the creation of a club house with entertainment facilities. The following three representatives for Polservice are at present assigned for that purpose to the duty station: Jozefowicz Kazimierz as team leader; Gorzelanny Miron as social services attendant and Bryczkowski Arkadiusz as translator (Polish/English) and social services assistant.

The local accounts for the project are kept by the financial department of the Libyan Cement Company. During the briefing of the expert, he assisted a group of officials from the said department delegated to UNIDO headquarters for revision of project particulars.

Specialists present at the duty station as of 20 November 1980

<u>Serial No.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Number on board</u>
1	11.06	Shift leader	4
2	11.07	Control panel operator	4
3	11.08	Miller	8
4	11.09	Cement burner	6
5	11.10	Foreman, mechanical maintenance	2
6	11.11	Fitter, mechanical maintenance	7
7	11.14	Milling machine operator	1
8	11.16	Maintenance electrician	4
9	11.17	Instrumentation specialist	5
10	11.20	Mechanical engineer	2
11	11.21	Maintenance fitter	2
12	11.22	Sheet-metal fitter	5
13	11.23	Welder	3
14	11.24	Electrical engineer	1
15	11.25	Workshop fitter	2
16	11.28	Instrumentation foreman	1
17	11.29	Shift electrician	7
18	11.30	Instrumentation and control specialist	3
19	11.31	Workshop and light electrician	1
20	11.32	High-tension electrician	2
21	11.33	Diesel mechanic	1
22	11.38	Lime burner	<u>4</u>
		Total	75

The group made the following comments which were conveyed to UNIDO in due time:

(a) It requested that trust funds deposited for the project be invested for the project and that the opinion of the Libyan Cement Company be sought before any sum is used to finance other activities. It was found out that \$31,050 were transferred from project TF/LIB/75/002 to fund the project TF/LIB/78/002. UNIDO was therefore requested to credit project TF/LIB/75/002 with that sum;

(b) The delegates of the Libyan Cement Company were promised to be regularly provided with the following computer print-outs:

monthly - status of allotment for the project

quarterly - manning table including areas.

It had been agreed that both print-outs will be sent to the project co-ordinator, thus facilitating a continuous follow-up of the project proceedings.

During his mission, the expert has been requested to complete organigrams and job descriptions for the personnel of the building materials complex in its recent form, including the Benghazi and Hawari Cement Factories, plus the four additional works for the manufacture of paper bags, building lime, concrete blocks and ceramic bricks. In co-operation with the Training and Administration Adviser the expert devoted a considerable part of the time of his mission to that task. The work proceedings have been prepared in Arabic language to cope with the local requirements. A translation into English could not be made during the expert's assignment.

#### Major problems

To enable the expert to determine which steps should be taken in order to resolve the major problems encountered at the duty station, a survey of the actual situation has been made which revealed the following.

##### Deficiency of accomodation

The housing facilities are again arising as one of the most remarkable inconveniences at the duty station. Sixteen flats are available at Benina Industrial City plus two Hawari Rest Houses. This total of 18 flats is distributed as follows:

1 flat as staff club and medical aid room

1 flat for the project co-ordinator and his family;

16 flats for 75 experts, 3 Polservice delegates and 2 team cooks (i.e. an average of 5 persons in each 3-room flat).

Eighty persons are therefore accommodated in 16 flats. In addition, seven new experts are expected soon (see annex III) and interviews are supposed to lead to more fieldings. The housing problem is a predominant one of which the concerned authorities are well aware. The General Manager of the Libyan Cement Company is doing his best to solve it as soon as possible.

#### Undesirable departures

Many experts, after having gotten used to the work routine and local living conditions, decline an extension of their contracts. Some leave the duty station even before the termination of their assignment. A considerable period elapses before the newly-fielded candidates get acquainted with the work and the social environment.

#### Language difficulties

An everlasting problem is the lack of language experience. The newly-fielded experts are normally assisted by colleagues who have been at site for some time. But in most cases the language is a serious barrier in establishing normal working relations with the national personnel. For example, engineers who are responsible for the planning of preventive maintenance and follow-up of work particulars are not in a position to read available technical documentation, nor are they able to keep registers for maintenance proceedings.

#### Project achievements

The project extends support to one of the most important industrial development activities in the Libyan Arab Jamahiriya. Due to the recent trend to expand industrialization, the availability of building materials became crucial and the Benghazi building materials complex plays an important role in enhancing that development process. The rapid paces in that direction created an acute need for technical skills and the UNIDO technical assistance project is therefore of vital importance for achievement of national development plans.

