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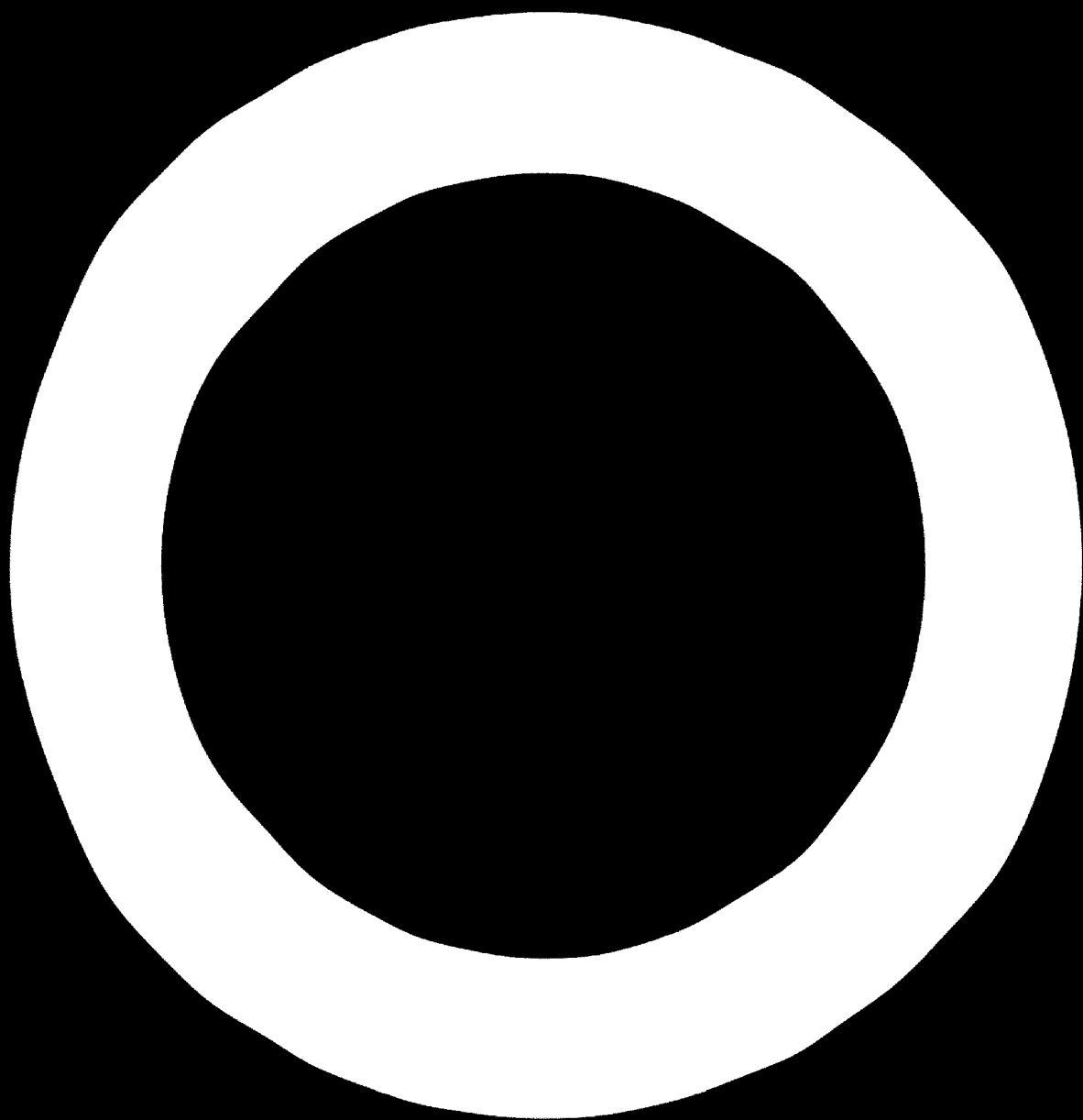
REPORT ON
INVESTMENT PROMOTION MEETING
AND TECHNOLOGICAL CONSULTATIONS FOR CHEMICAL INDUSTRIES
IN DEVELOPING COUNTRIES ^{1/}

Bucharest, 2 - 6 December 1974

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CONTENTS

I.	Introduction	Page 3
II.	Technological Consultations	Page 4
III.	Investment Promotion - Private Meetings	Page 5
IV.	Proposed Follow-up Action	Page 6

ANNEXES

1	List of Documents Issued for the Meeting	Page 10
2	Final List of Projects	Page 11

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1. Introduction

1. The Investment Promotion Meeting and Technological Consultations for Chemical Industries in Developing Countries was held in Bucharest (Romania) from 2 to 6 December 1974. The meeting was organized by UNIDO in co-operation with the Bucharest Office of the Joint UNIDO/Romania Centre.

2. The purpose of the meeting was twofold:

- (a) through plenary sessions, to provide an opportunity for industrialists and decision makers from both developing and industrialized countries who are concerned with chemical industries to hold consultations on selected technological and economic problems of the development of these industries in developing countries under the present conditions in the world economy.
- (b) through private bilateral meetings, to bring together sponsors of investment projects in the field of chemical industries from the developing countries and potential partners from the world of established chemical industry and finance with a view to initiating discussions and negotiations on the implementation of these projects.

3. The meeting was attended by 158 participants of which 44 represented 23 developing countries (Africa - 8, Asia - 4, Middle East - 6, Latin America - 5 and one subregional organization - East African Community) and 114 came from 20 countries with established chemical industry and finance including 8 participants from India and 55 from Romania being the Host Country. The Final List of Participants was issued as a separate meeting document - ID/WG. 197/3/Rev.1 and is circulated together with the Report.

