



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

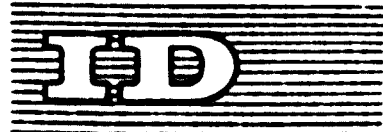
## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)



DC2972



Distribution:  
LIMITED

ID/WG.99/87  
26 November 1971

United Nations Industrial Development Organization

Original: ENGLISH

Second Interregional Fertilizer Symposium

Kiev, USSR, 21 September - 1 October 1971

New Delhi, India, 2 - 13 October 1971

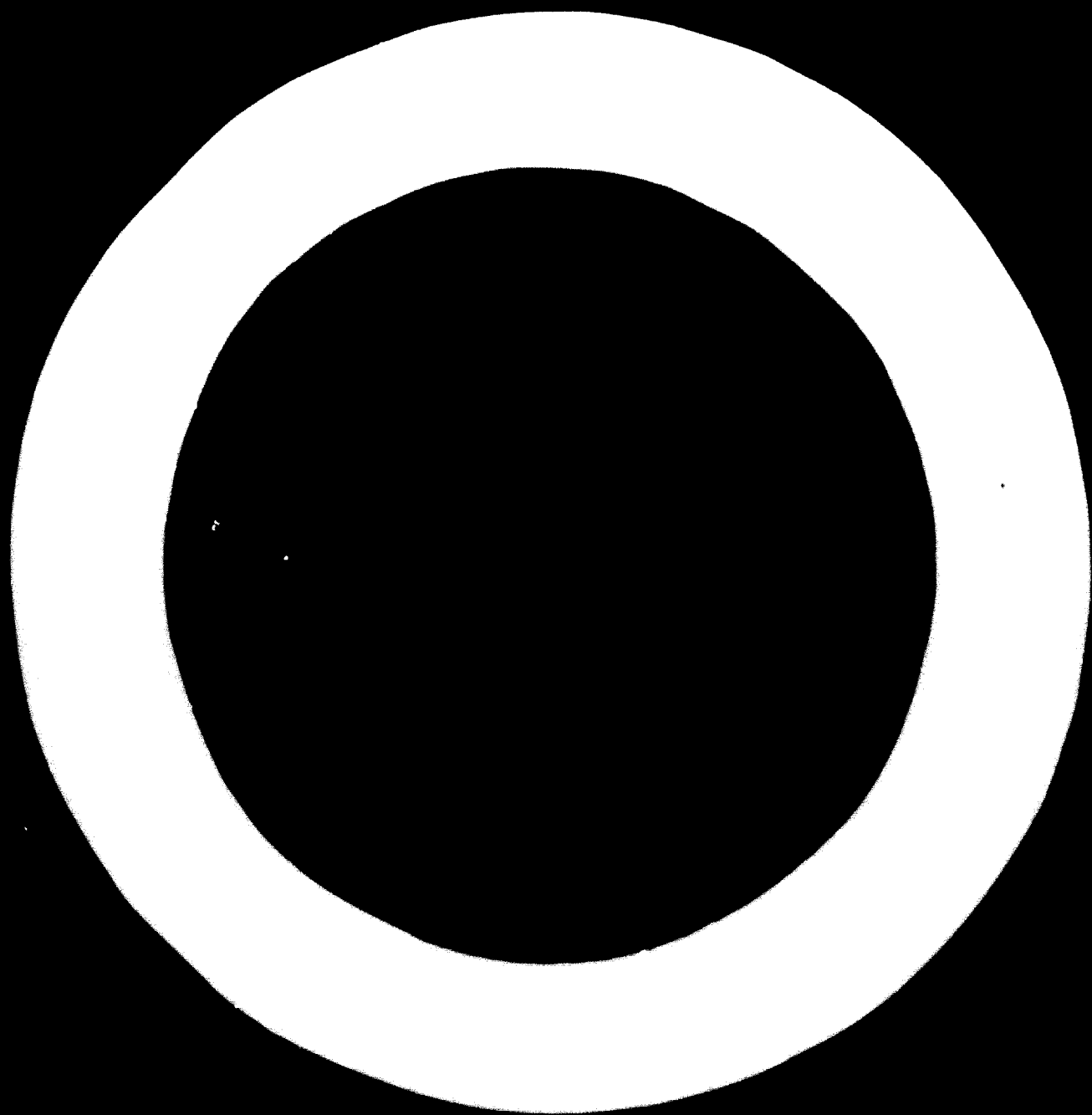
Agenda item XI/5

ROLE OF THE ECONOMIC COMMISSION FOR ASIA AND THE FAR EAST IN  
ASSISTING THE COUNTRIES IN THE DEVELOPMENT OF FERTILIZER INDUSTRY