The project proceeds satisfactorily. The team has obviously attained full appreciation of UNIDO's efforts to directly support developing industries. The project co-ordinator acts in full co-operation with the national counterparts. In addition to his original task to co-ordinate the technical assistance activities and to monitor the progress of the UNIDO team, he acts as a trouble shooter and thus participates in finding appropriate solutions to industrial problems.

Overall status and assessment of the project

The overall status of the project which is given in annex VI can be summarized as follows:

	<u>Number of specialists</u>
Total requirement, updated	98
On board	75
Expected repatriations	16
Net requirement	39

The project co-ordinator, A.R. Marei, is proceeding well with his duties and responsibilities. He is supervising the technical and administrative aspects of the project, monitoring the performance of the technical assistance team, and co-ordinating activities between the Libyan Cement Company, UNIDO, Polservice, and the Union of the Construction Materials Industries, Wroclaw. Moreover, his advice is valuable in solving day-to-day industrial problems; he is e.g. investigating major questions, such as defects in cement mills, poor flowability in cement silos, deficiency of gypsum reserves etc.

B. Progress of the project

The activities of the Libyan Cement Company have expanded considerably. The Company has constructed and operates now a building materials complex comprising two large cement works (Benghazi and Hawari), a lime factory, a paper bags works, and produces concrete blocks and ceramic bricks. The UNIDO project supported the growing industry, thus furthering continuous progress.

The project experts have performed their duties and responsibilities in accordance with their job description and in full co-operation with their national counterparts. The project is an exemplary case of technical assistance with direct support to industrial development and the UNIDO team has been most successful in the fulfilment of the dual purpose of consolidating the industry and training national counterparts through on-the-job co-operation. In addition to the originally-planned supporting activities in Hawari Cement works, technical assistance was further extended to the Benghazi Cement and Lime Works, and to the plant for concrete blocks. The implemented project activities consequently surpassed the original scope. Furthermore, as described before, the project co-ordinator increased his functions to include trouble shooting and advising on day-to-day problems. The growing satisfaction with the project achievements and the confidence in the merits of technical assistance led to an expansion of the project to comprise a team of 100 experts.



C. Work programme for the immediate future

Given the fact that many of the most experienced local technical personnel have resigned for various reasons, and that newly employed nationals require a rather long period of training, the technical assistance team has a dual function: it has been acting as a buffer by filling vacant jobs and at the same time has been providing on-the-job training for the new workers. It would therefore seem that technical assistance will be needed over a considerable period of time to come.

A priority for the near future is to establish a group of candidates as stand-by for the present team. As shown in annex II, the total repatriations are so far 42; 16 more experts are expected to leave the duty station up to the end of June 1981. (see annex IV). The group of stand-by candidates has been consumed down to 19 individuals, whose names and areas of specialization are given in annex V. A study of the situation shows clearly that 105 candidates with the specializations represented in annex VII will have to be selected. It has been arranged to hold interview sessions at Wroclaw, Poland, starting on 12 January 1981.

To facilitate time keeping for the technical assistance team it has been agreed with the project co-ordinator to provide UNIDO headquarters with a monthly attendance statement, the form of which is illustrated in annex VIII.

Annex I

SPECIALISTS ON BOARD, BY GROUP OF FIELDING  
(as of 20 November 1980)

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Name of specialist</u>	<u>Group no.</u>	<u>Date of fielding</u>	<u>End of assignment</u>
1	11.06	Shift leader	Kazimierczak Jan	1	31/5/1978	27/8/1981
2	11.06	Shift leader	Skupin Fliks	1	23/7/1978	19/10/1981
3	11.07	Control panel operator	Koscielnik Bleslaw	1	31/5/1978	27/8/1981
4	11.08	Miller	Majewski Jan	1	31/5/1978	27/8/1981
5	11.10	Foreman, mechanical maintenance	Jadrzejcsak Sewerin	1	31/5/1978	27/8/1981
6	11.11	Fitter, mechanical maintenance	Sajpel Roman	2	31/3/1978	17/6/1981
7	11.11	Fitter, mechanical maintenance	Szymaniec Jerzy	2	31/8/1978	27/11/1981
8	11.16	Maintenance electrician	Witkam Michal	2	31/8/1978	27/11/1981
9	11.16	Maintenance electrician	Kurdzielewicz Stanislaw	2	31/8/1978	31/8/1981
10	11.17	Instrumentation specialist	Matyja Henryk	2	31/8/1978	27/11/1981
11	11.06	Shift leader	Juckiewicz Jan	3	16/11/1979	13/11/1981
12	11.07	Control panel operator	Cheba Zdzislaw	3	16/11/1979	13/11/1981
13	11.08	Miller	Konopka Roman	3	16/11/1979	13/11/1981
14	11.09	Burner	Krymowski Josef	3	16/11/1979	13/11/1981
15	11.09	Burner	Terpilowski Wacław	3	16/11/1979	13/11/1981
16	11.16	Maintenance electrician	Okos Josef	3	16/11/1979	13/11/1981
17	11.17	Instrumentation specialist	Borowiak Wladyslaw	3	16/11/1979	13/11/1981

