



**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)

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.

07522

UNITED NATIONS

Department of Economic and Social Affairs

Centre for Industrial Development

8 July 1966

---

CID/Ref./A.1  
Restricted distribution

\*SYMPOSLA, CONFERENCES, MEETINGS, SEMINARS AND WORKING GROUPS IN WHICH  
THE CENTRE FOR INDUSTRIAL DEVELOPMENT HAS PARTICIPATED.

A LISTING OF PAPERS

Prepared by the Reference and Documentation Unit

---

\* Excluding the Regional Symposia on Industrial Development.

66-45997

TABLE OF CONTENTS

		Page no.
I	Seminar on Industrial Estates in the ECAFE Region, Madras, India, 1-11 November 1961. . . . .	1
II	Seminar on the Development of Basic Chemical and Allied Industries in Asia and the Far East, Bangkok, 3-13 October 1962. . . . .	3
III	Seminar on Industrial Programming for the Latin American Region, Sao Paulo, 4-15 March 1963. . . . .	9
IV	Interregional Symposium on the Application of Modern Technical Practices in the Iron and Steel Industry to Developing Countries, Prague, 11-26 November 1963 . . .	15
V	Conference on the Development of the Fertilizer Industry in Asia and the Far East, Bombay, 18 November - 2 December, 1963. . . . .	20
VI	United Nations Conference on Trade and Development, Geneva, 23 March - 16 June 1964. . . . .	30
VII	Inter-Regional Seminar on the Cement Industry, Humlebaek, Denmark, 2 - 16 May, 1964. . . . .	33
VIII	Inter-Regional Seminar on the Social Aspects of Industrialization, Minsk, 11 - 25 August, 1964. . . . .	34
IX	Inter-Regional Seminar on the Role of Industrial Complexes in Economic Development, Tashkent, 22 September - 6 October, 1964. . . . .	36
X	Inter-Regional Seminar on Food Canning and Preserving Industries in Developing Countries, Copenhagen, 21 September - 10 October, 1964. . . . .	38
XI	Inter-Regional Conference on the Development of Petrochemical Industries in Developing Countries, Teheran, 16 - 30 November, 1964. . . . .	39
XII	Inter-Regional Seminar on Industrial Research and Development Institutes in Developing Countries, Beirut, 30 November - 11 December 1964. . . . .	50
XIII	United Nations Seminar on Industrial Estates in the Region of the Economic Commission for Africa, Addis-Ababa, 14 - 21 December 1964. . . . .	54
XIV	Inter-Regional Seminar on the Production of Fertilizers, Kiev, 24 August - 13 September 1965. . . . .	55

Table of Contents, cont'd

Page no.

XV	Inter-Regional Working Party on Training of Economic Administrators of the Developing Countries in Industrial Development held in Paris, 2 to 10 September 1965. . . .	61
XVI	Inter-Regional Workshop on Textile Industries in Developing Countries, Lodz, Poland, 6 - 27 September 1965	64
XVII	Inter-Regional Symposium on Industrial Project Evaluation, Prague, 11 - 29 October 1965. . . . .	67
XVIII	United Nations Inter-Regional Seminar on Promotion of Industrial Standardization in Developing Countries, Denmark, 4 - 25 October, 1965. . . . .	76
XIX	Expert Group on Second-Hand Equipment for Developing Countries, New York, 7 - 22 December 1965 . . . . .	77
XX	Meeting of Experts on Management of Industrial Research Institutes in Developing Countries, New York, 7 September - 7 October 1965. . . . .	79

I. SEMINAR ON INDUSTRIAL ESTATES IN THE ECAFE REGION, MALRAS, INDIA,  
1-11 NOVEMBER 1961

a. Report and Proceedings in:

Industrial estates in Asia and the Far East. 1962. 408p.

Contains Discussion papers and large excerpts from Information papers.

French edition: Les domaines industriels en Asie et en Extrême-Orient.

Spanish edition: Conglomeraciones industriales en Asia y el Lejano Oriente.

Sales No. 62.II.B.5 (ST/ECA/73)

b. Discussion Papers

- |                     |  |
|---------------------|--|
| No symbol           | Aspects of labour and management on industrial estates with special reference to small industries in Asian countries, prepared by ILO. |
| Sales No. 60.II.B.4 | Establishment of industrial estates in under-developed countries.  |
| No symbol           | *Industrial estates in India - co-operation between, and assistance to, small-scale units, by A.S.E. Iyer.                             |
| Sales No. 62.II.B.4 | Physical planning considerations relating to industrial estates.   |
| No symbol           | Physical planning of industrial estates, by T.S. Vedagiri.   |
| "                   | *Problems in establishment of large-scale industrial estates, by G.G. Lanham.  |
| "                   | Problems of developing industrial estates in a rural setting, by L. Wong.  |
| "                   | *The port and industrial zone of Marghera, by G. Giavi   |
| "                   | *The role of industrial estates in the industrial development of Ceylon, by E.C.S. Paul.   |
| "                   | *Some controversial questions concerning industrial estates, by A. Molinari.   |

---

\* These Discussion Papers together with large excerpts from Information Papers are reprinted in: Industrial estates in Asia and the Far East, Sales No. 62.II.B.5.

c. Information Papers\* (all without symbols)

Burma	Industrial estate scheme for Burma
Republic of China	Development of industrial districts in Taiwan, China
Hong Kong	The development of industrial estates in Hong Kong
India	Industrial estates programme in India Role of industrial estates in Indian planning, by D.K. Malhotra The major problems in setting up units for production in the industrial estates, prepared by the Indian Investment Centre Industrialization and the changing dimensions of caste occupation in India, prepared by the Research Centre on Social and Economic Development in Southern Asia, UNESCO
Indonesia	Possibilities of integrating industrial estates with the central production plants and mechanization aid
Iran	Planning the expansion of small industry in Iran
Japan	Industrial estates for small-scale industries
Republic of Korea	Korean industrial estates and medium and small industry
Laos	The development of industrial areas in Laos
The Federation of Malaya	Industrial estates in the Federation of Malaya
Nepal	The development of industrial estates in Nepal
Pakistan	Industrial estates in Pakistan
Sarawak	Industrial estates in Sarawak
Singapore	Role of industrial estates in the industrial development of Singapore
Thailand	Industrial development, industrial zoning and industrial estates in Thailand
USSR	Practice of construction and development of industrial towns
USA	Planned industrial parks (industrial estates) in the United States

---

\* All discussion and large excerpts of information papers have been re-printed in: Industrial Estates in Asia and the Far East (Sales No. 62.II.B.5).

II. SEMINAR ON THE DEVELOPMENT OF BASIC CHEMICAL AND ALLIED INDUSTRIES IN ASIA AND THE FAR EAST, BANGKOK, 3-13 OCTOBER 1962

a. Report and Proceedings:

Development prospects of basic chemical and allied industries in Asia and the Far East. 1963. 599p.

Contains all papers listed below except E/CN.11/I&NR/CHI/56, 68 and 69. Sales No. 64.II.F.9 (E/CN.11/635). English only.

b. General Series:

- E/CN/11/  
I&NR/CHI/1
- 1 Sulphuric acid industry in the Province of Taiwan, China, by K.C. Chang and T.H. Huang
  - 2 Economic and technical aspects of the electrolytic caustic and chlorine industry in the Province of Taiwan, China, by Y. Li.
  - 3 Role of Durgapur Project in Indian industrial development, by J.K. Ghosh
  - 4 Sulphuric acid - trends in production and consumption and key location factors, by W.R. Koster
  - 5 The Atlas Fertilizer Plant
  - 6 The sulphuric acid industry and allied products of the chemical industries of the Philippines
  - 7 The basic chemical industry in the Philippines, by Mariano P. Ramiro
  - 8 The soda ash and caustic soda industries with special reference to developments in India and Ceylon, by C.R. Rao
  - 9 Techno-economic aspects of sulphuric acid industry in India
  - 10 Production of industrial chlorine products, by Friedrich Uhde
  - 11 Salt industry in Japan
  - 12 Economic and technical aspects of the soda ash industry in Indonesia
  - 13 Economic and technical aspects of the salt industry in Indonesia, see E/CN.11/I&NR/CHI/53
  - 14 The possibilities of modernization of process, mechanization of transport handling, recovery of by-product and its related specific problems of salt manufacture in Indonesia



Seminar on Basic Chemicals, cont'd

- E/CH.11/  
IASIR/CHI/15
- Current pattern and future trends in the production, consumption and marketing of soda ash, caustic soda, chlorine and chlorine products, by H. Schmitt
  - 16 Techniques and equipment for storing, handling, transporting of liquid chlorine, by H. Schmitt
  - 17 Current pattern and future trend of production and consumption of sulphuric acid, by H. Schmitt and H. Mika
  - 18 Electrolytic process for the production of caustic soda and chlorine, including the latest improvements in the design and operation of chlorine-alkali cells of various types and the application of continuous method of brine purification, by H. Schmitt
  - 19 Common salt, sulphuric acid, soda ash, caustic soda and chlorine industries in Pakistan, by I.R. Khan
  - 20 Salt industry in Pakistan
  - 21 Techniques of programming development of basic chemical industries - common salt, sulphuric acid, soda ash and caustic soda, chlorine complex, by Japan Consulting Institute (Chiyoda-Ku)
  - 22 Manufacture of rayon grade caustic soda, by Japan Consulting Institute (Chiyoda-Ku)
  - 23 Recent technological advancement in the salt-making industry in Japan, by Japan Consulting Institute (Chiyoda-Ku)
  - 24 Utilization of chlorine in the newly developing countries of ECAPF region, by Japan Consulting Institute (Chiyoda-Ku)
  - 25 Development of ammonium chloride soda process in Japan, by Japan Consulting Institute (Chiyoda-Ku)
  - 26 Industrial possibilities by chemical processes based on agricultural, forestry, animal and marine products, by Ernst Markowicz
  - 27 Organic chemicals industries in India: prospects and problems, by G.J. Dalachanji
  - 28 Development of the basic chemical and allied industries in the Republic of Korea.

Seminar on Basic Chemicals, cont'd

- E/CH.11/  
I&NR/CHI/29
- Technical and economic aspects of the sulphuric acid production
- 30 Outline of Japan's sulphuric acid industry
- 31 Electrochemicals in the country's economy, by S. Ramiswamy
- 32 Economic aspects and technological progress of the ammonia-soda process of special importance to the soda industry in the region, including the manufacture of sodium bicarbonate and sodium hydroxide, by Klaus Falk
- 33 Fluidised bed roasting of sulphur pyrites, by H.D. Vyasaraghavan
- 34 Economic and technical aspects of the salt industry in Ceylon
- 35 The salt industry in Taiwan, by Jeyns C. Liu
- 36 Economic and organizational problems concerning sulphuric acid and allied industries encountered by Thailand, by C. Ratanarat and S. Bunnaz
- 37 Outline of Japanese soda industry
- 38 Sulphuric acid industry in India, by P.K. Seshan
- 39 Alkali industry in India, by P.K. Seshan
- 40 The development of soda ash industry in Taiwan, by Jin Tai Shen
- 41 Salt industry in India, prepared by P.K. Seshan and M.H. Gurunath
- 42 Planning for fertilizer production
- 43 The alkali industry in Pakistan, by Ahmad Shah Nawaz
- 44 Design and manufacture of chemical plants in India, by R.K. Gupta
- 45 Methods and practices for storage handling and transportation of liquid chlorine, by V.R. Pabbi and M.V. Kulkarni
- 46 Salt industry in India

Seminar on Basic Chemicals, cont'd

- E/CN.11/  
I&NR/CHI/47
- 47 Manufacture of chemical equipment in Taiwan, Republic of China
  - 48 Utilization of chlorine in Taiwan, Republic of China
  - 49 Promotion of the international flow of technical information
  - 50 The present position of basic chemical industries in India
  - 51 List of documents
  - 52 Tentative programme
  - 53 Economic and technical aspects of the salt and soda industry in Indonesia
  - 54 Recent development in technology of phosphoric acid, by M.D. Vijayaraghavan
  - 55 Activities of Durr-Oliver (India) Limited, for supply of plant and machinery of Indian manufacture, by M.D. Vijayaraghavan
  - 56 Thailand's raw materials for chemical industries, by Saman Buravas
  - 57 Oil refinery and petrochemicals projects in Thailand, by Abban Samargachan
  - 58 Major problems of the development of chemical industries in Thailand, by V. Bunyaketh
  - 59 Manufacture of sulphuric acid from sulfide ores with supply of dust-free calcining gas directly into contact apparatus (dry purification process), by A.G. Anelin
  - 60 The production of ammonium chloride at soda plants, by V.N. Panov
  - 61 Recent developments in the manufacture of chemical plant and equipment in India and engineering and construction of complete chemical fertilizer factories
  - 62 Rock salt of the Kerat plateau (Thailand)
  - 63 Improvement of Thai solar salt