The composition of participants from the developing countries may be characterised by indicating that in 10 cases they represented Governmental departments dealing with planning and development of chemical industries, in 25 cases they came from state organisations and/or corporations responsible for chemical and petrochemical industries and in 11 instances they represented private companies. A number of the state organisations represented were directly responsible for financing of industrial projects in their countries. Like at the previous UNIDO investment promotion meetings, some developing countries, in this case India, Iran and Kuwait attended the meeting for the purpose of offering resources to other developing countries.

Some developing countries attended the Meeting without presenting any specific projects for promotion, but to participate in the technological consultations. Those were representatives of the governmental departments or state organizations from Argentina, Uruguay, Iran, Kuwait, Philippines, Thailand, Yugoslavia, Nigeria and the East African Community (EAC). Some of the official delegates were requested to represent the private project sponsors who themselves could not attend.

4. The Meeting was opened with a welcome address delivered by Mr. A. Lungu, General Director of the Bucharest office of the Joint UNIDO/Romania Centre. This was followed by an address by Mr. K. Adusei-Poku, Acting Chief, Industrial Financing and Investment Promotion Section, on behalf of the Executive Director of UNIDO. Mr. B. Devarajan, UNDP Resident Representative, spoke on behalf of the Administrator of UNDP. The main opening address was presented by His Excellency, Mr. M. Florescu, Minister of Chemical Industry, on behalf of the Romanian Government.

Following the formal opening, a technical briefing session took place during which the organization and procedures of the Meeting concerning both the plenary sessions on technological consultations and private discussions on specific chemical projects were explained.

II. Technological Consultations

5. The technological consultations as referred to under paragraph 2 (a) were held at three consecutive plenary sessions on the first two days of the meeting under the leadership of Mr. El Halfawy, Senior Interregional Field Adviser and Mr. A. Dumitrescu, Industrial Development Officer of the Industrial Technology Division of UNIDO. These sessions were attended by all registered foreign participants as well as by a group of Romanian officials and experts from the Ministry of Chemical Industry and senior executives of several chemical companies and institutes of the host country.

6. The discussions were initiated by an introduction of the two issue papers. The Background Paper was introduced by one of its authors, Mr. P. Stefanescu, Adviser to the Research Institute for International Marketing in Bucharest who also answered questions related to the paper. The Discussion Paper prepared by the UNIDO Secretariat was presented by Mr. El Halfawy. While the Background Paper dealt mainly with an overall situation of chemical industries in developing countries, the paper prepared by the UNIDO Secretariat pinpointed selected issues for general discussion directed towards areas of possible technical assistance to developing countries.

7. After detailed discussions of the problems and issues raised in both papers a number of conclusions and recommendations for UNIDO action were adopted at the Closing Session held on 6 December 1974 in relation

to the following aspects of chemical industries in developing countries:

- 1) Exploitation and Utilization of Indigenous Raw Materials
- 2) Fertilizers, Pesticides and Plastics as Inputs in Agriculture
- 3) Problems Relating to the Transfer of Technology
- 4) Indigenous Research and Development
- 5) Design Development Activities and Local Manufacture of Equipment
- 6) Economics of Scale
- 7) Problems of Maintenance
- 8) Co-operation among Developing Countries.

The text of the Conclusions and Recommendations was issued as UNIDO document ID/WI. 197/4 and is also circulated together with this Report.

III. Investment Promotion - Private Meetings

8. The objectives of these meetings are summarized above under paragraph 2 (b).

9. To solicit the interest of the developing countries in the meeting and especially in submitting specific projects for promotion, UNIDO had approached the developing countries several months before the meeting with an official invitation through the UNDP offices. Following this, UNIDO Industrial Development Field Advisers in 23 developing countries and the field experts assigned to chemical and petrochemical industries in a number of countries had been requested to assist project sponsors in formulating and submitting project proposals.

UNIDO also had approached directly the respective Government institutions in the developing countries which handled the on-going and/or recently completed UNIDO-Technical Assistance projects with investment potential relating to chemicals, with the aim of determining the state of the investment follow-up of these projects for promotion at the Bucharest Meeting.

Brief missions of two UNIDO consultants to selected developing countries had been organized to assist preparing project proposals.

10. In all, 96 specific projects and project ideas were submitted for promotion at the Meeting. Apart from ten projects which were submitted on the opening day (five from Nicaragua, one from Iraq and four from the Cameroon) all other projects had been circulated prior to the meeting to industrial firms and financing institutions in developed countries. The projects are listed under Annex 2. A number of project ideas were also submitted by the resource offering parties and circulated to selected developing countries for prior consideration and private bilateral discussions at the Meeting.

11. The total number of private appointments scheduled and recorded by the Secretariat's "Central Matrix", amounted to about 330 out of which about 280 related to the appointments prescheduled before the Meeting. There was, however, a significant number of additional appointments arranged directly between the participants with or without the help of the Secretariat.

It is of interest to note that several participants from developing countries whose normal time for private meetings had been fully booked, managed to arrange extra meetings during the lunch time and in the evenings. In some cases participants from developing countries who did not submit any specific projects, took advantage of the presence of the large number of potential investors and arranged a number of business contacts on their own. Many additional contacts were organized between the foreign participants and the Romanian industry combined with plant visits.