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Name of specialist</u>
18	11.17	Instrumentation specialist	Grzegocki Zygmunt
19	11.24	Electrical engineer	Dyiewski Janusz
20	11.29	Shift electrician	Sagadel Mirosław
21	11.29	Shift electrician	Kiczorowski Adam
22	11.29	Shift electrician	Juszczak Mieczysław
23	11.30	Instrumentation specialist	Czok Walter
24	11.31	Workshop and light electrician	Rabiej Waldemar
25	11.32	High-tension electrician	Sobala Gerzy
26	11.32	High-tension electrician	Szymonek Irenensz
27	11.21	Maintenance fitter	Kania Waldemar
28	11.21	Maintenance fitter	Rosikon Mieczysław
29	11.22	Sheet-metal fitter	Nakielski Edmund
30	11.22	Sheet-metal fitter	Rubis Jan
31	11.22	Sheet-metal fitter	Kulesza Henryk
32	11.22	Sheet-metal fitter	Wrzyszczy Jan
33	11.22	Sheet-metal fitter	Prokopczyk Josef
34	11.23	Welder	Ignatiuk Nikolaj
35	11.23	Welder	Tryksza Tadeusz
36	11.25	Workshop fitter	Sdunek Zbigniew
37	11.25	Workshop fitter	Krystianczuk Zdzisław
38	11.29	Shift electrician	Melnarowicz Tadeusz
39	11.38	Lime burner	Cybulski Władysław
40	11.08	Miller	Kurzepa Jan

<u>Group no.</u>	<u>Date of fielding</u>	<u>End of assignment</u>
4	11/1/1980	9/1/1981
4	11/1/1980	9/1/1981
4	11/1/1980	9/1/1981
4	11/1/1980	9/1/1981
4	11/1/1980	9/1/1981
4	11/1/1980	9/1/1981
4	11/1/1980	9/1/1981
4	11/1/1980	9/1/1981
4	11/1/1980	9/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
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5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
5	17/1/1980	16/1/1981
6	14/3/1980	12/3/1981

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Name of specialist</u>
41	11.09	Burner	Reszczyński Hieronim
42	11.10	Foreman, mechanical maintenance	Salwach Josef
43	11.11	Fitter, mechanical maintenance	Suchodolski Ryszard
44	11.11	Fitter, mechanical maintenance	Wronski Ryszard
45	11.14	Milling machine operator	Olszewski Stanisław
46	11.16	Maintenance electrician	Dzienis Adam
47	11.29	Shift electrician	Zimnica Josef
48	11.06	Shift leader	Bodziock Jan
49	11.07	Central panel operator	Sliwa Andrzej
50	11.08	Miller	Palaszynski Jozef
51	11.08	Miller	Jozwiak Mieczyslaw
52	11.08	Miller	Kopa Erwin
53	11.08	Miller	Cospodarzyk Andrzej
54	11.09	Burner	Kozera Tadeusz
55	11.09	Burner	Kuschill Jacek
56	11.09	Burner	Rachten Tadeusz
57	11.11	Fitter, mechanical maintenance	Nogajczyk Tadeusz
58	11.11	Fitter, mechanical maintenance	Matiaszewski Jan
59	11.20	Mechanical engineer	Mackowiak Jerzy
60	11.20	Mechanical engineer	Sarnowicz Bogdan