Seminar on Basic Chemicals, cont'd

- E/CN.11/  
I&NR/CHI/64
- Prospects of a polyethylene plant in Thailand, by Sanchitr Yessuntara
  - 65 Recovery of mineral wealth from sea
  - 66 Technical and economic aspects of development and location of sulphuric acid, soda ash, caustic soda and chlorine production, by N.P. Svatsay
  - 67 The electrolytic industry of chlorine and caustic soda
  - 68 Horizontal rotating cathode electrolytic cell
  - 69 Continuous brine purification method
  - 70 Production of chemical fertilizers from lignite in Thailand, by S. Natasilpa
  - 71 International and regional co-operation in the development of basic chemical and allied industries in the region
  - 72 Draft report of the Seminar
  - 73 Some notes on sulphuric acid production in the UK

c. Limited Series

- E/CN.11/  
I&NR/CHI/L.1
- 1 The present state of and plans for the development of chemical industries in the region
  - 2 Techniques of programming development of basic chemical industries (with special reference to soda ash caustic soda-chlorine complex and sulphuric acid), by ECAFE Secretariat
  - 3 Invited provisional agenda
  - 4 Economic and technical aspects of salt industry in Asia and the Far East, by the ECAFE Secretariat
  - 5 Common salt: its production and uses - prepared by the Division of Industrial Development
  - 6 The soda ash industry in the Asia and the Far East region, by ECAFE Secretariat

Seminar on Basic Chemicals, cont'd

- E/CN.11/  
I&NR/CHI/L.7
- 7 The caustic soda industry in the Asia and Far East region,  
by ECAFE Secretariat
  - 8 Soda ash and the caustic soda-chlorine complex, by the  
Division of Industrial Development
  - 9 Development of sulphuric acid industry in the region,  
by Hans Sachsse
  - 10 Economic aspects of sulphuric acid manufacture from various  
raw materials, by the Division of Industrial Development
  - 11 Chemical plant and equipment manufacture in the ECAFE region,  
by ECAFE Secretariat

III. SEMINAR ON INDUSTRIAL PROGRAMMING FOR THE LATIN AMERICAN REGION, SAO PAULO, 4-15 MARCH 1963

a. Report:

Report of the United Nations Seminar on Industrial Programming, 1964. 61p.  
French edition: Rapport sur le cycle d'Études des Nations Unies sur la planification industrielle.  
Spanish edition: Informe del seminario de las Naciones Unidas sobre programación del desarrollo industrial.  
The proceedings have not been published.  
Sales No. 64.II.B.8 (E/CN.12/663)

b. Limited Series

ST/ECLA/  
CONF.11/L.1 Not used [?]

- 2 Algunas notas sobre problemas de programación industrial
- 3 Selection of techniques and manpower absorption
- 4 Choice of capital intensity in operational planning; for under-developed countries
- 5\* Economies of scale in relation to industrial programming;
- 6 ✓ Plant size and economies of scale, by CID. Reprinted in Ind. & Prod. bulletin No. 2 (Sales No. 64.II.B.6)
- 7\* La experiencia de los Grupos asesores en la formulación de los programas de desarrollo de la industria manufacturera
- 8 Industrial programming in the ECAFE region, by ECAFE
- 9 India's experience in industrial planning, by CID
- 10 Japan's experience in industrial planning, by CID
- 11\* Algunos problemas metodológicos planteados por la programación de la industria de máquinas-herramientas y otros equipos
- 12\* Criterios y antecedentes para la programación de la industria de máquinas-herramientas
- 13 Not used

---

\* No master copy available

Seminar on Industrial Programming, cont'd

ST/ECLA/  
CONF.11/L.14\*

- Economías de escala en la fabricación de tubos de acero con costura
- 15\* Economies of scale in steel making: a progress report, by ECLA
- 16 Considerações preliminares sobre las economías de escala na industria automobilística brasileira, by ECLA
- 17\* Economías de escala en las industrias químicas, by ECLA
- 18 Nitrogenous fertilizers based on natural gas  
Reprinted in Sales No. 63.II.B.3, Part I
- 19 Programming data and criteria for the pulp and paper industry, by ECLA/FAO/BTAG
- 20 Economías de escala en la industria textil
- 21 Elementos de una metodología para la programación de industrias tradicionales: la industria textil
- 22 Pre-investment data for food processing industries
- 23 Programming data and criteria for the cement industry  
Reprinted in Sales No. 63.II.B.3, Part II
- 24 Pre-investment data in the aluminium industry, by Jan H. Reimers  
Revision announced for July 1966 publication as Sales No. 66.II.B.10 (ST/CID/9)
- 25 Material, labour, capital, and flow inputs in construction in the Soviet Union
- 26 Classification of industrial structures in the Soviet Union
- 27 Evaluation of projects in predominantly private enterprise economies: selected procedures based on case studies.  
Reprinted in Ind. & Prod. bulletin No. 5 (Sales No. 62.II.B.1)
- 28 The Inter-American Development Bank and industrial development in Latin America  
Reprinted in Ind. & Prod. bulletin No. 7 (Sales No. 64.II.B.1)

---

\* No master copy available

Seminar on Industrial Programming, cont'd

ST/ECLA/  
CONF.11/L.29

- Project appraisal, by IBRD
- 30 Evaluation of projects in centrally planned economies, by CID  
Reprinted in Ind. & Prod. bulletin No. 8 (Sales No. 64.II.B.6)
- 31 La creación de la industria automovilística brasileña analizada como un caso de programación sectorial
- 32 La industria de máquinas-herramientas del Brasil - elementos para la programación de su desarrollo (E/CN.12/633)
- 33 Industrial promotion policy and industry programming
- 34 French experience in industrial planning, by the French Planning Commission

c. CID Background Papers

Background Paper

- Number 1 Capital intensity in industry in under-developed countries  
In Ind. & Prod. bulletin No. 1, Sales No. 58.II.B.2
- 2 Choice of technology in industrial planning, by J. Tinbergen  
In Ind. & Prod. bulletin No. 1, Sales No. 58.II.B.2
- 3 Problems of size of plant in industry in under-developed countries  
In Ind. & Prod. bulletin No. 2, Sales No. 59.II.B.1
- 4 Choice of industrial technology: the case of wood-working, by G.K. Brown  
In Ind. & Prod. bulletin No. 3, Sales No. 60.II.B.1
- 5 Use of models in programming  
In Ind. & Prod. bulletin No. 4, Sales No. 60.II.B.2
- 6 Choice of techniques, by S. Okita  
In Ind. & Prod. bulletin No. 4, Sales No. 60.II.B.2
- 7 Projection of demand for industrial equipment  
In Ind. & Prod. bulletin No. 4, Sales No. 62.II.B.2



Seminar on Industrial Programming, cont'd

- Backer and Paper  
Number 8
- Report of the meeting of the Expert Working Group on Industrial Development Planning Data, by CID/ECLA/BTAO  
In Ind. & Prod. bulletin No. 5, Sales No. 62.II.B.1
- 9 A study of industrial growth  
Reprinted as Sales No. 63.II.B.2
- 10 Methods of analysis and projection of demand for industrial consumer goods, by CID  
Reprinted in Ind. & Prod. bulletin No. 9, Sales No. 65.II.B.6
- 11 Organizational aspects of planning  
Reprinted in Ind. & Prod. bulletin No. 9, Sales No. 65.II.B.6
- 12 Economic role of the dualistic nature in the industrial development of Japan, by T. Watanabe  
Reprinted in Ind. & Prod. bulletin No. 8, Sales No. 64.II.B.6
- 13 Proposals for an industrialization programme in Singapore, excerpts from the report prepared by a BTAO team of experts
- 14\* Manpower requirements in industrial planning, the Japanese experience, by S. Okita
- 14\* Aspects of the design of machinery production during economic development, by S. Iman
- 15 Engineering estimates of capital labour substitution in metal machining operations, by A.S. Manne and M. Kurz, CID
- 16 Factor proportion in the industrial sector, by G.K. Boon, CID
- 17 Investment in infra-structure versus direct production facilities, by J. Pajestka  
Reprinted in Ind. & Prod. bulletin No. 9, Sales No. 65.II.B.6

---

\* Number erroneously used twice

Seminar on Industrial Programming, cont'd

d. ECLA Documents

- E/CN.12/363      Introducción a la técnica de programación
- 493      The industrial development of Peru
- 535      Programming techniques for economic development
- 567      Formulating industrial development programmes
- 584      La experiencia de los Grupos Asesores y los problemas prácticos del desarrollo económico
- 619      The manufacture of basic equipment in Brazil
- 622      La industria textil de Chile (Sales No. 63.II.G.5)
- 623 and      La industria textil de Brasil - pesquisa sobre as  
Add.1      condições de operação nos ramos fiação e tecelagem.  
2 vols. (Sales No. 64.II.G.2)
- 628 and      La industria química en América Latina. 2 vols.  
Add.1-3      (Sales No. 64.II.G.4)
- 629 and      Estudios sobre la fabricación de equipos industriales  
Add.1-5      de base en la Argentina
- Development policies and programmes, by Hollis B. Chenery  
(off-print from the Economic Bulletin for Latin America,  
Vol.III, No. 1, March 1958)

e. ECAFE Documents

- E/CN.11/535      Programming techniques for economic development,  
report by a group of experts
- 567      Formulating industrial development programmes, report  
by a group of experts

f. ECE Documents

- (E/ECE.439      Production and exports of capital goods in the fields  
(and Add.1      of mechanical and electrical engineering  
(ST/ECE/ENG.1)

C. Other Documents

No Symbol	Instituto Latinoamericano de Planificación Económica y Social: Análisis y programación industrial
"	Gobierno de Colombia: Plan general de desarrollo económico y social de Colombia - sección industrias

IV. INTER-REGIONAL SYMPOSIUM ON THE APPLICATION OF MODERN TECHNICAL PRACTICES  
IN THE IRON AND STEEL INDUSTRY TO DEVELOPING COUNTRIES, PRAGUE, 11-26  
NOVEMBER 1963

a. Report and Proceedings:

Proceedings of the United Nations Interregional Symposium on the Application of Modern Technical Practices in the Iron and Steel Industry to Developing Countries. 1963. 155p.

Contains Discussion Papers and Discussion Summaries  
Sales No. 64.II.B.7 (ST/CID/1). English.

b. Discussion Papers

(All reproduced in Sales No. 64.II.B.7)

- |                              |   |
|------------------------------|---|
| Discussion Paper/<br>Sect. 1 | The modern iron and steel industry, by the Centre for Industrial Development  |
| 2                            | Preparations of ore for blast furnace iron making, by K.I. Chirkova and V.V. Miller   |
| 3                            | Problems arising in the establishment and development of the iron and steel industry in less-developed countries, by ECE.   |
| Discussion Paper/<br>ECA 1   | Raw materials in Africa for iron steel manufacture, by ECA  |
| 2                            | The iron and steel industry in Africa, by ECA   |
| Discussion Paper/<br>ECAFE 1 | Availability of raw materials for iron and steel making in the ECAFE region, by ECAFE                                       |
| 2                            | Review of the iron and steel industry in the ECAFE region, by ECAFE   |
| Discussion Paper/<br>ECE 1   | Trends in the production and consumption of iron and steel-making raw materials in Europe and in the United States, by ECE  |
| 2                            | Present and future trends of production and consumption of pig-iron and crude steel in Europe and the United States, by ECE |
| Discussion Paper/<br>ECLA 1  | Steel-making raw materials in Latin America, by ECLA  |
| 2                            | The iron and steel industry of Latin America: plans and perspectives, by ECLA   |

Symposium on Iron and Steel, cont'd

c. Technical Papers

- 1.1 Exploration of a small iron ore deposit, by J. Coarsi and G. Bossi
- 2 Ore exploration and exploitation - intermediate scale, by R. Wasnuht and R. Tschöpke
- 3 Ore exploration and exploitation on a large scale, by H. Renn
- 4 Standard methods of beneficiation and concentration - blending, separating, sizing and agglomeration, by M. Nakatsuyama
- 5 Pelletizing, by J.E. Astier
- 6 Krupp-Renn experience in Czechoslovakia, by J. Mach and B. Verner
- 7 Sintering: - a general review, by H. Lehmkuhler
- 8 The production of high quality sinter, by J.E. Greenawalt
- 9 Large scale production of sinter, by A. Rulkev
- 10 Sintering practice on large scale: continuous strand plants, by G. Brandes and L.R. Chaulhary
- 11 Operation of a large blending plant, by P. Maertens
- 12 Small steel plants - their influence on developing countries, by M.N. Dastur
- 13 The Canadian steel industry - a pattern of growth, by W.K. Buck and R.B. Elver
- 14 Growth pattern of the iron and steel industry in India's economic development, by D.R. Nijhawan
- 15 Problems connected with development of a metallurgical work with a closed production cycle, by W. Musialek
- 16 Economic considerations for steel plants in developing countries, by W.T. Hogan
- 17 The use of poor coking coals in the iron and steel industry, by R. Loison