12. Although no attempt was made on the spot to evaluate the overall results of the discussions, several participants from both developing and developed countries disclosed to the Secretariat that they had made concrete progress in negotiations. In some cases negotiations initiated in Bucharest were expected to lead to final contracts; in other cases the parties reported that they had established definite follow-up actions with selected opposite parties, including visits to their respective countries. Some of the project proponents representing government institutions indicated that they would seek UNIDO technical assistance to elaborate further some of their project ideas.

IV. Proposed Follow-up Action

13. The main follow-up action proposed by the Meeting to be taken by UNIDO will be directed towards providing technical assistance which may be requested by developing countries following

their participation in the Bucharest Meeting.

16. In order to determine the specific needs for such assistance, UNIDO is circulating a questionnaire to all the participants from developing countries. The questionnaire calls for information concerning inter alia:

1. Appraisal of the results achieved on specific project discussions with foreign parties;
2. Specification of projects on which the project promoters/governments would like to obtain additional UNIDO technical assistance in order to upgrade the project information if so required for further promotional action;
3. The need for additional effort with the help of UNIDO to introduce selected projects to other potential foreign suppliers of technology and financing;
4. UNIDO assistance required to implement specific recommendations referred to above under paragraph 7.

15. Letters will also be addressed to each participant from developed countries, listing all the projects they discussed in Bucharest and inquiring as to their findings, appraisal and progress made.

16. The analysis of the answers and feed back information to the questionnaires will form the basis for detailed evaluation of the immediate and the longer term results of the Meeting. Where necessary, UNDP and UNIDO will endeavour to secure the necessary funds within already approved projects or by initiating new allocations. Developing the required technical assistance projects may at certain stages call for direct contacts between the respective project sponsors/governments and the UNIDO Secretariat.

17. Specific follow-up activity is also being undertaken by the Bucharest Office of the Joint UNIDO/Romanian Centre as reflected in the Centre's Work Programme for 1975 adopted early in January 1975. The Programme provides, under paragraph 8 that:

At the request of UNIDO the Centre may participate in:

- (1) the provision of technical assistance to developing countries in (a) elaboration of investment project specifications;

- (b) advisory services for setting up national or regional development centres for the chemical industry;
- (ii) elaboration of catalogues for chemical technologies in various fields.

18. The services of the Centre indicated under (i)(a) and (b) above will be related to the requests for technical assistance which may result from the replies to the above mentioned questionnaire.

19. Concerning the elaboration of catalogues for technologies, the Centre together with UNIDO/IPPD and ITD will soon submit to CVC a project document for approval and financing. The catalogues would include the identification of the suppliers of the various technologies. The catalogues may be up-dated on a regular basis and circulated broadly by UNIDO to developing countries and research institutes.

FINAL LIST OF PROJECTS

This list combines the provisional List of Projects dated 30 August 1974 and the Addenda and Corrigenda dated 25 October 1974 which were circulated prior to the meeting. It also includes additional projects and amendments announced during the meeting in Bucharest.

I. PROJECTS SUBMITTED BY DEVELOPING COUNTRIES

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
<u>A F R I C A</u>		
<u>BURUNDI</u>		
BDI/1/BUH	Insecticide Plant Total Investment: US\$ 490,000 Capacity: 3,000 tons p.a. Proponent: Le Service de l'Industrie du Ministère de l'Economie	Equity Machinery + Equipment Loan Supplier's Credit
<u>CAMERCON</u>		
CAM/1/BUH	Plant for Aluminium Sulphate used for purification of town and industrial waters Total Estimated Investment: US\$ 1 million Capacity: 10,000 tons p.a. (3,000 tons liquids) (7,000 tons solids) Proponent: Ministry for Industrial Development and Commerce	Equity Loan (US\$ 475,000) Know-how Management
CAM/2/BUH	Plant for Manufacture of Quinin Salts starting with utilization of quinin plantations which exist in Cameroon Total Investment: US\$ 4 million Capacity: 750 kg p.a. Proponent: Ministry for Industrial Development and Commerce	Equity Loan (Subject to negotiations) Know-how Management
CAM/3/BUH	Plant for Manufacture of tyres and tubes for cars and trucks Total Investment: US\$ 30 million Capacity: 200,000 tyres p.a. 200,000 tubes p.a. Proponent: Ministry for Industrial Development and Commerce	Equity (65%) Loan Know-how Management

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Resources Required</u>
GAM/1/BUH	Plant for Production of Latex starting with natural rubber produced locally Proponent: Ministry for Industrial Development and Commerce	Details will be available after the feasibility study which is being carried out
<u>EGYPT</u> (Arab Republic of)		
EGY/1/BUH	Chemical Fertilizer Complex Total Investment: US\$ 342 million Capacity: Urea: 570,000 tons p.a. Triple Super Phosphate: 353,000 tons p.a. Diammonium Phosphate: 59,000 tons p.a. Nitro Phosphate: 109,000 tons p.a. Calcium Nitrate: 109,000 tons p.a. Sodium Tripoly Phosphate: 16,000 tons p.a. Proponent: General Organization for Chemical Industries	Equity Loan Know-how Staff training Export marketing
<u>GAMBIA</u>		
GAM/1/BUH	Oil Refinery Total Investment: US\$ 42.5 million Capacity: 1 million tons p.a. Proponent: President's Office Government of Gambia	Negotiable
<u>GHANA</u>		
GHA/1/BUH	Fertilizer Mixing and Granulating Plant Total Investment: US\$ 2.5 million Capacity: 50,000 tons p.a. Proponent: Capital Investment Board	Equity (40 %) Loan Know-how Staff training Export marketing Licensing
GHA/2/BUH	Polyvinyl Chloride (PVC) Plant Total Investment: US\$ 25 million Capacity: 12,000 tons p.a. Proponent: Capital Investment Board	Equity (40 %) Loan Know-how Staff training Export marketing Licensing
GHA/3/BUH	Caustic Soda Plant Total Investment: US\$ 25 million Capacity: 120,000 tons p.a. Proponent: Capital Investment Board	Equity (40 %) Loan Know-how Staff training Export marketing