by

Economic Commission for Asia and the Far East  
Bangkok Thailand

**We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.**



Like most of the United Nations Economic Commissions, the role of the United Nations Economic Commission for Asia and the Far East in the system of international co-operation has been the promotion of economic and social progress in member and associate member countries of the region through regional co-operation. The benefits to be derived from regional approach to development problems were obvious. In the industrial field, international division of labour and pooling of markets and resources could be achieved which would make economies of scale possible. Then, intra-regional trade expansion could be achieved, which in turn could accelerate the process of structural changes in the economies of developing member countries deemed essential if sustained economic growth were to be achieved.

All the distinguished participants of this Symposium would undoubtedly agree with me that promotion of regional co-operation is by no means an easy task. This is particularly true for a vast region like Asia and the Far East, which stretches from Iran in the West to Western Samoa in the East and which covers countries with diverse political and social systems and which are at varying levels of industrial development. Nevertheless, we feel that regional approach is necessary complement to global and national approaches to achieve the desired rates of economic growth in the developing countries.

In the earlier years, the efforts of ECAFE had been concentrated on bringing countries together by organizing seminars, conferences and other meetings for sharing of experience and knowledge and formulation of recommendations for action.

The first Conference on the Development of Fertilizer Industries in Asia and the Far East organized at Bombay, India in 1963, was one of a series of meetings organized by ECAFE in the field of fertilizer industry.

The Conference brought representatives of seventeen member countries together with several international experts in the field of fertilizer industry. It provided the opportunity for the exchange of views and experience among countries of the region in the planning and programming of fertilizer industries and the choice of technology, process, size of plants, etc. The benefit which a country can have by drawing upon the experience of other countries, similarly placed, is immense and such experience is often more relevant than the example of advanced countries elsewhere. The plant visits conducted after the Conference to various fertilizer factories in India provided opportunities to engineers and plant operators of countries attending

the Conference to see similar operations in similar conditions and with more or less similar equipment and personnel and to learn at first hand the experience gained by India in the operation of fertilizer factories. This experience was invaluable to those countries which were just starting the fertilizer industry.

Apart from these benefits, the habit of working together has instilled in the countries of the region the spirit of seeing one another's point of view within the context of the regional needs and fostered a common approach to various problems facing the countries of the region.

This Conference was followed by the Seminar on the Development and Utilization of Natural Gas Resources held in Teheran, Iran, in 1964 and the Seminar on Sources of Mineral Raw Materials for the Fertilizer Industry held in Bangkok in 1967.

As I have stated before, in the earlier years, ECAFE's efforts were concentrated on the promotion of regional co-operation through sharing of experience and knowledge and the habit of working together among member countries. In later years, the emphasis was shifted to regional co-operation through joint action. In the industrial field, the efforts of ECAFE to promote joint-action programmes gained momentum with the establishment by ECAFE of the Asian Industrial Development Council in September 1966. In the field of fertilizer industry, an Action Group on Fertilizers and Allied Chemical Industries were organized at Bangkok, Thailand in October 1967 with the object of holding preliminary consultation among interested countries of the region on the possibilities of establishing specific projects in the participating countries, on a bilateral or multilateral basis and to suggest appropriate action.

The representatives from India, Indonesia, Iran, Japan, the Philippines, Singapore and Brunei participated in the Action Group.