Symposium on Iron and Steel, cont'd

- A.18 Substitutes for coking coals in the blast furnace, by  
M. Fine, J. de Carlo and E. Sheridan
- 19 Substitutes for coking coals in iron ore reduction, by  
H.R. Brown and W.R. Hesp
- 20 Electric energy requirements for steel plants, by  
H.W. Lownie, Jr. and R.E. Presnell
- 21 Electric pig iron smelting, by H. Rekar and J. Starc
- 22 Electric steel melting, by G. Scotti and F. Grossi
- 23 Electric furnace steel production in Peru, by E. Palacio  
(No master copy available)
- 24 Iron ore exploration and exploitation on a large scale -  
Liberia, by A. Momolu Massaquoi
- 25 Progress in electric pig-iron smelting furnaces, by  
F.C. Collin

d. Technical Papers

- B.1 Technical progress in iron making, by V.G. Voskobochnikov
- 2 Charcoal blast furnace operations, by A. Constantine
- 3 General review of direct reduction processes, by F.M. Wiberg
- 4 Comparative evaluation of direct reduction processes, by  
H. Poblete
- 5 The SL direct reduction process, by D.J. Haine
- 6 The HyL process, by J. Celada and J. Skelly
- 7 The Echeverria ore reduction process, by G. Cedarvall
- 8 The Strategic-Udy iron smelting process, by K. Sandbach
- 9 Number cancelled
- 10 Comparison of steel making processes, by ECE
- 11 Open hearth steel making with oxygen, by M. Trotta and  
B. Sommacal

Symposium on Iron and Steel, cont'd

- B.12 Oxygen-lime steel making practices, by B. Trentini
- 13 Problems of quality in steel production, by J. Pearson
- 14 Steel standards and standardization on country-wide basis,  
by B.S. Krishnamachar
- 15 Steel standards and regional standardization, by F. Aguirre  
and A. Gomez
- 16 Continuous casting - developments and current installations,  
by I.M.D. Halliday
- 17 Continuous casting - present and future prospects, by  
E.I. Astrov
- 18 The continuous casting of round sections, by B. Tarmann  
and W. Poppmeier
- 19 Technical and economic feasibility planning for a small  
iron and steel plant, by I.D. Dick and T. Marshall
- 20 Project planning and construction - intermediate scale,  
by M. Perez
- 21 Project planning and construction - large scale steel plant,  
by M. Gonni
- 22 Problems raised by the establishment of an iron and steel  
plant, by M. Allard
- 23 Regional integration of the steel industry in Latin America,  
by F. Aguirre
- 24 Training of engineers and operators for new steel operations  
in developing countries, by J.A. Berger
- 25 The Purofer direct reduction process, by Ludwig von Bogdandy
- 26 The Kaldo process, by F. Johansson
- 27 The iron and steel industry of Southern Rhodesia, by W. Wells
- 28 The use of charcoal in blast furnace operation, by FAO

Symposium on Iron and Steel, cont'd

e. Discussion Summaries

(DS-1 - 14 reprinted in Sales No. 64.II.B.7)

- |      |  |
|------|--|
| DS-1 | Raw materials and their preparation  |
| 2    | Problems arising from the establishment and development of iron and steel industries in developing countries |
| 3    | Exploration and exploitation of iron ore reserves  |
| 4    | Blast furnace: operation and developments  |
| 5    | Beneficiation and concentrations   |
| 6    | Direct reduction processes   |
| 7    | Sinter practice  |
| 8    | Developments in and comparison of steel making processes   |
| 9    | Non-integrated and semi-integrated plant operations  |
| 10   | Quality factors and standardization  |
| 11   | Improvement or substitution for non-coking coals   |
| 12   | Continuous casting   |
| 13   | Electricity in the steel industry  |
| 14   | Project planning and construction  |
| 15   | Closing of Prague Discussion Sessions  |



V. CONFERENCE ON THE DEVELOPMENT OF THE FERTILIZER INDUSTRY IN ASIA AND THE FAR EAST, BOMBAY, 18 NOVEMBER - 2 DECEMBER, 1963

a. Report:

Report of the Conference. 1963. 80p.  
The proceedings have not been published.  
E/CN.11/IGNR/51. English

b. Limited Series

E/CN.11/L.1/Rev.1  
FI/L.1/Rev.1

Agenda

- 2 The present state of and plans for the development of fertilizer industry in the ECAFE Region
- 3 Development of the phosphatic fertilizer industry in the Region
- 4 Fertilizer plant and equipment manufacture in the Region
- 5 Development of the potash fertilizer industry in the ECAFE Region
- 6 Anticipated requirements of chemical fertilizers in the Region up to 1975, presented by FAO
- 7 Technical and economic aspects of mixed fertilizers in Asia and the Far East, by Raymond Ewell, Centre for Industrial Development
- 8 Potassium compounds by solar evaporation, by E.W. Douglass, Centre for Industrial Development
- 9 Potash sources for Asia and the Far East, by E.W. Douglass, Centre for Industrial Development
- 10 Development prospects and investment needs of the fertilizer industry in the Region
- 11 & Add.1 Storage, packaging, handling and transportation of fertilizers
- 12 Conversion of ammonia to nitrogenous fertilizers
- 13 Development of nitrogen industry in the Region

Conference on Fertilizer Industry, cont'd

c. General Series

- ICNR/FI/1                      Development of the fertilizer industry in the Philippines, by Alfonso Q. Briones
- 2                              Response of some important Indian crops to fertilizers and factors influencing this response, by V.G. Panse and R.C. Khanna, Institute of Agricultural Research Statistics, New Delhi
- 3                              New processes in the manufacture of high grade fertilizer materials, by A. Alon, Israel Mining Industries Laboratories, Haifa, Israel
- 4                              Potassium metaphosphate as fertilizer and fertilizer intermediate, by A. Bercsky, Chemicals and Phosphates, Ltd., Israel
- 5                              Potassium fertilizers from seawater, by D.S. Datar, Central Salt and Marine Chemicals Research Institute, Bhavnagar, India
- 6                              Synthesis and transformation of plant nutrients by micro-organisms, by A.C. Das, The Fertilizer Corp. of India, Ltd., Sindri
- 7                              Role of catalysts in fertilizer industry, by The Fertilizer Corp. of India, Ltd., Sindri
- 8                              By-product ammonium sulphate from coke oven industries, by A.C. Srivastava and B.K. Dutta, The Fertilizer Corp. of India, Ltd., Sindri
- 9                              By-product carbon dioxide in fertilizer industry: its recovery and use, by U.R. Warhadpande and A.K. Bhattacharji, The Fertilizer Corp. of India, Ltd., Sindri
- 10                             Nitrogen solutions-prospects of their manufacture and use in India, by The Fertilizer Corp. of India, Ltd., Sindri
- 11                             Technical and economic aspects of ammonia manufacture, by P. Pothan and V.N. Kasurirange, Fertilizers & Chemicals Travancore, Ltd., India.

Conference on Fertilizer Industry, cont'd.

- I&NR/FI/12      Manufacture of ammonium sulphate by the method of direct neutralization and the Marseberg Reaction, by K.C. George and N.D. Gopinath, Fertilizers...etc.
- 13      Ammonium chloride (ammonia and hydrochloric acid process), by S.R.S. Sastry and S. Sundaram, Fertilizers...etc.
- 14      Ammonium phosphate and ammoniation of superphosphate, by V.N. Kasturirangan and S.M. Sastri, Fertilizers... etc.
- 15      Non-granular mixed fertilizers by S.M. Sastri and R. Sankaran Nair, Fertilizers... etc.
- 16      Survey of the processes for ammonia synthesis gas manufacture from different raw materials in India, by Fertilizer Corp. of India, Ltd., Sindri
- 17      Manufacture of phosphatic fertilizer by different processes - a comparative study with particular reference to Indian conditions, by Fertilizer Corp. of India, Ltd., Sindri
- 18      Potash fertilizer - requirement and production possibilities in India, by Fertilizer Corp. of India, Ltd., Sindri
- 19      Problems concerned with storage, bagging and handling of fertilizers in countries of this region, by Fertilizer Corp. of India, Ltd., Sindri
- 20      Impediments to adequate fertilizer use in India and suggested ways of overcoming them, by C.R. Ranganathan, The Fertilizer Ass'n. of India, New Delhi
- 21      Balanced fertilization, by J.R. Ward, R. Parry, Ltd., Madras
- 22      The use of Urea in agriculture and industry, by H. Dickmann, Fed. Republic of Germany
- 23      The leaching behaviour of nutrients of fertilizers in the soil, by H. Dickmann, Fed. Republic of Germany
- 24      Ammonium chloride as fertilizer, by H. Dickmann, Fed. Republic of Germany
- 25      Ammonium nitrate and safety measures, by H. Dickmann, Federal Republic of Germany
- 26      The production of ammonium sulphate based on gypsum, by H. Dickmann, Fed. Republic of Germany

Conference on Fertilizer Industry (cont'd.)

- I&NR/FI/27            Manufacturing process of ammonium sulphate nitrate,  
by H. Diekmann, Fed. Republic of Germany
- 28                    The use of fertilizers in India, by U.S. Patel,  
Gov't. of India
- 29                    Storage, packaging, handling and transportation of  
fertilizers, by P.M. Thomas
- 30                    The present state of and plans for the development  
of fertilizer industry in India, by M.N. Kale,  
Dept. of Technical Development, New Delhi
- 31                    Prospects of high-analysis package fertilizers in  
India, by Fertilizer Corp. of India, Ltd., Sindri
- 32                    Application of secondary and trace elements, by  
P.V. Mane and S.N. Kenaday, Swati Industries Prvt.  
Ltd., Bombay
- 33                    A study of limitations of mixing secondary and  
minor elements with NPK fertilizers, by P.V. Mane  
and S.N. Kenaday, Swati Industries Prvt. Ltd.,  
Bombay
- 34                    Training requirement and development of fertilizer  
industry, by P.G. Borwankar and O.P. Agarwal,  
Fertilizer Corp. of India, Ltd., Sindri
- 35                    The organization of large fertilizer plants, by  
J. Simon, Fertilizer Corp. of India, Ltd., Sindri
- 36                    Special problems met with in setting up and  
operating fertilizer plants in underdeveloped  
countries, by J. Simon, Fertilizer Corp. of India,  
Ltd., Sindri
- 37                    Working aspects of urea production by "once  
through process" at Sindri, by G.S. Mathur and  
V.B. Ghatnekar
- 38                    Production of ammonia from various raw materials  
and its economics, by E. Kapp
- 39                    The fertilizer industry of Taiwan, by Gov't. of the  
Republic of China

Conference on Fertilizer Industry (cont'd.)

IC NR/FI/40

- The present status and prospects of fertilizer use in Taiwan, by S.C. Chang, National Taiwan University, Taipei
- 41 The manufacture of ammonium sulphate and ammonium nitrate in Taiwan, by F.C. Wong and W.P. Han, Kachsiung Ammonium Sulphate Corp., Taiwan
- 42 The manufacture of urea in Taiwan, by T.H. Shen and Sherwood B.E. Chin, Taiwan Fertilizer Co., Nankong
- 43 The manufacture of calcium cyanamide in Taiwan, by T.H. Huang, I.P. Yu, and L.C. Cheng, Engineering Dept., Taiwan Fertilizer Co., Taipei
- 44 The manufacture of nitro-chalk in Taiwan, by H.C. Cheng, Taiwan Fertilizer Co., Hualie, Taiwan
- 45 The manufacture of phosphatic fertilizers in Taiwan, by T.H. Huang, I.P. Yu, and L.C. Cheng, Engineering Dept., Tai Fertilizer Co.
- 46 Comparison of selected processes for the production of Np-fertilizers with view to requirements in sulphur, to investment and production cost, by H. Banthien, Hoeschst-Uhde International GmbH, Frankfurt am Main
- 47 Selection of suitable coals for ammonia synthesis at Sindri, by S. Vedaraman, Fertilizer Corp. of India, Ltd., Sindri
- 48 Corrosion in the water scrubbing system for the removal of carbon dioxide from converted gas for ammonia synthesis at Sindri, by S. Vedaraman, Fertilizer Corp. of India, Ltd., Sindri
- 49 Quality control in the production of nitrogenous fertilizers at Sindri, by S. Vedaraman, Fertilizer Corp. of India, Ltd., Sindri
- 50 Ammonium nitrate based explosives for commercial use, by G.H. Perks, Indian Explosives Ltd., India

Conference on Fertilizer Industry (cont'd).