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Resources Required</u>
GHA/4/BUH	Urea Formaldehyde Plant Total Investment: US\$ 200,000 Capacity: 5,000 tons p.a. Proponent: Capital Investment Board	Equity (40 %) Loan Know-how Staff training Export marketing
GHA/5/BUH	Pulp and Paper Mill Total Investment: US\$ 29 million Capacity: 50,000 tons p.a. Proponent: Capital Investment Board	Equity (40 %) Loan Know-how Staff training Export marketing
GHA/6/BUH	Calcium Carbide Plant Total Investment: US\$ 5 million Capacity: 12,000 tons p.a. Proponent: Ghana Industrial Holding Corporation (GIHOC)	Equity (40 %) Loan Know-how Staff training Export marketing
GHA/7/BUH	Expansion of Pharmaceutical Plant Total Investment: US\$ 9 million Capacity: expansion from 500 million to 1,500 million tablets Proponent: Ghana Industrial Holding Corporation (GIHOC)	Equity (40 %) Loan Know-how Staff training
<u>KENYA</u>		
KEN/1/BUH	Furfural Plant Total Investment: US\$ 5 million Capacity: 5,000 tons p.a. Proponent: Industrial Survey and Promotion Centre (ISPC)	Equity (60 %) Loan Know-how Staff training Export marketing Licensing
KEN/2/BUH	Caustic Soda Plant Total Investment: US\$ 6.6 million Capacity: 30,000 tons p.a. Proponent: Industrial Survey and Promotion Centre (ISPC)	Equity (60 %) Loan Know-how Staff training Licensing
KEN/3/BUH	Alcohol Plant Total Investment: US\$ 2 million Capacity: 8,200 tons p.a. Proponent: Industrial Survey and Promotion Centre (ISPC)	Equity (60 %) Loan Know-how Staff training Export marketing Licensing
KEN/4/BUH	Urea-Formaldehyde-Resins Total Investment: US\$ 500,000 Capacity: 3,000 tons p.a. Proponent: Industrial Survey and Promotion Centre (ISPC)	Equity (60 %) Loan Know-how Staff training Licensing

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
KEN/5/BUH	Calcium Carbide Plant Total Investment: US\$ 1 million Capacity: 2,500 tons p.a. Proponent: Miguri Nianza Mines	Equity (60 %) Loan Know-how Staff training Export marketing Licensing
KEN/6/BUH	Aluminium Sulphate Plant Total Investment: US\$ 1.2 million Capacity: 5,000 tons p.a. Proponent: Kenya Industrial Estate	Equity (60 %) Loan Know-how Staff training Licensing
<u>LIBYA</u>		
LIB/1/BUH	Ethylene Plant Total Investment: US\$ 100 million Capacity: 400,000 tons p.a. Proponent: National Oil Corporation (NOC)	negotiable
LIB/2/BUH	Urea Plant Total Investment: approx. US\$ 40,000 Capacity: 1,25,000 tons p.a. Proponent: National Oil Corporation (NOC)	negotiable
LIB/3/BUH	Heavy Water Plant Total Investment: approx. US\$ 10 million Capacity: 60 tons p.a. Proponent: National Oil Corporation (NOC)	negotiable
LIB/4/BUH	Nylon 6 Production Plant Total Investment: approx. US\$ 160 million Capacity: 100,000 tons p.a. Proponent: National Oil Corporation (NOC)	negotiable
LIB/5/BUH	Polyester-Fiber Plant Total Investment: approx. US\$ 220 million Capacity: 100,000 tons p.a. Proponent: National Oil Corporation (NOC)	negotiable

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
LIB/6/BUH	Expansion of Oil Refinery Total Investment: US\$ 55 million Capacity: To expand from 2.5 million tons to 5 million tons p.a. Proponent: National Oil Corporation (NOC)	negotiable
LIB/7/BUH	Oil Refinery Total Investment: US\$ 250 million Capacity: 9 million tons p.a. Proponent: National Oil Corporation (NOC)	negotiable
LIB/8/BUH	Oil Refinery Total Investment: US\$ 500 million Capacity: 18 million tons p.a. Proponent: National Oil Corporation (NOC)	negotiable
LIB/9/BUH	Petrochemical Complex (ABUCHAMASH) Total Investment: US\$ 100 million Capacity: Caustic Soda 50,000 tons p.a. PVC 50,000 tons p.a. Sodiumchloride 40,000 tons p.a. Hydrochloride acid 8,000 tons p.a. Chlorins 5,000 tons p.a. Proponent: General National Organization for Industry (GNOI)	negotiable
LIB/10/BUH	Petrochemical Complex (NARARA) Total Investment: US\$ 90 million Capacity: PVC 50,000 tons p.a. NI Metal 30,000 tons p.a. Potassiumchloride 27,000 tons p.a. Sodiumchloride 30,000 tons p.a. Gypsum (medical grade) 10,000 tons p.a. Proponent: General National Organization for Industry (GNOI)	negotiable
LIB/11/BUH	Glass - Sheets - Production Total Investment: US\$ 7.5 million Capacity: 100,000 tons p.a. Proponent: General National Organization for Industry (GNOI)	negotiable
LIB/13/BUH	Pulp and Paper Mill Total Investment: approx. US\$ 60 million Capacity: 100,000 tons p.a. Proponent: General National Organization for Industry (GNOI)	negotiable