<u>Group no.</u>	<u>Date of fielding</u>	<u>End of assignment</u>
6	1/4/1980	2/4/1981
6	14/8/1980	12/3/1981
6	14/3/1980	12/3/1981
6	14/3/1980	12/3/1981
6	14/3/1980	12/3/1981
6	11/4/1980	9/4/1981
6	14/3/1980	12/3/1981
7	8/8/1980	7/8/1981
7	21/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	21/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Name of specialist</u>
61	11.28	Instrumentation foreman	Kopystynski Stanislaw
62	11.29	Shift electrician	Slusarz Josef
63	11.30	Instrumentation specialist	Jonczy Jerzy
64	11.30	Instrumentation specialist	Chwastek Eugeniusz
65	11.33	Diesel mechanic	Kustra Wladyslaw
66	11.38	Lime burner	Kowalczyk Josef
67	11.07	Central panel operator	Jachymczyk Bogdan
68	11.08	Miller	Dujka Mieczyslaw
69	11.11	Fitter, mechanical maintenance	Janoszek Edmund
70	11.17	Instrumentation specialist	Fiutowski Ryszard
71	11.17	Instrumentation specialist	Nerklinger Wojciech
72	11.23	Welder	Swieton Adam
73	11.29	Shift electrician	Siolkowski Andrzej
74	11.38	Lime burner	Zboina Czeslaw
75	11.38	Lime burner	Stanislowski Wladyslaw

<u>Group no.</u>	<u>Date of fielding</u>	<u>End of assignment</u>
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
7	8/8/1980	7/8/1981
8	26/9/1980	23/9/1981
8	26/9/1980	23/9/1981
8	3/10/1980	1/10/1981
8	26/9/1980	24/9/1981
8	26/9/1980	24/9/1981
8	3/10/1980	1/10/1981
8	26/9/1980	24/9/1981
8	26/9/1980	24/9/1981
8	26/9/1980	24/9/1981



Annex II

SPECIALISTS REPATRIATED UP TO 20 NOVEMBER 1980,  
FROM ALL GROUPS

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Name of specialist</u>	<u>Date of departure</u>
1	11.06	Shift leader	Warzyc Stefan	17/4/1979
2	11.06	Shift leader	Nytka Zdislaw	28/8/1979
3	11.07	Panel operator	Makulski Waldemar	15/4/1979
4	11.07	Panel operator	Berka Andrzej	26/7/1978
5	11.08	Miller	Hein Ginter	17/5/1979
6	11.08	Miller	Stepinski Henryk	28/8/1979
7	11.09	Burner	Szadlowski Pawel	28/8/1979
8	11.09	Burner	Brodzinski Jan	7/3/1979
9	11.10			
		maintenance	Szypulski Zygmunt	28/11/1978
10	11.10	Foreman, mechanical maintenance	Jedrzejczak Romuald	28/11/1978
11	11.12	Compressor maintenance mechanic	Dmuch Wladyslaw	15/4/1979
12	11.16	Maintenance electrician	Wystup Jozef	15/4/1979
13	11.17	Instrumentation specialist	Joniec Piotr	8/11/1976
14	11.17	Instrumentation specialist	Wszolek Tadeusz	26/8/1979
15	11.19	X-ray specialist	Soltynski Andrzej	8/11/1978
16	11.10	Foreman, mechanical maintenance	Wozniakowski Woj	27/11/1979
17	11.11	Fitter	Brauer Witold	12/12/1979
18	11.11	Fitter	Kandyba Wieslaw	25/4/1979
19	11.11	Fitter	Cybulski Kazimierz	25/4/1979
20	11.11	Fitter	Maluszak Zygmunt	25/4/1979
21	11.11	Fitter	Bienias Alfred	25/4/1979
22	11.11	Fitter	Ciastko Wlodzimierz	26/4/1979
23	11.11	Fitter	Makulski Marek	25/04/1979
24	11.13	Foreman, mechanical workshop	Blonski Witold	21/3/1979
25	11.11	Fitter	Driegel Kazimier	25/4/1979