- I&NP/FI/51
- Possibilities for nitrophosphate production especially in countries in short supply of sulphur, by F.W. Brandt and K. Geiersberger, Chemische Fabrik Kalk, Cologne, Fed. Republic of Germany
- 52 Development of potassium salts from the sea salt bitterns in India for fertilizer purposes, by fertilizer purposes, by P.K. Seshan, Dept. of Technical Development, New Delhi
- 53 Exploitation of potash resources in West Pakistan, by A.S. Nawaz, Chemical Consultants (Pakistan) Ltd., Lahore
- 54 Fertilizer use in the less developed countries, by J. E. Adams, U.S. Dept. of Agriculture, Maryland
- 55 Development of fertilizer industry in Viet-Nam, by Govt. of the Republic of Viet-Nam
- 56 and Add.1 Development of fertilizer industry in Indonesia, by Bureau for Industrialization, Dept. of Basic Industries and Mining of the Republic of Indonesia
- 57 Occupational safety and health in the chemical fertilizer industry, by ILO
- 58 Urea as a raw material for the synthetic resins industry, by N. Srinivasan, Ministry of Economic and Defense Coordination, New Delhi
- 59 Manufacture of fertilizer plants and equipment in India with particular reference to phosphatic fertilizers, by M.D. Vijayaraghaven, Dorr-Oliver (India) Ltd., Bombay
- 60 Wet process phosphoric acid manufacture, by A.N. Vakil, Dorr-Oliver (India) Ltd., Bombay
- 61 The application of complex fertilizers in India and the Far East from an ecological point of view, by F.K. Brandt and H. Stimming, Chimesch, Fabrik Kalk, Fed. Republic of Germany
- 62 Mixed fertilizers, by Tallis India, Ltd., Bombay

Conference on Fertilizer Industry (cont'd.)

- I&NR/FI/63      Technical and economic aspects of superphosphate production in India, by J.L. Thakkar, The Dharan Morarji Chemical Co., Ltd., Bombay
- 64      The fertilizer industry in Korea, by Govt. of the Republic of Korea
- 65      Technical and economic aspects of the manufacture of mixed fertilizers in Japan, by Ministry of Int. Trade and Industry, Japan
- 66      Development of the phosphoric fertilizer industry in Japan, by Ministry of Int. Trade and Industry, Japan
- 67      Anticipated requirements of chemical fertilizers in Japan, by Ministry of Agriculture and Forestry, Japan
- 68      The present state of and plans for the development of fertilizer industry in Japan, by Ministry of Int. Trade and Industry, Japan
- 69      Storage, packing, handling and transportation of fertilizers. Flow of shipments and seasonal demand of fertilizers, by H. Bantien, Hoechst-Uhde International GmbH, Frankfurt am Main
- 70      Agricultural conditions that influence the choice of fertilizers and their efficiency, by G.W. Cooke, Rothamsted Experimental Station, Harpenden, England
- 71      The latest urea processes development in Japan, by N. Tsuda, Japan Consulting Institute, Tokyo
- 72      Studies in the production of complex and other Np-fertilizers, by A.K. Mitra, K.T. Bhandari, K.S. Viswanathan & S.K. Mukherjee of Fertilizer Corp. of India, Ltd.
- 73      Fertilizer grade ammonium nitrate as a field compounded explosive for the mining industry, by N.B. Tandolkar & S.K. Mukherjee, Fertilizer Corp. of India, Ltd.

Conference on Fertilizer Industry (cont'd.)

- I&NR/FI/74
- Relative merits of urea processes with partial recycle and/or one pass integrated with ammonium nitrate plants against total recycle, by K.H. Chaurey & S.K. Mukherjee, Fertilizer Corp. of India, Ltd.
- 75 Production of granular nitro-lime fertilizer, by A.K. Mitra & S.K. Mukherjee, Fertilizer Corp. of India, Ltd.
- 76 Influence of operating pressure on costs in commercial plants for nitric acid production, by K.T. Bhandari, V.M. Johaapurkar & S.W. Mukherjes, Fertilizer Corp. of India, Ltd.
- 77 Analysis of possible investment and production costs for alternative schemes for production of ammonia, by K.S. Viswanathan & S.K. Mukherjee, Fertilizer Corp. of India, Ltd.
- 78 Technoeconomic evaluation of recent trends in the production of ammonia synthesis gas, by A.V. Naganathan & S.K. Mukherjee, Fertilizer Corp. of India, Ltd.
- 79/Corr.1 Recent technological developments in high-analysis Np-fertilizers, by S.K. Mukherjee, Fertilizer Corp. of India, Ltd.
- 80 Some important missing links in the manufacture of chemical plant and equipment in India, by S.K. Mukherjee, Fertilizer Corp. of India, Ltd.
- 81 A review of urea synthesis processes, by Chemical Construction Corp. N.Y.
- 82 Advance in the technology of fertilizer processes, by Strelzoff & S. Vasan, Chemical Construction Corp. N.Y.
- 83 Fertilizer use in Ceylon, by Govt. of Ceylon
- 84 Provisional annotated agenda
- 85 Development of the fertilizer industry in Pakistan, by Ahmed Ghad Nawaz, Chemical Consultants (Pakistan) Ltd.
- 86 The present state of and plans for the development of fertilizer industry in Thailand by Govt. of Thailand



Conference on Fertilizer Industry (cont d.)

- I&NR/FI/87 Economic factors in the choice between processes for manufacture of phosphate fertilizers, by U.K. Govt.
- 88 Technical factors affecting fertilizer use in New Zealand, by P.B. Lynch, Dept. of Agriculture, New Zealand
- 89 The techno-economic aspects of processes for the acid solubilization of phosphates, by Wm. C. Weber and R.H. Oliver, Fertilizer Development, Dorr-Oliver Inc., Stamford, Conn.
- 90 Statements on crop responses and fertilizer requirements, by Govt. of Thailand
- 91 A plan to set up in developing countries standard package anhydrous ammonia plants with an annual productive capacity of 20,000 tons couples with the scheme for distribution of agricultural ammonia, by J. Caupin, S.A. L'Ammoniac Agricole, Pas-de-Calais, France
- 92/Corr.1 Technical aspects of the production of phosphorus fertilizers, by Government of the U.S.S.R.
- 93 Development of nitrogen industry in the region (the manufacture of synthetic ammonia) by L.S. Axelrod & T.E. O'Hare (H.V. Kellogg Co.)
- 94 Complex fertilizers by the nitrocarbonic process: their part in the development of the fertilizer industry in the countries of South East Asia and the Far East, by A. Kleiber
- 95 Fertilizer use in Afghanistan, by A.M. Karzay, Ministry of Agriculture, Govt. of Afghanistan.
- 96 Methods of producing potassium sulfate for fertilizer use in the USA, by E.W. Douglass, Centre for Industrial Development
- 97 Low temperature co-conversion, by J.M. Hoe, Girdler Catalysts Chemical Products Div., Chemetron Corp., Kentucky
- 98 Development of nitrogen industry in the region. Special economic factors relating to integrated nitrogen plants, by L.S. Axelrod, L.L. Dowling and T.E. O'Hare, H.V. Kellogg Co., N.Y.

Conference on Fertilizer Industry (cont'd.)

- I&NR/FI/99      Some technical aspects in the production of phosphorus fertilizers, by N.S. Ulianov (U.S.S.R.)
- 100      Concerning some problems of mineral fertilizer production and utilization in the U.S.S.R., by H.V. Katalymov (U.S.S.R.)
- 101      Review of crops responses and fertilizers requirements, by Indian Agricultural Research Institute, New Delhi
- 102      Regional and international cooperation in the development of the fertilizer industry. Note by Secretariat.
- FI/1      Development of the fertilizer industry in the Philippines, by Govt. of the Philippines

VI. UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT, GENEVA, 23 MARCH -  
16 JUNE 1964

a. Report and proceedings:

Trade and development. 1964 - 1965

8 volumes

Sales nos. 64.II.B.11 - 18. English. Vols. 1 - 4, 7 - 8 in French.

Vol. 3 in Russian.

b. Papers of particular interest to the Centre for Industrial Development

General series

E/CONF.46/6

Measures for expansion of markets of the developed countries for exports of manufactures and semi-manufactures of developed countries.

Reprinted in vol.4\*

- 11 General study of exports of manufactured and semi-manufactured goods from developing countries and their role in development (C.I.D.)

Reprinted in vol.4\*

- 14 & 1 An analysis of the proceedings of the United Nations Corr. Conference on Science and Technology related to problems of export of manufactured goods from developing countries. (C.I.D.)

Reprinted in vol.4\*

- 22 Inter-governmental cooperation in market research and marketing advisory services to help expand exports from developing countries (ECE).

Reprinted in vol.7\*

- 28 Expert Group report on planning for economic development (see document A/5533)

- 31 Implications for trade and development of developing countries of economic groupings of developed countries and/or preferential trading arrangements (ECE).

Reprinted in vol.6\*

---

\* See above under a. Report and proceedings.

Conference on Trade & Development (cont'd.)

E/CCNF.46/33

- Promotion of exports of small industry products from developing countries (C.I.D.)  
Reprinted in vol.4\*
- 34 Trade problems between countries having different economic and social systems (ECE)  
Reprinted in vol.6\*
- 35 Past trade flows and future prospects for trade between the centrally planned economies and developing countries (ECE)  
Reprinted in vol.6\*
- 43 Possibilities and measures of expanding exports from the manufacturing sector in Mexico (C.I.D.)
- 54 Exports of manufactures and industrial development of Hong Kong (C.I.D.)
- 64 Methods and experiences in promoting exports of manufactured goods in Yugoslavia (C.I.D.)
- 76 India - Policies and measures for promotion of exports of manufactures and semi-manufactures (C.I.D.)
- 77 Poland's export promotion policy for manufactures and semi-manufactures (C.I.D.)
- 78 Argentina - exports of manufactures and semi-manufactures (C.I.D.)
- 94 Memorandum on trade in manufactures and semi-manufactures - submitted by Yugoslavia.  
Reprinted in vol.4\*
- 98 Resolution of the Committee for Industrial Development on United Nations machinery in the field of industrial development (March 1964)  
Reprinted in vol.5\*
- 102 Deliveries on credit of industrial equipment, reimbursable in quotas from the resultant production - submitted by Romania.  
Reprinted in vol.5\*

---

\* See above under a. Report and proceedings

Conference on Trade & Development (cont'd)

c. Contributed papers

- E/CONF.46/P/2 Problems and prospects in the export of manufactured goods from the less-developed countries, by R. Vernon  
Reprinted in vol.4\*
- P/4 A framework for trade between developed and less developed countries, by I. Gal-Edd.  
Reprinted in vol.5\*
- P/8 Possibilities of establishing food processing industries in developing countries for export, by B.D. Heumark
- P/9 India - export possibilities for Indian manufactures in the European markets, by B.P. Adarkar
- P/10 Aluminum as an export industry, by H. Bachman
- P/11 Brazil: outlook for promotion of exports of manufactures, by E. Grosco
- P/12 Exports of manufactures and industrial development of Japan, by H. Kanamori

---

\* See above under a. Report and proceedings

VII. INTER-REGIONAL SEMINAR ON THE CEMENT INDUSTRY, HULLEBAEK, DENMARK,  
2 - 16 MAY, 1964

Report:

Report of the Interregional seminar --- 1965  
ST/T.C/SER.C/71 English

VIII. INTER-REGIONAL SEMINAR ON THE SOCIAL ASPECTS OF INDUSTRIALIZATION,  
LINCOLN, 11 - 25 AUGUST, 1964

a. Report:

Report of the interregional seminar - 1965. 80 p.  
Sales no. 65.IV.7 (ST/TAO/SER.C/74) English

b. Working papers

Paper No.

- 1 The social planning role of trade unions in the USA, by R.M. Haughton
- 2 Social services in industry, by the United Nations Bureau of Social Affairs
- 3 Industrial development in relation to general economic growth, by S.N. Malinin
- 4 Coordination of social planning with industrial development, by K. Chowdhry
- 5 Coordination of social planning with industrial development planning, Office of Social Affairs, Geneva
- 6 Housing construction and related community facilities within industrial development, United Nations Bureau of Social Affairs
- 7 The question of human resources in industrial growth, by the United Nations Centre for Industrial Development
- 8 Health aspects of industrialization by WHO
- 9 The problem of skills in industrial development: and some general considerations, by K.G.V. Krishna
- 10 Coordination of social planning with industrial development planning: Byelorussian SSR experience, by A.A. Chizhov
- 11 The role of non-governmental organizations in planning and providing social welfare services in industry, by Yahia Darwish
- 12 Industrial development policy and social development policy: Byelorussian SSR experience, by Martinkevich

Seminar on the social aspects of industrialization (cont'd.)

Paper No.