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
<u>MADAGASCAR</u>		
MAG/1/BUH	Fertilizer Plant Total Investment: US\$ 4.1 million Capacity: 30,000 tons p.a. Proponent: Ministère du Plan	Negotiable
MAG/2/BUH	Flat Glass Plant Capacity: Flat glass: 15-20 tons per day Bottles: to expand from 35 to 56 tons per day Proponent: Ministère du Plan	Negotiable
MAG/3/BUH	Paper Mill Total Investment: US\$ 60 million Capacity: Craft pulp: 100,000 tons p.a. Proponent: Ministère du Plan	Negotiable
MAG/4/BUH	Manufacture of Polyethylene Film for Bags Total Investment: US\$ 800,000 Capacity: 5,000 tons p.a. Proponent: Ministère du Plan	Negotiable
<u>NIGERIA</u>		
NIG/1/BUH	Manufacture of Oil Well Drilling Fluids and Related Products Total Investment: US\$ 5 million Proponent: Chief J.O. Mewor Chairman/Managing Director Mewor Group of Companies	Equity (40 %) Loan Machinery and Equipment Supplier's credit Know-how Staff training
NIG/2/BUH	Salt Refinery Total Investment: US\$ 3 million Capacity: 100,000 tons p.a. Proponent: Oak Engineering Co. Ltd.	Loan Supplier's credit Staff training

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
<u>ROMANIA</u>		
RMA/1/BUH	Nitrogenous Fertilizer Plant Total Investment: US\$ 7.5 million Capacity: 45,000 tons p.a. Proponent: Ministère du plan et des ressources naturelles	Equity Know-how Staff training
RMA/2/BUH	Polyvinyl Chloride (PVC) Processing Plant Total Investment: US\$ 200,000 Capacity: 420 tons p.a. Proponent: Ministère des finances et de l'économie	Equity Know-how Staff training
RMA/3/BUH	Packaging of Pharmaceutical Products Total Investment: US\$ 210,000 Proponent: Ministère de la santé publique et des affaires sociales	Participation in joint venture
<u>SIERRA LEONE</u>		
SIL/1/BUH	Ammonia Urea Fertiliser Plant Total Investment: US\$ 20.3 million Capacity: Urea 55,000 (max. 85,000) tons p.a. Proponent: Ministry of Trade and Industry	Equity (49 %) Loan Supplier's credit Know-how
<u>TANZANIA</u> (United Republic of)		
TAN/4/BUH	Salt Refining Total Investment: US\$ 2 million Capacity: 20,000 tons p.a. Proponent: State Mining Corporation (SME)	Equity (49 %) Loan Know-how Staff training Export marketing Licensing
TAN/5/BUH	Integrated Phosphate Fertiliser and Phosphoric Acid Plant Total Investment: US\$ 9 million Capacity: Phosphate: 220,000 tons p.a. Proponent: State Mining Corporation (SME)	Equity (49 %) Loan Know-how Staff training Export marketing Licensing
TAN/6/BUH	Sodium Soda and Byproducts Plant (Lake Estera) Total Investment: US\$ 150 million Capacity: 1 million tons p.a. Proponent: State Mining Corporation (SME)	Equity (49 %) Loan Know-how Staff training Export marketing Licensing

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
URT/1/BUH	Sulphuric and Hydrochloric Acid Plant (Kilwa Salt) Total Investment: not defined Capacity: not defined Proponent: State Mining Corporation (SMC)	Equity (40%) Feasibility study Know-how Staff training Export marketing Licensing
URT/2/BUH	Polyvinyl Chloride Plant Total Investment: approx. US\$ 2.6 million Capacity: 2,000 tons p.a. Proponent: Tanzania Petroleum Development Corporation	Equity (40%) Loan Know-how Staff training Export marketing Licensing
<u>TUNISIA</u>		
TUN/1/BUH	Industrial Gas Plant Total Investment: US\$ 1.75 million Capacity: Acetylene 100,000 m ³ p.a. Oxygen 100,000 m ³ p.a. Nitrogen 14,000 m ³ p.a. Carbon dioxide and solid carbon dioxide 350 tons p.a. Proponent: Mr. Ali Ghenni, Tunisia	negotiable
TUN/2/BUH	Chemical Plant for Fertilizers Total Investment: US\$ 184 million Capacity 100,000 tons p.a. Proponent: Industries Chimiques Maghrébines	negotiable
TUN/3/BUH	Tri-Fluoride of Aluminium Total Investment: US\$ 9 million Capacity: 10,000 tons p.a. Proponent: Industries Chimiques Maghrébines	negotiable