Joint-venture projects recommended were: (i) establishment of a sulphur-  
ammonia complex in Iran by India and Iran; (ii) development of phosphate deposits in the Philippines by India and the Philippines; (iii) establishment of joint-venture projects in the Philippines between the Philippines and Iran, and in Singapore between Singapore and Iran to produce ammonium phosphate, diammonium phosphate, super-phosphate and NPK fertilizers from imported phosphoric acid from Iran; (iv) establishment of joint-venture projects in Indonesia between Indonesia and India, and also between Indonesia and Japan; and (v) establishment

of joint-venture projects in Brunei, Iran, the Philippines and Singapore between the respective countries and Japan.

The second Asian Conference on Industrialization held at Tokyo in October 1970 recommended a number of projects for implementation by the Asian Industrial Development Council. They include the following projects:

1. To explore the possibilities of regional co-operation in respect of production and marketing of indigenous raw materials, especially sulphur and rock phosphate guano
2. To explore the possibilities of regional co-operation in the development and expansion of trade in raw materials and finished fertilizer products
3. To assist interested countries in undertaking techno-economic studies on the establishment of fertilizer plants based either on local feedstock or imported ammonia and to assist them to come together and initiate consultations on the possibilities of multinational projects to establish large plants
4. To assist interested countries in ascertaining their requirement of phosphate and multinutrient fertilizers by kind during 1970-1980 and to assist in conducting techno-economic studies for the establishment of these plants

At this point, I would like to say a few words about the work of Asian Industrial Development Council, as it is relevant to the role of ECAFE in assisting the countries in developing the fertilizer industry.

The terms of reference of the Council covered the following general areas:

Area Number 1. Identification of industrial projects

Area Number 2. Assisting countries in the preparation of feasibility studies, engineering reports, etc. and

Area Number 3. Assisting countries in taking all necessary steps for implementing the projects.

I might be of interest to this Symposium to know how the Asian Industrial Development Council carries out its work. To give you an example, I would like to take up the work done in the Petrochemical Industry:

- (a) In 1968, a survey mission on Petrochemical Industries was organized to identify potential multi-national projects. The mission visited nine countries of the region which showed interest in the survey and prepared a report containing a list of potential multi-national projects. Preliminary economics of production, including the commercial profitability was given for each of projects identified.

- (b) This report was submitted to the Governments concerned. After the study of this report, representatives of these Governments met in Bangkok in 1967 to discuss the specific projects in which they were interested to collaborate and for which detailed feasibility studies were required. One of the projects was the possible establishment of Southeast Asia Petrochemical Complex in which three countries, namely, Indonesia, the Philippines, and Singapore showed interest. ECAFE secretariat then approached the interested Governments to assist in the preparation of the necessary feasibility study. The French Government offered the services of the French Petroleum Institute to do the job free of cost to ECAFE. The study was completed in early this year and was submitted to three countries concerned.
- (c) ECAFE has already received a request from the Philippines Government to organize the meeting of representatives of three countries to discuss the feasibility study for possible collaboration in the establishment of the Southeast Asia Petrochemical Complex.

Asian Industrial Development Council had up to date identified many project possibilities in industries such as iron and steel, agricultural machinery, petrochemicals, fertilizers, forest-based industries and agro-industries. It organized twelve survey missions and two feasibility studies, one in iron and steel and the other in the petrochemical industries.

All these activities have been undertaken with the whole-hearted support of UNIDO and interested member countries which contributed experts free-of-cost to ECAFE.

It will be noted that although considerable progress had been made in identification of projects, the same degree of progress had not been achieved in respect of the other two major areas, namely, undertaking feasibility studies and implementation of projects.

Regional members of ECAFE have given serious consideration to this matter and have decided during the last session of the Commission held in Manila in April this year that necessary assistance should be sought from the United Nations Development Programme for the purpose of:

- (1) Creating the post of an Executive Director for AIDC, who will be responsible for undertaking follow-up work on all the projects, not only with the member Governments but also with the private sector, in order that speedy implementation of projects may be realized
- (2) Obtaining technical support for undertaking feasibility studies, and the preparation of engineering reports, etc.