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Name of specialist</u>	<u>Date of departure</u>
26	11.14	Milling machine operator	Rajda Miroslaw	27/11/1979
27	11.16	Maintenance electrician	Langoz Pawel	27/11/1979
28	11.06	Shift leader	Koss Zygmunt	4/3/1980
29	11.07	Panel operator	Topolnicki Tadeusz	4/3/1980
30	11.16	Maintenance electrician	Kocot Stefan	4/3/1980
31	11.11	Fitter	Pieschkalla Henryk	4/3/1980
32	11.08	Miller	Rajchert Stanislaw	26/6/1980
33	11.09	Cement burner	Luczak Zkigniew	5/6/1980
34	11.16	Maintenance electrician	Kopik Joachim	5/6/1980
35	11.11	Fitter, mechanical maintenance	Kosmowski Jan	24/6/1980
36	11.11	Fitter, mechanical maintenance	Pluta Kazimierz	26/6/1980
37	11.17	Instrumentation specialist	Krajewski Tadensz	24/6/1980
38	11.17	Instrumentation specialist	Pyla Henryk	12/6/1980
39	11.07	Panel operator	Smeryczynski Janusz	5/6/1980
40	11.17	Instrumentation specialist	Lawniczak Michal	19/11/1980
41	11.31	Workshop and light electrician	Jarzabek Stanislaw	18/9/1980
42	11.23	Welder	Kulik Hubert	21/8/1980

Annex III

NINTH GROUP OF SPECIALISTS FIELDDED

ON 27 NOVEMBER 1980

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Name of specialist</u>
1	11.10	Foreman, mechanical maintenance	Boska Bromislaw
2	11.11	Fitter, mechanical maintenance	Pluta Kazimierz
3	11.17	Instrumentation specialist	Duda Zygmunt
4	11.17	Instrumentation specialist	Skwarczek Stanislaw
5	11.23	Welder	Grodzinski Andrzej
6	11.23	Welder	Trysztak Jan
7	11.29	Shift electrician	Grudziecki Michal

Annex IV

ANTICIPATED REPATRIATIONS UP TO 30 JUNE 1981  
(as of 20 November 1980)

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Name of specialist</u>	<u>Anticipated date of departure</u>
1	11.11	Fitter	Szymaniec Jerzy	26/11/1980
2	11.11	Fitter	Wronski Ryszard	26/11/1980
3	11.17	Instrumentation specialist	Rabiej Waldemar	28/1/1981
4	11.17	Instrumentation specialist	Melnarowicz Tadeusz	28/1/1981
5	11.21	Maintenance fitter	Kamia Waldemar	28/1/1981
6	11.21	Maintenance fitter	Rosikom Mieczyslaw	28/1/1981
7	11.22	Sheet-metal fitter	Nakielski Edmund	28/1/1981
8	11.22	Sheet-metal fitter	Wrzyszc Jan	28/1/1981
9	11.23	Welder	Tryksza Tadeusz	28/1/1981
10	11.32	High-tension electrician	Sobala Jerzy	28/1/1981
11	11.32	High-tension electrician	Szymoneki Ireneusz	31/3/1981
12	11.22	Sheet-metal fitter	Rubis Jan	31/3/1981
13	11.22	Sheet-metal fitter	Kulesza Henryk	17/6/1981
14	11.29	Shift electrician	Sagadel Michal	20/5/1981
15	11.11	Fitter	Sajpel Roman	17/6/1981
16	11.25	Workshop fitter	Zdunek Zbigniew	24/6/1981

Annex V

STAND-BY CANDIDATES  
FROM INTERVIEW OF MARCH 1980

<u>Serial no.</u>	<u>List no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Name of specialist</u>
1	1	11.06	Shift leader	Legowski Stanislaw
2	36	11.06	Shift leader	Matz Ryszard
3	37	11.06	Shift leader	Mieczkowski Igor
4	135	11.08	Miller	Stanczak Jerzy
5	179	11.08	Miller	Switala Benard
6	99	11.10	Foreman, mechanical maintenance	Boska Bronislaw
7	76	11.10	Foreman, mechanical maintenance	Panek Jerzy
8	84	11.14	Milling machine operator	Smola Edward
9	17	11.17	Instrumentation specialist	Duda Zygmunt
10	21	11.17	Instrumentation specialist	Skwarczek Stanislaw
11	26	11.17	Instrumentation specialist	Mazij Ryszard
12	8	11.20	Instrumentation and control foreman	Rutkowski Roman
13	95	11.23	Welder	Grodzinski Andrzej
14	72	11.23	Welder	Fryszak Jan
15	116	11.27	Electrical maintenance foreman	Lech Zbigniew
16	111	11.29	Shift electrician	Przybyla Adam
17	130	11.29	Shift electrician	Grudziecki Michal
18	115	11.31	Workshop and light electrician	Dabrowski Boguslaw
19	125	11.31	Workshop and light electrician	Przybyl Wladyslaw

Annex VI

GENERAL SITUATION OF PROJECT SPECIALISTS  
(as of 20 November 1980)