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
BDD/2/BDH	Rationalization of a plant for Caustic Soda, Liquid Chlorines, Hydrochloric Acid and Bleaching Powder Investment in machinery and spares approx. US\$ 0.5 million Proponent: Bangladesh Fertilizer Chemical and Pharmaceutical Corporation Chemical Industries of Bangladesh	Supplier's credit
BDD/9/BDH	Manufacture of Insecticides and Pesticides Proponent: Bangladesh Fertilizer Chemical and Pharmaceutical Corporation	Possibility study Equity Know-how
BDD/10/BDH	Extraction of Rauwolfia Alkaloids Total Investment: approx. US\$ 2.5 million Capacity: approx. 1 tons p.a. Proponent: Bangladesh Fertilizer Chemical and Pharmaceutical Corporation	Negotiable
BDD/11/BDH	Manufacture of Para-amine Salicylic Acid Total Investment: approx. US\$ 4.5 million Capacity: 100 tons p.a. Proponent: Bangladesh Fertilizer Chemical and Pharmaceutical Corporation	Turkey contract Loan financing Supplier's credit
BDD/12/BDH	Manufacture of Nyr Stuff Total Investment: approx. US\$ 1.5 million Capacity: 100 tons p.a. Proponent: Bangladesh Fertilizer Chemical and Pharmaceutical Corporation	Negotiable
BDD/13/BDH	Manufacture of Acetylsalicylic Acid Total Investment: approx. US\$ 4.6 million Capacity: 200 tons p.a. Proponent: Bangladesh Fertilizer Chemical and Pharmaceutical Corporation	Turkey contract Loan financing Supplier's credit
<u>INDIA</u>		
IWD/1/MIH	Dimethylformamide Plant Total Investment: US\$ 1.4 million Capacity: 1,000 tons p.a. Proponent: East Anglia Plastics (India) Ltd.	Equity 50 % Loan Know-how Supplier's Credit
IWD/1/BDH	Vinyl Acetate Monomer Total Investment: US\$ 10.5 million Capacity: Calcium Carbide: 16,000 tons p.a. Acetic Acid: 5,000 tons p.a. Vinyl Acetate Monomer: 6,500 tons p.a. Proponent: Polychem Limited, Bombay	Loan Supplier's Credit Know-how Staff training

Project No.

Project Name and Description

Financing and Terms
Required

- PAK/ 10/ 70/1
Manufacture of Polyethylene
Total Investment: approx. US\$ 5 million
Capacity: 100,000 tons p.a.
Proponent: Federal Chemical and Ceramics Corp. Ltd.
(Board of Industrial Management)
- PAK/ 10/ 70/2
Manufacture of Acrylonitrile
Total Investment: approx. US\$ 10 million
Capacity: 100,000 tons p.a.
Proponent: Federal Chemical and Ceramics Corp. Ltd.
(Board of Industrial Management)
- PAK/ 10/ 70/3
Manufacture of Karathion (Insecticide)
Total Investment: approx. US\$ 1.5 million
Capacity: 1,000 tons p.a.
Proponent: Federal Chemical and Ceramics Corp. Ltd.
(Board of Industrial Management)
- PAK/ 10/ 70/4
Manufacture of Monosodium Glutamate
Total Investment: approx. US\$ 3 million
Capacity: 1,000 tons p.a.
Proponent: Federal Chemical and Ceramics Corp. Ltd.
(Board of Industrial Management)

PHILIPPINES

- PHI/ 10/ 70/1
Activated Carbon Plant
Total Investment: US\$ 1.1 million
Capacity: 720 tons p.a.
Proponent: Excelsior Chemicals Inc.
- PHI/ 10/ 70/2
Amino Acid Plant
Total Investment: US\$ 845,000
Capacity: 390 tons p.a.
Proponent: Meising Incorporated
- PHI/ 10/ 70/3
Titanium Dioxide
Total Investment: US\$ 30 million
Capacity: 14,250 tons p.a.
Proponent: Chemical Industries of the Philippines, Inc.

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
PHI/1/BUH	Methanol Production Total Investment: US\$ 9.8 million Capacity: 100,000 tons p.a. Proponent: Eastman Chemical Industries, Inc.	Equity Loan Know-how Staff training Export marketing Licensing
<u>THAILAND</u>		
THA/1/BUH	Manufacture of Tetracycline Total Investment: US\$ 2.1 million Capacity: 50 - 75 tons p.a. Proponent: The Government Pharmaceutical Organization	Equity (50 %) Know-how Technical assistance Marketing

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
<u>M I D D L E E A S T</u>		
<u>IRAQ</u>		
IRQ/1/BUH	Manufacture of Dioctyl Phthalate (DOP) Total Investment: US\$ 5 million Capacity: 30,000 tons p.a. Proponent: The National Chemical Industries Co. S.A.	Machinery and Equipment Engineering Know-how Staff training Export marketing Supply of raw materials (partly)
IRQ/2/BUH	Chemical Complex Projects Proponent: State Organization for Chemical Industries, Ministry of Industry (Basic information by the participating representatives will be provided upon request).	The proponent wishes to meet the potential foreign collaborators in order to arrange with them for further studying and implementing the considered projects.
<u>LEBANON</u>		
LEB/1/BUH	Plastic Calendering and Lamination Total Investment: US\$ 1.1 million Capacity: 2,000 tons p.a. Proponent: Mr. Hassan D. Hamdan	Equity Technical know-how

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Contribution Required</u>
<u>L A T I N A M E R I C A</u>		
<u>C O S T A R I C A</u>		
COS/1/BUH	Polyvinyl Chloride (PVC) Resin Plant Total estimated Investment: US\$ 5 million Capacity: 30,000 tons p.a. Proponent: Corporacion Costarricense Desarrollo (CODESA)	Feasibility Study
<u>M E X I C O</u>		
MEX/1/BUH	Manufacture of Pesticides/Insecticides Proponent: Secretaria de Industria y Comercio, Direccion General de Industrias	Equity Know-how Technical assistance
MEX/2/BUH	Manufacture of Pharmaceuticals Proponent: Secretaria de Industria y Comercio, Direccion General de Industrias	Equity Know-how Technical assistance
MEX/3/BUH	Chemical Processing of non-refined molasses (Monosodium Glutamate, Lactic Acid, Itaconic Acid, Acetone- Butanol, Acetic Acid and others)	Feasibility Studies Know-how Licensing Financing
<u>N I C A R A G U A</u>		
NIC/1/BUH	Vinyl Chloride Monomer Plant Total Investment: US\$ 6 million Capacity: 25,000 tons p.a. Proponent: Instituto de Fomento Nacional (INFONAC)	Joint venture Know-how
NIC/2/BUH	Low Density Polyethylene Plant Total Investment: US\$ 25 million Capacity: 40,000 tons p.a. Proponent: Instituto de Fomento Nacional (INFONAC)	Joint venture Know-how
NIC/3/BUH	Nitrogen Fertilizers Plant Total Investment: US\$ 25 million Capacity: 168 tons p.a. Proponent: Instituto de Fomento Nacional (INFONAC)	Joint venture Know-how

