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Executive Committee of
the Multilateral Fund for the
Implementation of the Montreal Protocol

Thirteenth Meeting
Montreal, 25-27 July 1994

UNIDO WORK PROGRAMME AMENDMENTS

This document includes:

- Comments and Recommendations of the Fund Secretariat
- UNIDO 1994 Work Programme Amendment

COMMENTS AND RECOMMENDATIONS OF THE FUND SECRETARIAT

COMMENTS

1. UNIDO is requesting approval from the Executive Committee for one amendment to its 1994 Work Programme.
2. The requested amount is US \$15,000 for preparation of investment project on ODS phase-out for four additional refrigerator manufacturers in Egypt.

RECOMMENDATION

3. The Fund Secretariat recommends approval of US \$15,000 and US \$1,950 support costs.

AMENDMENTS

TO THE 1994 WORK PROGRAMME

of the

**UNITED NATIONS INDUSTRIAL
DEVELOPMENT ORGANIZATION**

These amendments to the Work Programme are for the following countries:

Argentina:

Investment project for 2 companies in the foams sector

Cameroon:

Investment project for one company in the refrigeration sector

China:

Investment project for 1 project in the halons sector

Egypt :

- a) Preparation, project formulation for 4 companies in the refrigeration sector;
- b) Investment projects for 3 companies in the refrigeration sectors:

India:

Investment project for 1 project in the solvents sector

Jordan:

Investment projects for 3 companies in the refrigeration sector

Syria:

Investment projects for 1 company in the refrigeration sector

They are listed in the following budget summary:

The project formulation project outline is attached to this work programme. The other projects have separate project documents.

PROJECT OUTLINE

COUNTRY : EGYPT

SECTOR COVERED : Refrigerators

ODS CONSUMED IN SECTOR (1990) : 1.830 mt of CFC11 and CFC12

PROJECT TITLE : Preparation of investment projects on ODS phase-out for four additional refrigerator manufacturers

PROJECT DURATION : 3 months

PROPOSED BUDGET : US\$ 15,000 (excluding support costs)

IMPLEMENTING AGENCY : UNIDO

NATIONAL COORDINATION AGENCY: Egyptian Environmental Affairs Agency, EEAA

PROJECT SUMMARY

The project provides for technical services, proposed to be rendered by UNIDO to assist the Egyptian Government for the preparation of four investment projects for phasing-out of CFC consumption in the refrigeration industry.

Background

While carrying out work in connection with preparing

- a) a strategy and workplan for the phase-out of ODS in the refrigeration industry and
- b) formulating projects for eliminating the use of ODS for three major manufacturers of refrigerators - namely: Delta, Electrostar and Kiriazi, which are being re-submitted to this meeting of the Executive Committee, our experts formulated projects for four other companies, which manufacture refrigerators.

These are:

- Islamic Company for Industrialization (SILTAL)
- Elnassra Electric and Electronic Operators Company SA (PHILIPS)
- International Company for Refrigeration and Appliances (IBERNA)
- Mondial Refrigeration Company (ALASKA)

As these are all relatively small companies, it was thought that the most cost effective way of eliminating the use of CFCs would be to use HCFC 141b. This was therefore proposed in spite of the fact that both the companies and the Egyptian authorities, the EEAA, preferred the use of cyclopentane as blowing agent.

It has since been determined that because of the high cost of making innerliners which are resistant to HCFC 141 b, the use of this product is no longer considered to be the most cost effective. Therefore, the projects should be re-formulated to consider foam manufacturer using cyclopentane. To determine the most cost effective way of modifying the plants to use cyclopentane, it is necessary to field an appropriate expert and then have another mission to discuss the re-formulated projects with the Egyptian authorities. It is estimated that it will be possible to formulate all four projects with the information gathered during one formulation mission and discuss all four projects again in the course of a further single mission.

No.	Country	Sector	Project Title	US \$
1.	Argentina	Foams	- Investment Project for Phasing-out of ODS at BANDEX S.A.	1,452,534
			- Investment Project for Phasing-out of ODS at CELPACO S.A.	1,475,490
2.	Cameroon	Refrigeration	Investment Project for Phasing-out CFCs at FAEM S.A.	3,736,736
3.	China	Halons	Conversion from Halons 1211 to ABC, CO2 and Foam Waterspray at Nanjing Fire Fighting Equipment Factory	3,773,252
4.	Egypt	Refrigeration	a) Preparation of investment projects on ODS phase-out for four additional refrigerator manufacturers	15,000
			- Phasing out ODS at the Electrostar for Refrigeration Co.	1,583,884
			- Phasing out ODS at the Refrigerator Plants of DELTA INDUSTRIAL CO.	2,946,308
			- Phasing out ODS at the KIRIAZI Refrigerators Manufacturing Co.	1,846,031
5.	India	Solvents	Conversion of Electronic Cleaning Processes from ODS Solvents to Aqueous Cleaning at ITI Mankapur	799,154

No.	Country	Sector	Project Title	US \$
6.	Jordan	Refrigeration	- Phasing-out ODS at the National Refrigeration Co.	861,652
			- Phasing-out ODS at the Middle East Electrical Industries Co. Ltd.	943,346
			- Phasing-out ODS at the Household Appliances Manufacturing Co. Ltd.	829,934
7.	Syria	Refrigeration	Investment Project for Phasing-out of CFCs at Al-Hafez Refrigerator Co.	4,450,098
Sub-Total				24,713,419
13% Support Costs				3,212,744
GRAND TOTAL				27,926,163