- |    |   |
|----|---|
| 13 | Social services in industry, by V.I. Luzgin   |
| 14 | The role of trade unions and other voluntary and non-governmental organizations in social planning related to industrial development: Byelorussian SSR experience, by A.P. Obukhovich |



IX. INTER-REGIONAL SEMINAR ON THE ROLE OF INDUSTRIAL COMPLEXES IN ECONOMIC DEVELOPMENT, TASHKENT, 22 SEPTEMBER - 6 OCTOBER, 1964

a. Report:

Report of the interregional seminar - 1965. 15 pp. & annexes  
E/C.5/67 English, French, Spanish and Russian

b. Papers\*

- 1 The industrial development of the Uzbek SSR, by S.K. Ziyadullayev
- 2 Introduction of scientific and technical achievements into the industry of Uzbekistan, by G.S. Sultanov
- 3 Principles and organization of planning the national economy in economic regions and republics (on the example of Central Asia and Uzbekistan, by D.D. Erlikh
- 4 Industrial territorial complexes in the USSR, by A.E. Probst
- 5 Methods of planning industrial centres, by V. Lukyanov
- 6 Industrial complexes in the USSR and their role in the development of economy, by K.N. Bedrintsev
- 7 Problems of the complex development of the Tashkent industrial region, by H.X. Hikmatullayev
- 8 Economic prerequisites for the formation of the Nuresk industrial power centre in South Tadjikistan, by I.K. Narzikulov
- 9 Methods of elaborating schemes of regional planning on the example of the Angren-Almalyk industrial region, by A.N. Zotov
- 10 Planning and financing capital investments in the industry of Uzbekistan, by G.U. Aliev
- 11 Role of oil and gas industry in the development of production forces, by A.A. Bekirov
- 12 Role of electric power in development of industrial complexes in the USSR, by A.A. Beschinsky

---

\*Summaries of papers are contained in the report

Seminar on the role of industrial complexes in economic development (cont'd.)

Paper No.

- |    |   |
|----|---|
| 13 | Role of fuel and power industry in creating industrial complexes in the Uzbek SSR by A. Hamidov                     |
| 14 | Development of the machine-building complex in Uzbekistan for production and processing of cotton, by L. Nazariants |
| 15 | The role of industrialization in technical re-equipment of Uzbekistan's agriculture, by O. Djamalov                 |
| 16 | Specialization and cooperation of industrial complexes in the UzSSR, by P. Kalyakin                                 |

X. INTER-REGIONAL SEMINAR ON FOOD CANNING AND PRESERVING INDUSTRIES IN DEVELOPING COUNTRIES, COPENHAGEN, 21 SEPTEMBER - 10 OCTOBER, 1964

a. Report:

1965. 4 pp.

E/C.5/79 English, French, Spanish, Russian

b. Papers submitted by the Centre for Industrial Development

No symbol      The role of food preservation in developing countries,  
by N.H. Ishler

Not available

No symbol      Pre-investment data for food processing industries,  
by N.H. Ishler

XI. INTER-REGIONAL CONFERENCE ON THE DEVELOPMENT OF PETROCHEMICAL INDUSTRIES IN DEVELOPING COUNTRIES, TEHRAN, 16 - 30 NOVEMBER, 1964

a. Report and proceedings

Report of the First United Nations Interregional Conference - 1966  
152 pp. The proceedings will be published as: Studies in  
petrochemicals (ST/CID/4)

Sales no. 66.II.B.14 (ST/TAO/SER.C/83)

b. General series

PET/CHEM/CONF.1-2 Provisional agenda

- 3 Economics of ammonia production in the developing countries, by S. Strelzoff, Chemical Construction Corp.
- 4 Selected processes for the production of basic chemicals and intermediates from petroleum hydrocarbons, by H. Soenksen, Badische Anilin- & Soda-Fabrik AG (BASF)
- 5 Economics of olefin and diolefin production, by R.G. Craig, L.C. Doelp, A.K. Logwinuk Houdry Process & Chem. Co.
- 6 Benzene by hydrodealkylation, using the detol process, by R.G. Craig, L.C. Doelp, A.K. Logwinuk
- 7 Recent trends in petrochemical research and development, by H. Hart, Michigan State University
- 8 Licensing of process know-how, by Jerry G. Jenkins, Cosden Oil & Chemical Co.
- 9 Multipurpose reactor for the production of selected petrochemical intermediates and end products, by J.B. Sproull, Mica Chemicals, Inc.
- 10 Market research - essential to petrochemical development, by F.C. Kaupp and P.F. Neu, Esso Chemical Co. Inc.
- 11 Recent trends in the world petrochemical industry, by F.N. Baumgartner and P.L. Richards, Esso Chemical Co. Inc.

Conference on the Petrochemical Industries (cont'd.)

PET/CHEM/CONF.12

- Development of petroleum based organic chemicals in India, by H.C. Bijawat, Union Carbide India, Ltd.
- 13 The production of synthetic fibres on a petrochemical basis, by P. Seifert, Inventa
- 14 Refining and petrochemicals production by the Cosden Oil and Chemical Co., by G. Jenkins
- 15 Naphtha steam cracking and utilization of its products, by S. Hayashi and Y. Hirakawa, Nippon Petrochemicals Co.
- 16 Methods for the preparation of caprolactam and the synthesis of lysine from caprolactam, by L.J. Revallier, Central Laboratory of Staatsmijnen, Limburg
- 17 Styrene resins for petrochemical growth, by W. Sherwood and R.G. Edmonds, The Badger Co. Inc.
- 18 The biosynthesis of proteins from petroleum, by A. Champagnat, Société Internationale de Recherches BP
- 19 Petrochemicals from natural gas - The Lacq experience, by H. Husson, Société Nationale des Petroles d'Aquitaine
- 20 Low-density polyethylene - the world market, by K.E. Cosslett, U.S. Industrial Chemicals Co.
- 21 Financial and other problems for Japan's petrochemical industry, by T. Hirayama, Mitsui Petrochemical Industries, Ltd.
- 22 Ocean transportation of ethylene and other basic intermediates for petro-chemicals, by R. Boudet, Gazocin and Helvin H. Gertz Purvin & Gertz, Inc.
- 23 Patents and licensing in the petrochemical industry, by S. Kahn, Engelhard Industries, Inc.
- 24 The petrochemical industry of the U.S. - a review of its development, by C. V. Foster, Continental Oil Co. and W.S. Coe, PASA
- 25 Location factors for the chemical industries in developing countries, by H. Nordenson, Scientific Design Co. Inc.

Conference on the Petrochemical Industries (cont'd.)

PET/CHEM/CONF.26

- Some aspects of finding and financing petrochemical projects, by S.H. Chafkin, Checchi and Co.
- 27 From crude oil to synthetic fibres - with special considerations of process sequences for polyester type fibres, by D. Natus, Lurgi Gesellschaft fur Mineralöl-technik m.b.H
- 28 Aromatics: better to import or to produce, by J.W. Andrews and R.E. Conser, Universal Oil Products Co.
- 29 License agreements on the petrochemical industry, by G.H. Brooner and O.D. Edwards, Phillips Petroleum Co.
- 30 Petrochemical and carbochemical processes in Poland, by K. Laidler, Ministry of the Chemical Industry of Poland
- 31 Modern methods for the production of aromatics, olefins and paraffins, by K.H. Eisenlohr, Lurgi Gesellschaft fur Mineralöltechnik m.b.H.
- 32 The petrochemical industry as a key tool of economic development. A case history: Southern Italy, by Societa Edison, S.p.A.
- 33 Problems of technology and obsolescence in petrochemical industries for developing countries, by R. Landau, Scientific Design Co. Inc.
- 34 Nylon, by Lewis F. Hatch, the University of Texas
- 35 Technical and economic changes in ethylene manufacture, by P. Braber, Bataafse Internationale Chemie Maatschappij, N.V.
- 36 Carbon black production in developing countries, by C.A. Polachi, C.A. Stokes, K.A. Burgess, Columbian Carbon Co.
- 37 Nitrogenous fertilizers as a petrochemical operation, by R.H. Reed and C.R. Sloan
- 38 Natural gas as a raw material for petrochemicals, by F.B. Kormeyer, Mobil Chemical Co.

Conference on the Petrochemical Industries (cont'd)

PET/CHEM/CONF.39

- Recent trends of petrochemistry in the macromolecular Field by G. Natta and G. Crespi, Institute of Industrial Chemistry Polytechnic of Milan, Italy.
- 40     Plastics as construction materials for developing countries by Arthur P. Lien, Battelle Memorial Institute.
- 41     Use of natural gas and natural gas liquids as petrochemical feedstock by B.L. Bates and R.G. Boatright, Phillips Petroleum Company.
- 42     Venezuelan petrochemical industry by G.O. Kusanova, Instituto Venezolano de Petroquímica.
- 43     Experiences acquired during a study for an acrylonitrile plant by H. Galan-Gomez, Empresa Colombiana de Petroleos.
- 44     The beginning of petrochemical industry in Colombia by H. Galan-Gomez, Empresa Colombiana de Petroleos.
- 45     Petrochemical industries in Chile by J. Tampier, Petrochemical Project - CORFO & ENAP.
- 47     La industria petroquímica en la República Argentina by Dr. O. Gatti, Fabricaciones Militares.
- 48     Petrochemical country studies: Burma by Tin Hg Aye and Kyaw Sein, People's Oil Industry.
- 49     Synthetic substitutes of natural materials through petroleum feedstocks by D.M. Privedi, M/s Synthetics and Chemicals Ltd.
- 50     Technical and economic aspects of the fertilizer industry in Pakistan by Y. M. Kanaan, Industrial Development Corp.
- 51     Acrylic fibers, by Y. Tsunoda, Asahi Chemical Industry Co.
- 52     The newer synthetic rubbers by T.K. Roy, Scientific Design Co., Inc.
- 53     Monomers and polyvinyl chloride by R.A. Brown and H.A. Huckins, Scientific Design Company.

Conference on the Petrochemical Industries (cont'd)

- PET/CHEM/CONF.54      Development of a synthetic fiber industry as for example Nylon-6 in developing countries by D. Thormann, Hoechst - Uhde International G.m.b.H.
- 55      Petrochemical industry in East Pakistan by S.A. Momen, East Pakistan Industrial Development Corporation.
- 56      Recent trends in the ammonia industry in Japan, by S. Kodama, Sumitomo Chemical Co., Ltd.
- 57      Polyester synthetic fiber materials for developing countries by D. Brown, Halcon International, Inc.
- 58      Acrylonitrile-butadiene-styrene copolymers by T.E. Ronay, Carbon Chemical Co.
- 59      Growth of plastics in developing countries by B.D. Garud, S.K. Subbaroyan and P. Vachani, Delhi Cloth & General Mills Co., Ltd.
- 60      Recent trends in research and development in the petrochemical industry by W. Beredjick, Centre for Industrial Development.
- 61      The economic aspects of development of the petrochemical industry in the USSR by W. Fedorenko, Central Institute of Mathematical Economics.
- 62      Country studies: Malaysia by Lim Ho Pheng, Department of Chemistry, Malaysia.
- 63      Realization of fertilizer production in a developing country by J. Mylton V. and J. Ctero R. YPFB, La Paz and L.C. Axelrod, L.E. Bostwick and B.G. Mandelik, W. A. Kellogg Co.
- 64      Developing the petrochemical potentials of north africa and the persian gulf by H.K. Nieuwenhuis, Chemical Projects Assoc., Inc., CID
- 65      The petrochemical industry of trinidad and tobago by D.H.N. Alleyne, Ministry of Petroleum and Mines and E.L. Bertrand.
- 66      Industry studies: China (Taiwan) by Te-Lin Yu and Shu-Hsun Ling, Chinese Petroleum Corp.



Conference on the Petrochemical Industries (cont'd)

PET/CHEM/CONF.67

- The economics of international distribution of anhydrous ammonia by A.J. Haude, G.R. Grace & Co.
- 68 Factors influencing the location of a petrochemical plant by P.C. Livesay, American Oil International Co.
- 69 Development of the petrochemical industry in the ECAFE Region by the Economic Commission for Asia and the Far East.
- 70 Development of the petrochemical industry in Europe: its problems and potentialities by the Economic Commission for Europe.
- 71 Synthetic rubber as related to petrochemical production in developing countries by D.F. Othmer, Polytechnic Institute of Brooklyn.
- 72 Petrochemical industry: Peru by H. de Souza Heategui, Empresa Petrolera Fiscal del Peru.
- 73 Production of basic petrochemicals from heavy oils via the H-Oil Process by A.W. Johnson and S.W. Ehrlich, Hydrocarbon Research, Inc.
- 74 The Mexican Government and the petrochemical industry in Mexico by Petroleos Mexicanos.
- 75 Natural gas reserves in Mexico as a Factor of the social and economic development of the country by means of nitrogenous compounds, by Petroleos Mexicanos.
- 76 Structure of petrochemical development in Mexico - Reynosa and Pajaritos developments by Petroleos Mexicanos.
- 77 Petrochemical industry: Turkey by Hayrettin Bezman, Ministry of Energy and Natural Resources, Turkey.
- 78 Petrochemical industry: Syrian Arab Republic by Y. Tabaa, General Petroleum Authority and Hicham El-Kass, General Organization for the Implementation of Industrial Projects.