<u>Project No.</u>	<u>Country and Description of Project</u>	<u>Foreign Resources Required</u>
NIC/4/BUH	Pesticides Plant - DDT and Parathion Total Investment: US\$ 4.4 million Capacity: 5,000 tons p.a. Proponent: Instituto de Fomento Nacional (INFONAC)	Joint venture Know-how
NIC/5/BUH	Window Flat Glass Plant Total Investment: US\$ 4.5 million Capacity: 12,500 tons p.a. Proponent: Instituto de Fomento Nacional (INFONAC)	Joint venture Know-how

II. PROJECT PROPOSALS FROM SUPPLEMENTARY INVESTMENT RESOURCES

Proposals

Proposal (Summary)

Allied Chemicals & Dyeing Co. Ltd.
18, Gandhi Street
Calcutta 700017
India

Ready to co-operate in setting up a plant for the production of formaldehyde, hexamine, pentaerythritol, synthetic tanning agents and leather chemicals, D.F. resins and other items.

Polychem Ltd.
7, Jambhaleji Tata Road
Bombay-20, India

Ready to co-operate in setting up a plant for the production of 100% P/W industrial alcohol. A manufacturing capacity of 10 million litres/year would require a total investment of US\$ 2.7 million.

Säteri Osakeyhtiö
37600 Valkeakoski
Finland

Ready to co-operate in setting up a plant for the production of:

- 1) viscose filament yarn for textile end use. A capacity unit of 1,000 tons per year would require an investment of US\$ 13,000,000.
- 2) polyester and polyamide textured yarns for textile end use. A capacity unit of 500 tons/year would require an investment of US\$ 1,150,000. Raw materials required are: polyester flat yarn, polyamide flat yarn.
- 3) viscose staple for textile and non-woven end use. A capacity unit of 1,000 tons/year would require an investment of US\$ 15 mill.
- 4) sodium alkyl xanthates and ammonium alkylxanthates both for the mining industry. A capacity unit of 400 tons/year (12% sodium amyl xanthate) would require an investment of US\$ 700,000.

Official proposal on behalf of the Indian firms

Ministry of Petroleum and Chemicals
of the Government of India

announced that the following companies from India were ready to co-operate in setting up plants in other developing countries for the production of the selected chemical products :

- | | |
|---|--|
| (a) <u>Formaldehyde</u> | - Allied Resins and Chemical Pvt. Ltd.,
Calcutta |
| | - Atul Drug House Ltd., Bombay |
| | - Nachem Plastics Ltd., Paridabad |
| | - Hindustan Organic Chemicals Ltd.,
Rasayani |
| (b) <u>Acetaldehyde and Acetic acid</u> | - Indian Organic Chemicals Pvt. Ltd.,
Bombay |
| | - Sir Silk Ltd., Sirpur |
| | - Somaiya Organic-Chemical Ltd.,
Sakarwadi, Maharashtra |
| | - Andra Sugars Ltd., Tanuku |
| (c) <u>Monochloro acetic acid</u> | - Cellulose Products of India Ltd., Kathwada,
Ahmedabad |
| | - Sardesai Brothers, Billimora |
| (d) <u>Acetanilide*</u> | - Hindustan Organic Chemicals, Rasayani |
| (e) <u>Industrial Alcohol*</u> | |
| (f) <u>Phthalate Plasticiser</u> | - India Carbon Ltd., Calcutta |
| | - Indian Organic Chemicals Ltd., Bombay |
| | - East Anglia Plastics (India) Ltd. |
| | - National Chemical Laboratory, Poona |
| (g) <u>Sodium Silicate*</u> | |
| (h) <u>Electroplating salts</u> | - Golden Chemicals, Vile Parle, Bombay |
| | - Ponuk Industries Ltd., Bombay 18 |
| | - Graver and Veil (India) Ltd., Bombay |
| | - Sen and Pandit Industries, Calcutta |
| | - Arim Metal Industries (P) Ltd., Calcutta |

* The names of the Indian firms were not specified but can be obtained from the Ministry of Petroleum and Chemicals