<u>Budget line</u>	<u>Post title</u>	<u>Original requirement</u>	<u>Updated requirement</u>	<u>On duty</u>	<u>Expected repatriation</u>	<u>Present requirement</u>
11.06	Shift leader	4	4	4	-	-
11.07	Control panel operator	4	4	4	-	-
11.08	Miller	8	8	7	-	1
11.09	Cement burner	8	8	7	-	1
11.10	Foreman, mechanical maintenance	2	2	2	-	-
11.11	Fitter	7	7	7	3	3
11.12	Compressor maintenance mechanic	-	1	-	-	1
11.14	Milling machine operator	1	1	1	-	-
11.16	Maintenance electrician	7	7	4	-	3
11.17	Instrumentation specialist	6	6	5	2	3
11.19	X-ray specialist	1	1	-	-	1
11.20	Mechanical engineer	2	3	2	-	1
11.21	Maintenance fitter	2	2	2	2	2
11.22	Sheet-metal fitter	-	6	5	4	5
11.23	Welder	-	5	3	1	3
11.24	Maintenance electrical engineer	-	1	1	-	-
11.25	Workshop fitter	2	2	2	1	1
11.26	Instrumentation electrical engineer	-	1	-	-	1

Budget line	Post title	Original requirement
11.27	Electrical maintenance foreman	-
11.28	Instrumentation and control foreman	1
11.29	Shift electrician	8
11.30	Instrumentation specialist	4
11.31	Workshop and light electrician	5
11.32	High-tension electrician	2
11.33	Diesel mechanic	2
11.34	Mechanic, petrol engines	1
11.35	Electrician, quarry equipment	1
11.38	Lime burner	4
11.39	Scraper operator	<u>4</u>
	Total	86

<u>Updated requirement</u>	<u>On duty</u>	<u>Expected repatriation</u>	<u>Present require- ment</u>
1	-	-	1
1	1	-	-
8	7	1	2
4	3	-	1
5	1	-	4
2	2	2	2
3	1	-	2
-	-	-	-
1	-	-	1
4	4	-	-
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
98	75	16	39



Annex VII

SPECIALISTS TO BE SELECTED TO COVER REQUIREMENT AND TO FORM STAND-BY GROUP

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>	<u>Total required</u>	<u>At present on duty</u>	<u>Available stand-by</u>	<u>To be selected</u>
1	11.06	Shift leader	4	4	3	1
2	11.07	Control panel operator	4	4	-	4
3	11.08	Miller	8	8	2	7
4	11.09	Cement burner	8	6	-	10
5	11.10	Foreman, mechanical maintenance	2	2	2	2
6	11.11	Fitter	7	7	-	7
7	11.12	Compressor maintenance mechanic	1	-	-	2
8	11.14	Milling machine operator	1	1	1	1
9	11.16	Maintenance electrician	7	4	-	10
10	11.17	Instrumentation specialist	6	5	3	4
11	11.19	X-ray specialist	1	-	-	2
12	11.20	Mechanical engineer	3	2	1	2
13	11.21	Maintenance	2	2	-	2
14	11.22	Sheet-metal fitter	6	5	-	7
15	11.23	Welder	5	3	2	5
16	11.24	Maintenance electrical engineer	1	1	-	1
17	11.25	Workshop fitter	2	2	-	2
18	11.26	Instrumentation electrical engineer	1	1	-	2
19	11.27	Electrical maintenance foreman	1	-	1	1
20	11.28	Instrumental and control foreman	1	1	-	1

<u>Serial no.</u>	<u>Budget line</u>	<u>Post title</u>
21	11.29	Shift electrician
22	11.30	Instrumentation specialist
23	11.31	Workshop and light electrician
24	11.32	High-tension electrician
25	11.33	Diesel mechanic
26	11.35	Electrician, quarry equipment
27	11.38	Lime burner
		Total

<u>Total required</u>	<u>At present on duty</u>	<u>Available stand-by</u>	<u>To be selected</u>
8	7	2	7
4	3	-	5
5	1	2	7
2	2	-	2
3	1	-	5
1	1	-	2
<u>4</u>	<u>4</u>	<u>-</u>	<u>4</u>
98	75	19	105

Annex VIII

MODEL OF ATTENDANCE LIST FOR POLISH EXPERTS

Month:

Serial no.	Budget line	Post title	Name of expert	Fielding date	Assignment until	Annual leave	Home leave	Sick leave	Work injury	Remarks