Conference on the Petrochemical Industries (cont'd)

PET/CHEM/CONF.79

- The pattern of raising funds in the petrochemical industry in Japan by Sukemitsu Irie and Teruhiko Kotera, Industrial Bank of Japan, Ltd.
- 80 Processes for production of concentrated fertilizers by H. Banthien, Hoechst-Uhde International GMBH.
- 81 Plastics progress by J.M. Goppel, Shell International Research Maatschappij N.V., The Hague.
- 82 Petrochemistry and polymer production by H.F. Mark, Polytechnic Institute of Brooklyn and S.M. Atlas, City University of N.Y.
- 83 Petroleum, a major source of sulphur by G.P. Giusti, Texas Gulf Sulphur Co.
- 84 Synthetic fibres of polyamides by J. Laub and Hans J. Zimmer.
- 85 The petrochemical industry, Section I by l'Institut Francais du petrole - CID.
- 86 The petrochemical industry section II by l'Institut Francais du Petrole - CID.
- 87 New trends in research and development of the USSR petrochemical industry by V.A. Khodakhovskaja.
- 88 Applications of petrochemical based plastics in developing countries by A.L. Griff, Edison Technical Services, Inc.
- 89 Optimum combination of petroleum refining and petroleum chemistry processes by R.G. Ismailov, Azerbaijan Academy of Sciences.
- 90 Recent trends in production, consumption, trade and end-uses in selected petrochemical products by R. Abu El-Haj, Centre for Industrial Development.
- 91 Application of advanced technology to developing countries for basic petrochemical intermediates by H.R. Shawk and D.L. Caldwell, The Lummus Company.

Conference on the Petrochemical Industries (cont'd)

PET/CHEM/CONF.92

- Petrochemical industry in Yugoslavia by V. Dizdar, C. Jenic and K. Mirkov.
- 93 Ammonia manufacture from petroleum feedstocks by A. de Ficciotto and G.C. Sweeney, Jr., Arthur D. Little, Inc.
- 94 The role of foreign investment in petrochemical manufacture by Business and Industry Advisory Committee to the OECD.
- 95 Planning of the chemical industries at the national level by T. Vietorisz, International Business Machines and the New School for Social Research.
- 96 Prospects of development of petrochemical industries in India and other countries of Asia and the Far East by G.P. Kane, Ministry of Industry and Supply, New Delhi.
- 97 New Vinyl Chloride Process by S. Gomi, Kureha Chemical Industry Co., (A. Tanaki - Chiyoda)
- 98 Characteristics and prospects of petrochemical industry - with an emphasis on the Yokkaichi Complex, Japan by T. Yano, Mitsubishi Petrochemical Company Ltd.
- 99 Production of aromatics from petroleum in Japan by I. Watanabe, Sc., D. Japan Gasoline Company, Ltd.
- 100 Petrochemical industry in Brazil by E. O.M. Brandao, Petroleo Brasileiro S.A.
- 101 Plant Size, location, and time-phasing - introduction, by A.S. Manne, M.I.T. Center for International Studies.
- 102 Plant size, location and time-phasing - the nitrogenous fertilizer industry by P.N. Radha Krishnan, Perspective Planning Division T.V.S., Rama Mohan Rao, Indian Statistical Institute.
- 103 Olefins vs. Acetylene, competitive raw materials for the petrochemical industries in developing countries by D.F. Othmer, Polytechnic Institute of Brooklyn.
- 104 La Industria Petroquimica en Ecuador by G.H. Salvador G., Junta Nacional de Planificacion y Coordinacion Economica.

Conference on the Petrochemical Industries (cont'd)

- PET/CHEM/CONF.105 Financing of petrochemical ventures in developing countries by S. Schiavo-Campo and S. Teitel, Centre for Industrial Development.
- 106 Summaries of Working Papers contributed to the UN Interregional conference on the development of petrochemical industries in developing countries.
- 107 The role of the domestic market in the development of petrochemical industries and the need for exports in relation to economies of scale by The Research and Evaluation Division, Centre for Industrial Development.
- 108 The evolving pattern of petrochemical industry in India with particular reference to Gujarat and Bombay regions by B. Greenivasan, Sarabhai Group of Industries and H.T. Bhavanani, Calico Mills.
- 109 Petrochemical developments by J.W. Woolcock, Imperial Chemical Industries.
- 110 The development of the petrochemical industry in Israel by J.C. Lobel and B. Toren, Ministry of Commerce and Industry.
- 111 Production of ethylenic hydrocarbons by cyclic cracking by A. Roche, Office National Industriel de l'Azote and J. Lemaire, G.E.G.I. Company.
- 112 Hydrocarbons steam reforming, in tubes, for production of synthesis gas or hydrogen by A. Roche, Office National Industriel de l'Azote and J. Lemaire, G.E.G.I. Company.
- 113 Contribution to the manufacture of polyester fibres and plasticizers by ANTAR Petroles de l'Atlantique.
- 114 Contribution de la petrochimie a la defense des cultures by A. Charlet, Societe Progil.
- 115 General characteristics of petrochemical industries and factors conditioning their development by S. Teitel, Centre for Industrial Development.

Conference on the Petrochemical Industries (cont'd)

PET/CHEM/CONF.116

- The petrochemical industry in Iran.
- 117 Planning of the Calfo Botelo Integrated Oil Refinery and Petrochemical Complex by A.L. Dowling and T. E. O'Hare, M.W. Kellogg Company.
- 118 The role of the International Finance Corporation in promoting industrial ventures in developing countries by J. Chanmugam, The International Finance Corporation.
- 119 The economics of coal: chemistry vs. petrochemistry by E.W. Nagelstein, UN Special Fund.
- 120 La industria Petroquímica en América Latina by Economic Commission for Latin America.
- 121 The possibilities for developing petrochemicals in Libya by B. Mangush, Ministry of Petroleum Affairs.
- 122 Petrochemical industry in Indonesia by Mr. Sukasimir, Department of Basic Industry and Mining.
- 123 List of Conference Participants.
- 124 List of Conference Documents.
- 125 Natural and synthetic alcohol as competitive raw materials by H. Magnat, Groupe Centrale de Dynamite, Nobel-Bozel.
- 126 Natural gas in Kuwait and its utilization by Meisal Mazidi, Kuwait Chemical Fertilizer Co.
- 127 Country study: Morocco by M. Fala.
- 128 Country study: United Arab Republic, M. ElOHalfawy.
- 129 Country study: Saudi Arabia by I.I. Habbash.
- 130 Country study: Romania by I. Marinescu.
- 131 Country study: Burma by Tin Maung Aye and K. Sein.
- 132 Country study: India by Ranjit Rai Bahl.
- 133 Country study: Indonesia by Mr. Sukasimir.

**Conference on the Petrochemical Industries (cont'd)**

- PET/CHEM/CONF.134 Country study: Japan by H. Adochi and H. Yonaga.  
135 Country study: Uruguay by C. Vanrell and H. Gratzmar.  
136 Training of manpower by A.E. Laurence, UNESCO.

**c. Information Papers**

- 63.II.D.3 Studies in economics of industry No. 1. Cement/  
nitrogenous fertilizers based on natural gas.  
(E/3861/Rev.1  
(E/C.5/52/Rev.1  
65.II.B.1 The role of patents in the transfer of technology  
to underdeveloped countries.  
E/C.5/35 Transfer and adaptation of technology patents and  
the economies of underdeveloped countries.  
63.II.G.7 La industria quimica en la America Latina.  
E/3905 and  
Add.1 Financing of economic development.  
Promotion of the international flow of private capital  
to developing countries.  
E/CN.11/I&NR/  
PH2/L.6 Utilization of natural gas in petrochemical and other  
industries.

XII. INTER-REGIONAL SEMINAR ON INDUSTRIAL RESEARCH AND DEVELOPMENT  
INSTITUTES IN DEVELOPING COUNTRIES, BEIRUT, 30 NOVEMBER -  
11 DECEMBER 1964

a. Report and proceedings

Proceedings of the Interregional Seminar...1966. 2 volumes.  
ST/TMO/SER.C/77/vol. 1-2 English

b. Working papers

- 1 The role of research and development functions in supporting industrialization in developing countries by U.N. Centre for Industrial Development.
- 2 Organization of industrial research, by U.N. Centre for Industrial Development.

c. Discussion Papers

- 1 The role of industrial research institutes in developing countries, by I. Malecki.
- 2 Organizing integrated industrial research and development institutes by D.B. Hertz.
- 3 Industrial research and development in the United Kingdom by U.K. Department of Scientific and Industrial Research.
- 4 The role of industrial research institutes in undertaking technological research and feasibility studies in developing countries by N. Tanyolac.
- 5 Formulation and selection of projects for a national institute of industrial research by A. Sundralingam.
- 6 Applied research, development, tests and standards in the developing countries by D. Zanobetti.
- 7 Some aspects on research and testing laboratories and standards by K. Vieweg.
- 8 The role of research and development institutes in applying science to industry by B.R. Williams.

Seminar on Industrial Research and Development (cont'd)

- 9 Netherlands Technical Consulting Service by Development Centre, Delft.
- 10 Scientific information and technical advisory services to the United Kingdom Industry by U.K. Department for Scientific and Industrial Research.
- 11 The scientific and technical documentation centres and their utilization for information needs of industry in developing areas by UNESCO.
- 12 The organization of industrial research in Belgium by L.M. Henry.
- 13 Industrial research institutes for serving manufacturing industries by R.C. Russell.
- 14 Organization form and operating policies for industrial research and development institutes in developing countries by F.L. Godwin.
- 15 Industrial research in Yugoslavia by B. Rakovic.
- 16 The management consultant and the industrial research and development institute by J.D. Mooney.
- 17 The organization of technical research in the Czechoslovak Socialist Republic by J. Dittert.
- 18 Organization of industrial research in France by J.L. Kahn.
- 19 The development of industrial research institutes by R.R. Adams.
- 20 Organization of industrial research on a regional basis with particular reference to "ICAITI" by M. Moreira Morales.
- 21 Project-wise management of an institute serving industry by F. Schoppers.
- 22 The research institute as a channel for utilization of foreign technical skills by L.F. Bass and S.J. Langley.



Seminar on Industrial Research and Development (cont'd)

- 23 The organization of scientific and industrial research in the United Kingdom by U.K. Department of Scientific and Industrial Research.
- 24 Technical sciences in Poland, by I. Malecki.
- 25 Planning of scientific research in the Soviet Union by W. Oznobin.
- 26 An appraisal of German experiences in industrial research and development for the industrialization by K. Billerbeck.
- 27 Austria's contribution in industrial research by K. Dettelbacher.
- 28 Organization patterns of industrial research and development activities in Asia and the Far East by EC.AFE.

b. Country Reports

- 1 Industrial research in the Philippines by C.G. Manuel.
- 2 Industrial research and development in Thailand by C. Surasiti.
- 3 Industrial development and research in Singapore by A.K. Kiang.
- 4 Report on industrial research in India by B. Singh.
- 5 Industrial research in Iran by M. Taslimi.
- 6 Industrial research in Ceylon by N. Navaratnarajah.
- 7 Planning and Progress on Scientific and Technological Research in Pakistan by S. Siddiqui.
- 8 Report on industrial research in Argentina by S.M.A. del Carril.
- 9 The role of the Mexican Institute of Technological Research with the scope of the organization of industrial research in Mexico by I. Deschamps.

**Seminar on Industrial Research and Development (cont'd)**

- 10 Industrial research specialized institutions in Colombia by H. Franco Bravo.
- 11 Industrial research in the United Republic of Tanzania by J.B. Mkondya.
- 12 Industrial research and development organizations in Libya by S. Al Lishani.
- 13 Industrial research in Northern Rhodesia by J.P. Allchin.
- 14 The organization of industrial research in the United Arab Republic by M. El H. Halfawy.
- 15 Industrial research in the Sudan by A.M. Fadlalla.
- 16 Industrial research in Ghana by E. Lartey.
- 17 Industrial development in Iraq by A. Sukkar.
- 18 Industrial research in Syria by A. Ballouta.
- 19 Industrial research in Lebanon by A.D. Attiyah.
- 20 Organization of industrial research in Nigeria by C. Ezeji-Okoye.