- (i) Potassium permanganate - Swadeshi Chemicals (P) Ltd., Bombay
- Universal Chemicals Industries (P) Ltd.,
Bombay 18
- (j) Soda ash (straight sol-
vey process) - Tata Chemical Ltd., Mithapur
- Saurashtra Chemicals Ltd.
- Dharanghadara Chemicals Works Ltd.,
Gujarat
- (k) Sulphuric acid*
- (l) Superphosphate*
- (m) Sodium Dichromate - Buckingham and Carnatic Ltd., Madras-1
- Golden Chemicals Pvt. Ltd., Bombay
- Campore Chemical Works Ltd., Kanpur
- The Pioneer Chromate Works Ltd., Bombay
- (n) Copper Sulphate/Zinc sul-
phate*
- (o) Fatty acids*
- (p) Carboxy Methylcellulose
and its salts - Cellulose Products of India Ltd.,
Kath Wada, Ahmedabad
- Sardesai Brothers (P) Ltd., Billimora
- (q) Synthetic detergent - Tata Chemicals Ltd., Bombay
- Swadeshi Chemicals (P) Ltd., Bombay
- Kusum Products, Calcutta
- (r) Soaps (all types) - Government Soap Factory, Bangalore
- (s) Dyes - Amar Dye Chemicals Ltd., Bombay
- Aniline Dyestuff and Pharmaceuticals
(P) Ltd., Bombay
- Indian Dye Chemicals Industries, Delhi-6
- Indian Dyestuff Industries Ltd., Bombay
- Sabayadri Dye Stuffs and Chemicals (P) Ltd
Poona
- Sudarshan Chemical Industries (P) Ltd.,
Poona
- United Dye-Chem. (P) Ltd., Bombay-3
- Universal Dyestuffs Industries Ltd.,
Ahmedabad

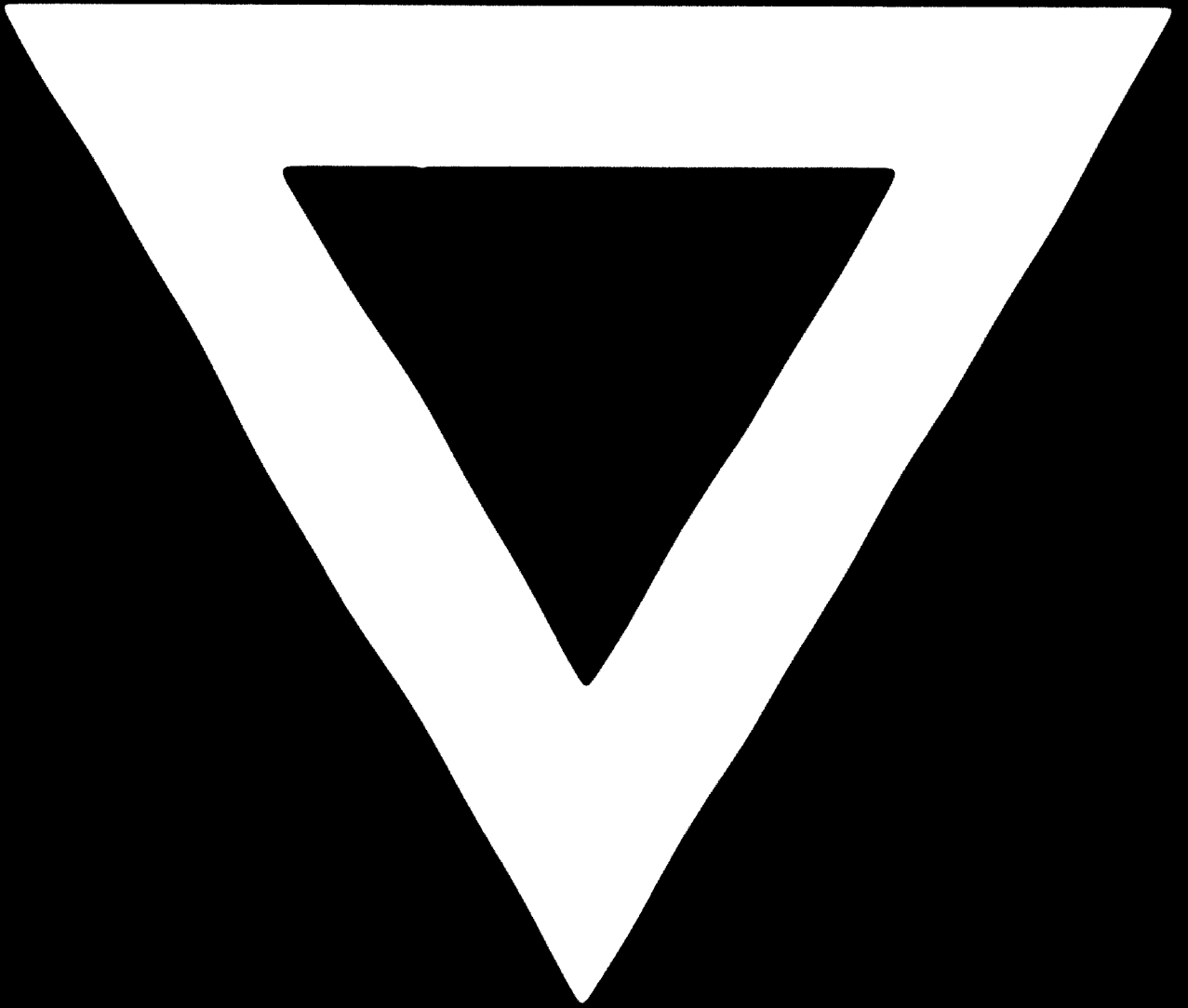
The names of the Indian firms were not specified but can be obtained from the Ministry of Petroleum and Chemicals

(1) Paints and Varnishes*

(2) Drugs and Pharmaceuticals*

Penicillin, I.D.P., P.A.S., Thioacetamide, Sulpha, Iodogenated oxyquinoline, D.F.C., Citrate, Nyloneine, Aspirin, Amalgam, Para Acetamol, Phenyl, Nitazone, Caffeine from tea waste, phenobarbitone, etc.

* The names of the Indian firms were not specified but can be obtained from the Ministry of Petroleum and Chemicals



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