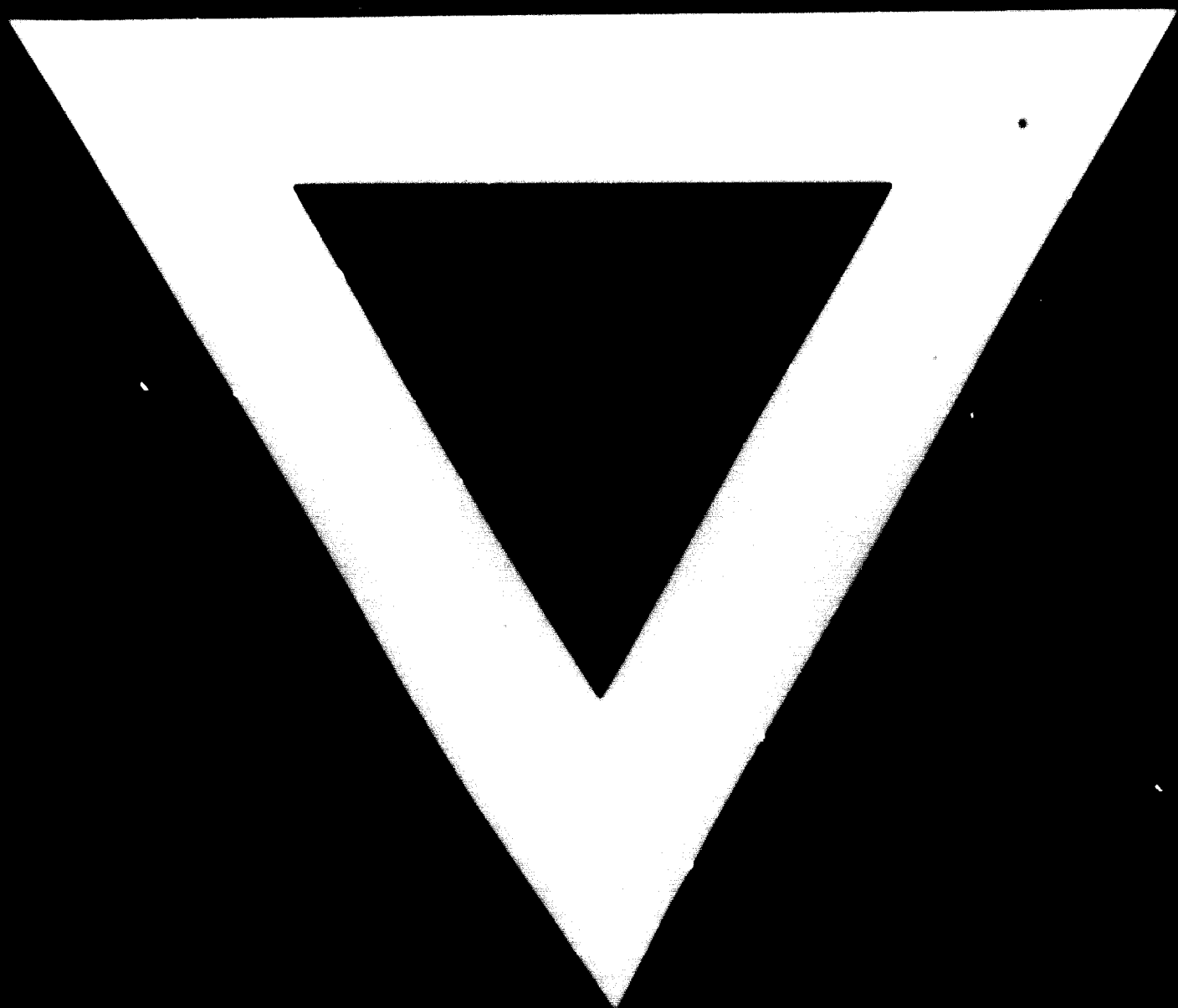
ECAFE secretariat has, accordingly, prepared a request for UNDP assistance involving a UNDP contribution of about US 200,000 over a period of 3 years and



circulated it to regional member countries for their consideration. Three countries, namely, Philippines, Nepal and Singapore had already submitted their applications to UNDP, New York, through the UNDP Resident Representatives in their respective countries.

Hopefully, if this request for UNDP assistance is approved next year, we can look forward to more intensified work in the promotion of industrial projects, including fertilizer projects in the developing countries of this region.





**12.7.74**