XIII. UNITED NATIONS SEMINAR ON INDUSTRIAL ESTATES IN THE REGION  
OF THE ECONOMIC COMMISSION FOR AFRICA, ADDIS-ABABA, 14-21  
DECEMBER 1964

a. Report and proceedings

Industrial estates in Africa. 1965, 52 p. contains report and some papers. Balance of papers to be published soon entitled: Promotion of small-scale industry.  
Sales No. 60.II.B.2 (ST/CID/5). English

b. Papers

- |                    |   |
|--------------------|---|
| E/CN.14/LE/1/Rev.2 | Provisional annotated agenda.   |
| 2                  | The role of industrial estates in policies and programmes for the development of small scale industries.  |
| 3                  | Industrial estate developments in the UAR.  |
| 4                  | The Yaba industrial estate in Lagos, Nigeria.   |
| 5                  | United Nations activities in the field of industrial estates.   |
| 6                  | Types of industrial estates.  |
| 7                  | Planning, design and construction of industrial estates with particular reference to Africa, by Edward D. Mills. Reprinted in: Industrial estates in Africa, Sales No. 60.II.B.2. |
| 8                  | The potential importance of industrial estates for African countries.   |
| 9                  | A review of industrial estate development in Africa.  |
| 10                 | Proposed questions for discussion.  |
| 11                 | Definition of small-scale industry.   |
| 62.II.B.5          | Industrial estates in Asia and the Far East.  |
| 62.II.B.4          | The physical planning of industrial estates.  |
| 60.II.B.4          | Establishment of industrial estates in under-developed countries.   |

XIV. INTER-REGIONAL SEMINAR ON THE PRODUCTION OF FERTILIZERS, KIEV,  
24 AUGUST - 13 SEPTEMBER 1965

a. Report

Report of the Interregional Seminar...  
1966. 51 p.  
Sales No. 66.II.B.7 (ST/TAO/SER.C/78 & Corr.1) English  
Proceedings to be issued later in 3 volumes.

b. Documents

- FERT/CONF.1/1 recent trends in the technology and economics of the production of ammonia, by A.P. Oele, U.N. expert.
- FERT/CONF.1/2 Design and fabrication of fertilizer plants in developing countries with special reference to India, by D.N. Daruvalla, U.N. expert.
- FERT/CONF.1/3 The ICI naphtha reforming process for the production of ammonia, by D.J. Borgars, U.N. expert.
- FERT/CONF.1/4 automation in the agricultural chemical industries, by Russell Milham (B. L. Balls), Foxboro Company.
- FERT/CONF.1/5 The FAO fertilizer programme under the freedom from hunger campaign: its purposes and accomplishments, by J. T. Couston, FAO.
- FERT/CONF.1/6 methods of estimating national fertilizer requirements, by R.D. Narain, FAO.
- FERT/CONF.1/7 Essential agricultural services required to support the development of fertilizer usage in developing countries, by M. Lunan, FAO.
- FERT/CONF.1/8 The development of agricultural chemistry in the USSR, by A.V. Peterbourgsky, USSR.
- FERT/CONF.1/9 Agro-chemical services in the USSR, by N.I. Artyushin, USSR.
- FERT/CONF.1/10 Assortment of chemical fertilizers and their utilization in the Soviet Union, by D.A. Korenkov, USSR.

Interregional Seminar on the Production of Fertilizers, cont'd

- FERT/CONF.1/11 Production of chemical fertilizers in the USSR, by S.K. Voskressensky, USSR.
- FERT/CONF.1/12 Designing of nitrogenous fertilizer plants in the USSR and some other problems of technology and economics.
- FERT/CONF.1/13 Organization scheme of a fertilizer-producing plant, by Yu T. Lifshitz and I.T. Svetsov, USSR.
- FERT/CONF.1/14 Capital investment in the production of chemical fertilizers, by V.S. Belyayev and N.P. Svyetsov, USSR.
- FERT/CONF.1/15 Production and use of chemical fertilizers in the Ukrainian SSR, by A.I. Kukavishnikov and P.A. Dmitrenko, Ukrainian SSR.
- FERT/CONF.1/16 Equipment maintenance organization at the plants of the Ukrainian SSR producing fertilizers, by V.P. Egorov, Ukrainian SSR.
- FERT/CONF.1/17 Training and improving professional skill of workers employed in production of chemical fertilizers, by I.V. Sichkov, Ukrainian SSR.
- FERT/CONF.1/18 Training and advancement of technical personnel of the Ukrainian fertilizer plants, by L.S. Cherednichenko, Ukrainian SSR.
- FERT/CONF.1/19 The organization of safety engineering and supervision of accident-free work at enterprises producing chemical fertilizers, by G.G. Gordienko, Ukrainian SSR.
- FERT/CONF.1/20 World overview of fertilizer production, consumption, international trade and future needs for fertilizers, by Raymond Ewell, U.N. expert.
- FERT/CONF.1/21 Fertilizers and the economics of crop production, by Frank W. Parker, U.N. expert.
- FERT/CONF.1/22 Experience in construction and operation of nitric acid and ammonium nitrate plants in a developing country, by S.K. Mukherjee, U.N. expert.
- FERT/CONF.1/23 (a) Planning and organization for fertilizer production in a developing country  
(b) Factors relevant in determining location for fertilizer projects in developing countries.

Interregional Seminar on the Production of Fertilizers, cont'd

- FERT/CONF.1/24 Development of the urea industry, by S. Kimura, U.N. expert.
- FERT/CONF.1/25 Technical progress and economics of production of fertilizers, by Otto Kuhl, U.N. expert.
- FERT/CONF.1/26 Recent developments in processes, equipment and machinery affecting scales of production of fertilizers, by H.C. Verghese, UN Centre for Industrial Development.
- FERT/CONF.1/27 Certain aspects of fertilizer distribution in developing countries, by George C. Sweeney, Jr., Arthur D. Little, Inc.
- FERT/CONF.1/28 International trade in fertilizer raw materials, by Christopher J. Pratt, Mobil Chemical Company.
- FERT/CONF.1/29 Organization for maintenance work and its importance, by Christopher J. Pratt, Mobil Chemical Company.
- FERT/CONF.1/30 Production, trade and price trends of phosphate rock, by K.L.C. Birdridge, The International Superphosphate Manufacturers' Association.
- FERT/CONF.1/31 Design criteria for large tonnage complete recycle urea plants, by Lucien H. Cook, Chemical Construction Corp.
- FERT/CONF.1/32 Natural gas and naphtha reforming furnaces, by Raymond J. Renard, Jr., Selas Corp. of America.
- FERT/CONF.1/33 Comparative evaluation of nitric acid processes, by S. Strelzoff, Chemical Construction Corp.
- FERT/CONF.1/34 Importance of sulphur in agriculture, by Samuel L. Fiscale, The Sulphur Institute.
- FERT/CONF.1/35 Aspects of large-scale ammonia production, by T.E. O'Hare, H.W. Kellogg Company.
- FERT/CONF.1/36 The use of low temperature carbon monoxide conversion catalyst in manufacture of ammonia synthesis gas, by Robert Habermehl and K. Atwood, Catalyst and Chemicals, Inc.

Interregional Seminar on the production of fertilizers, cont'd

- FERT/CONF.1/37 Present status and future plans for the fertilizer industry in the ECAFE region, by U Tin Nyunt, ECAFE.
- FERT/CONF.1/38 The fertilizer industry in Latin America, present situation and perspectives, by Roberto Petitpas, ECLA.
- FERT/CONF.1/39 Fertilizer production and consumption in Africa, by Alemayehu Makonnen, ECA.
- FERT/CONF.1/40 Marketing of fertilizers in a developing country, by M. Dandapani, India.
- FERT/CONF.1/41 Manufacture of ammonium sulphate utilizing by-product gypsum from a phosphoric acid plant, by V.N. Masturirangan, India.
- FERT/CONF.1/42 Present state and future plans for the development of the fertilizer industry in Japan, by Takashi Nakiyama, Japan.
- FERT/CONF.1/43 Recent trends in use of raw materials: patterns of end-products, processes and scales of production in Japan, by Kyoichi Kajima, Japan.
- FERT/CONF.1/44 Study on fertilizers in Colombia, by Efraim Forero Fonseca, Colombia.
- FERT/CONF.1/45 Fertilizer Country Study - Israel present status and future plans for the development of the fertilizer industry - nitrogen, phosphate and potash - in Israel Technological and new process developments in Israel, by B. Levontin and Y. Araten, Israel.
- 46
- FERT/CONF.1/47 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate and potash - in Argentina, by Salvador Bocchieri, Argentina.
- FERT/CONF.1/48 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate and potash - in Iran, by Hossein Salimi, Iran.

Interregional Seminar on the Production of Fertilizers, cont'd

- FERT/CONF.1/49 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate and potash - in Turkey, by Ali Bayram, Turkey.
- FERT/CONF.1/50 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate and potash - in India, S.K. Mukherjee, U.N. expert.
- FERT/CONF.1/51 Production of phosphatic fertilizers (Chapter 11, Draft United Nations Fertilizer Manual), by P. Castro Boisier.
- FERT/CONF.1/52 Production of nitrogen solutions (Chapter 10, Draft United Nations Fertilizer Manual), by Robert Kay.
- FERT/CONF.1/53 Production of potash fertilizers (Chapter 12, Draft United Nations Fertilizer Manual) by B. Levontin.
- FERT/CONF.1/54 Production of mixed fertilizers (Chapter 14, Draft United Nations Fertilizer Manual), by A.P. Oele.
- FERT/CONF.1/55 Production of nitro-phosphates and ammonium phosphates (Chapter 13, Draft United Nations Fertilizer Manual), by S.K. Mukherjee.
- FERT/CONF.1/56 Criteria for production vs. importation of fertilizers (Chapter 4, Draft United Nations Fertilizer Manual), by L.B. Rajakaruna.
- FERT/CONF.1/57 Criteria for production vs. importation of ammonia (Chapter 6, Draft United Nations Fertilizer Manual), by C. Pratt.
- FERT/CONF.1/58 Economies of scale and costs of production of fertilizers (Chapter 22, Draft United Nations Fertilizer Manual by M.C. Verghese, UN Centre for Industrial Development.
- FERT/CONF.1/59 Planning for development of fertilizer production (Chapter 19, Draft United Nations Fertilizer Manual), by M. Taha Zaki.



Interregional Seminar on the Production of Fertilizers, cont'd

- FERT/CONF.1/60 Location of fertilizer plants (Chapter 16, Draft Fertilizer Manual), by M. Taha Zaki.
- FERT/CONF.1/61 Marketing, distribution and pricing of fertilizers (Chapter 18, Draft United Nations Fertilizer Manual).
- FERT/CONF.1/62 Demand for fertilizers (Chapter 17, Draft United Nations Fertilizer Manual), by F.W. Parker.
- FERT/CONF.1/63 Draft Fertilizer Manual (U.N. Centre for Industrial Development), by M.C. Verghese.
- FERT/CONF.1/64 Industrial Technology - The Centre's activities in the field of chemical industries, by M.C. Verghese (U.N. Centre for Industrial Development).
- FERT/CONF.1/65 Statement of the Commissioner for Industrial Development, Mr. I.H. Abdel-Rahman, at the opening of the Committee for Industrial Development.
- FERT/CONF.1/66 United Nations Centre for Industrial Development - A short review of its activities by M.C. Verghese (U.N. Centre for Industrial Development).
- FERT/CONF.1/67 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate and potash - in Nigeria, by E.O. Ojuringbe, Nigeria.
- FERT/CONF.1/68 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate and potash - in Chile by Juan Carniglia Montesanto.
- FERT/CONF.1/69 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate and potash - in Mexico, by F. Gaptan Cardenas.
- FERT/CONF.1/70 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate, and potash - in Ceylon, by L.S. Rajakaruna.
- FERT/CONF.1/71 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate, and potash - in Peru, by H. de Souza Reategui.
- FERT/CONF.1/72 Present status and future plans for the development of the fertilizer industry - nitrogen, phosphate and potash - in Romania, by M. Duad.

XV. INTER-REGIONAL WORKING PARTY ON TRAINING OF ECONOMIC ADMINISTRATORS OF THE DEVELOPING COUNTRIES IN INDUSTRIAL DEVELOPMENT HELD IN PARIS, 2 to 10 SEPTEMBER 1965.

a. Report 1966. 25 p. and annexes.  
E/C.5/124. Eng., Fr., Sp. and Russian

b. Discussion papers

- 1 Level, duration and location of training programmes by P. Borel, Institut International de Recherche et de Formation en vue du Developpement Harmonisé, Paris.
- 2 Administration of industrial programmes in under-developed countries, by C. Furdado, Yale University.
- 3 The nature, merit and content of the academic and in-service types of training programme for industrial economic administrators, by D. Carney, African Institute for Economic Development and Planning, Dakar.
- 4 A review of methods utilized in the formulation, evaluation and implementation of industrial development programmes and projects and the implications of such methods for the formulation of suitable training programmes for industrial development, by H.J. Solomon, U.S. Bureau of the Census.
- 5 Improving the training of industrial development planning administrators, by V. Trickovic, Yugoslav Institute of Economic Research, Belgrade.
- 6 The concept and function of economic administrators in industrial development programmes, by R.S. Thorn, U. of Pittsburgh.
- 7 Problems of developing adequate training programmes in the field of project preparation and evaluation, by L.V. Zimmerman, Netherlands Institute of Social Studies.
- 8 The experience of Svimez (Association for the industrial development of Southern Italy) in training of economic administrators, by P. Saraceno, SVIMEZ, Rome.

Interregional Working Party on Training of Economic Admin., cont'd

- 9 Training of industrial economic administrators,  
by Yap Nie Har
- 10 U.N. Training Programme in Industrial Development  
and Planning for the African Government Officials  
(Feb. 15 - 11 May 1965.) Presented by the Centre  
for Industrial Development.
- 11 Training of economic and industrial administrators  
in industrial development, prepared by the Centre  
for Industrial Development.
- CID/SIMP.A./9 Training of economic administrators of the  
developing countries in industrial development,  
prepared by the Centre for Industrial Development.
- No symbol Training of economic administrators in industrial  
development, by F. van Hoek.

c. Country Reports

- 1 Training programme for industry in the Philippines  
by A. C. Espiritu, Philippines Chamber of  
Industries.
- 2 The implementation time path of the rayon project  
in Iraq: a case study by Ferhang Jalal.
- 3 Training of industrial economic administrators:  
Ghana by H.K.O. Djang.
- 4 Training requirements of economic administrators  
as revealed by Malta's industrialization drive,  
by H.A. Frenco.
- 5 Training of economic administrators: Israel, by  
Shmuel Golomb.
- 6 Les données d'expérience de la Guinée sur la  
formation en matière de développement industriel,  
d'administrateurs des services économiques des  
pays sous-développés, by B.A. Mamadou.
- 7 The need for and the training of industrial  
economic administrators: Colombia, by H. Franco-  
Bravo.

Interregional Working Party on Training of Economic Admin., cont'd

- 8 Training of industrial economic administrators:  
Malaya, Mr. Jamil bin Mohd. Jan.
- 9 Planification et execution des programmes de  
développement industriel au Cameroun, by M.  
Ndoung Albert Christian.
- 10 Rapport relatif aux administrateurs des services  
économiques s'occupant de l'industrie: Tohad,  
by N'Gakoutou Valentin.
- 11 Rapport relatif aux administrateurs des services  
s'occupant de l'industrie: Madagascar, by  
Ramenason Gaston.
- 12 The role of the industrial development corporation  
in the context of India's industrialization  
programmes, by K.B. Rao.
- 13 Some concepts concerning economic administrators,  
their activities and training: Chile, by  
E. Troncoso.

XVI. INTER-REGIONAL WORKSHOP ON TEXTILE INDUSTRIES IN DEVELOPING COUNTRIES, LODZ, POLAND, 6 - 27 SEPTEMBER 1965

- a. Report 1966. 151p.  
E/C.5/101 Eng., Fr., Sp., & Russian  
The proceedings have not been published.
- b. Working Paper
- 1 Textile industries in developing countries, by V. Saxl, Centre for Industrial development.
- c. Background Papers
- 1 Manufacturing controls for textile mills, by Werner Textile Consultants.
  - 2 New finishes giving additional advantages to wool products, by A. Meumeekers, International Wool Secretariat.
  - 3 Modifications of textile products by chemical or physical treatment, by C.L. Hoffpauir and B.M. Kopacz.
  - 4 Modern finishing methods for cotton textiles, including the production of stretch fabrics by using special spinning, twisting or weaving methods, by C.L. Hoffpauir and B.M. Kopacz.
  - 5 The textile fibre: raw materials, their availability and application criteria, by Instytut Włokiennictwa, Lodz.
  - 6 Recent technological achievements and possibilities of their application in developing countries, by Instytut Włokiennictwa, Lodz.
  - 7 The systemated mill. Textile Industries, February 1965.
  - 8 Modern cotton industry, by the Special Committee for Textiles (OECD).
  - 9 Textile outlook for the sixties, by US Department of Commerce.

Interregional Workshop on Textile Industry, cont'd

- 10 The textile industry in Latin America II. Brazil, by ECLA (E/CN.12/623).
- 11 The American textile industry: competition, structure, facilities, costs, by L.D. Howell, Economic Research Service.
- 12 International cotton industry statistics of 1963, by International Federation of Cotton and Allied Textile Industries.
- 13 Surface styling of textiles by flocking, by Farbenfabriken Bayer AG.
- 14 The production of synthetic fibres on a petrochemical basis in developing countries, by P. Seifert, Inventa AG.
- 15 From crude oil to synthetic fibres with special consideration of sequence for polyester type fibres, by D. Natus, Lurgi Gesellschaft, für Mineralöltechnik m.b.H .
- 16 Polyester synthetic fibre materials for developing countries, by D. Brown, Malcan International Inc.
- 17 Development of a synthetic fibre industry, as for example Nylon-6, in developing countries, by D. Thormann, Hoechst-Uhde, International GmbH.
- 18 Economies of scale in the cotton spinning industry (E/CN.12/L.7) by ECLA.
- 19 Problems and prospects of the textile industry in Latin America (E/CN.12/L.6), by ECLA.
- 20 Some aspects of the international setting for textile industries in developing countries, by J.L. Juvet, University of Neuchatel.
- 21 Policies regarding the development and operation of textile industries in developing countries, by R. Haour, Cepiec.
- 22 Synthetic fibres of polyamides, by J. Laub, Hans J. Zimmer AG.

Interregional Workshop on Textile Industry, cont'd

- 23 Acrylic fibres, by E. Tsunoda, Asahi Chemical Industry Co., Ltd.
- 24 Selection of wools in relation to end-uses, by J. Matthews, International Wool Secretariat.
- 25 Competitive operation of woollen and worsted plants, by J. Matthews, International Wool Secretariat.
- 26 Modern weaving techniques, styling, designing and fabrication of wool fabrics, by A.Z. Sliwerski, International Wool Secretariat.
- 27 Textile fibres and their properties, by Burlington Industries, Inc.
- 28 Productivity and inter-firm comparisons in the cotton textile industry, by A. Nicol, Productivity Measurement Advisory Service.
- 29 Manufacturing trends in the textile industry, by E. Schlesinger, United Merchants and Manufacturers, Inc.
- 30 Recent innovations in textile finishing, by R. Badenbaugh.
- 31 Establishing of textile industries in developing countries: comparative study of weaving costs, by RUTI machinery Works, Ltd.
- 32 Modern methods of fellmongering, by International Wool Secretariat.
- 33 A guide to fibres, by E. I. Du Pont De Nemours and Company, Inc.

XVII. INTER-REGIONAL SYMPOSIUM ON INDUSTRIAL PROJECT EVALUATION,  
FRAGUE, 11 - 29 OCTOBER 1965

a. Report and Proceedings:

Report of the Interregional Symposium ... 1966. 92 p.  
Sales No. 66.II.B.11 (ST/PAO/SER.C/82). English

The proceedings will be published later during 1966 as:  
Studies on Evaluation of Industrial Projects: selected  
papers. (ST/CID/13)

b. "a series"

- CID/IFE/A.1 Project evaluation data and other information  
required for the purpose, by K.C. Mitra.
- 2 Implementation of industrial development  
programs using critical path network theory,  
by E.P.C. Fernando.
  - 3 Project evaluation and the consistency of  
the plan by G. Cukor.
  - 4 Organizing professional cadres for industrial  
project evaluation, selection and follow-up,  
by J.D. Nyhart.
  - 5 Beyond project evaluation, by U.S. Agency for  
International Development.
  - 6 Information required by ICICI Ltd. for  
project appraisal for their clients, by  
Industrial Credit and Investment Corporation  
of India, Ltd.
  - 7 Strategie du développement industriel:  
programme d'études générales pour les pays  
associés à la Communauté Economique  
Européenne, by A. Anylrechts.
  - 8 A new approach to training managers for  
industrial development, by H.A. Riker, Jr.
  - 9 Essential elements in the preparation of  
industrial projects, by S.J. Langley.
  - 10 Standard designing in industrial construction  
in the CMEA member countries and its evaluation  
by Council for Mutual Economic Assistance.
- CID/IFE/A.11 Project evaluation and industrial development  
programming by N.F. Figueiredo
- 12 Requirement for data and other information  
for evaluation of industrial projects, by Z. Bluzej  
and V. Lorenz.



c. "B series"

- CID/IPE/B.1 Evaluation of projects in predominantly private enterprise economies, by The Centre for Industrial Development, UN.
- 2 Evaluation of projects in centrally planned economies, by Centre for Industrial Development, UN.
  - 3 Uncertainty in industrial project evaluation with special reference to export industries, by M.V. Pejovic
  - 4 Skill requirements in manufacturing industries, by M. Zymelman.
  - 5 Requirements of skilled personnel for industrial projects and their appraisal, by Sanford Cohen.
  - 6 A system for Industrial project evaluation, by M.J. Solomon.
  - 7 Managerial requirements and their appraisal in industrial project evaluation, by J.H. Newman.
  - 8 Industrial project evaluation and the engineer, by Ching.
  - 9 General criteria for industrial project evaluation, by A.K. Sen.
  - 10 The rate of interest and the value of capital with unlimited supplies of labour, by S.A. Marglin.
  - 11 Inter-industrial aspects of project evaluation, by Z. Roman.
  - 12 Some considerations on the relationship between the industrial projects and transport services, by G. Siri.
  - 13 Capital budgeting and pricing techniques, by J.R. Meyer and L.M. Cole.

- CID/IPE/B.14 Criteria of economic integration in the industrial project evaluation in developing countries, by V. Cerniansky.
- 15 A study of environmental considerations in industrial project evaluation with special reference to the productivity of labour, by V. Halaxa.
- 16 Project planning in developing countries, by J.L. Tyron and F.E. Cookson.
- 17 Financial planning of industrial projects and their appraisal, by J. Dean.
- 18 Industrial project evaluation in the U.S., the U.K., and France, by The Economist Intelligence Unit, London.
- 19 Survey of literature on cost-benefit analysis for industrial project evaluation, by A.C. Harberger.
- 20 Useful procedures suggested for developing countries by the discounted cash flow technique, by J. McArthur.
- 21 Study of industrial plant systems, by ELC - Electroconsult. Milano, Italy.
- 22 Appraisal of financial needs for new industrial projects, by C. Williams.
- 23 Problems and methods of research into the effectiveness of investments in Poland, by M. Rakowski.
- 24 The economic evaluation of productive investments in Hungary, by M. Turanszky.
- 25 Bibliography on project evaluation, by F.E. Cookson and J.L. Tyron.
- 26 Evaluation of industrial infrastructure; methodology and practical experience, by T.E. Kuhn.
- 27 Foreign trade criteria in industrial project evaluation, by R. Schmelz.

- CID/IPE/B.28 Project evaluation in the presence of economies of scale and indivisibilities, by T. Vietorisz.
- 29 Shadow prices in industrial project evaluation, by J.S. Fleming and M.S. Feldstein.
- 30 Pricing problems in industrial project evaluation, by M. Ostrowski and Z. Sadowski.
- 31 A systems methodology for evaluating industrial projects in the context of national strategies, by E.B. Roberts.
- 32 Methodology of industrial project evaluation in Czechoslovakia, by O. Ferfecky.
- 33 National and commercial profitability, by C.M. Foster.
- 34 Criteria for evaluation of industrial projects in an open economy, by L. Csapo and M. Mandal.
- 35 Mathematic methods of evaluation of industrial projects, by O.A. Mihajlov.
- 36 Public investment criteria - benefit cost analysis for planned economic growth, by S.A. Marglin.
- 37 Economic criteria for choice of technique in a socialist economy, by K. Leszczynski.
- 38 Evaluation of an industrial project from the point of view of a rational location of productive forces, by L.B. Alaev.
- 39 Methods of technical and economic foundation of the development of industrial centres, by L.B. Alaev.
- 40 Management as a factor in project evaluation, by Stoneham.
- 41 Skill formation in Japan, by M. Yamada and M. Yokomizo.
- 42 Choice of location in industrial project evaluation, by Z. Zajda and S. Zawadzki.

- CID/IPE/B.43 Assessment of factor endowments in industrial project evaluation, by K. Baba and T. Unno.
- 44 Integration of accounting and economic concepts of costs and benefits in evaluation of industrial projects, by Arthur D. Little, Inc.
- 45 Combined criterion for investment in manufacturing industries in developing countries, by Centre for Industrial Development, UN.
- 46 The optimal selection of export-promoting and import-substituting projects by M. Bruno.

d. "C series" (Follow-up and supervision of industrial projects)

- CID/IPE/C.1 Follow-up procedures and practices, by H.T. Parskh.
- 2 Follow-up, by B. Berkoff.

e. "D series" (Survey of country experience)

- CID/IPE/D.1 Conversion of Malta dockyard, by A.H. Camilleri.
- 2 Argentina's experience in industrial project evaluation, by J. Lorenzo Vietti.
- 3 Ampliacion de la planta siderurgica de  
and annex Chimbote Proyecto, by M.H. Campos.
- 4 Planificacion global y evaluacion de proyectos, by M.A. Figueros.
- 5 Criteria for and experience in project evaluation, by M. Reza Amin.
- 6 Influence of local conditions in project evaluation, by A. El Barbary.
- 7 Selected Harvard Business School case studies: Nos. F985, 986, 987, 988, 989, 990, 991; ICR261 (and questionnaire).
- 8 Foundry forge project, by S.D. Joshi.
- 9 Governmental assistance in establishing industrial projects in the private sector, by Pakistan Industrial Credit and Investment, Ltd.
- 10 Project appraisal in PICIC, by S.V. Durrani.
- 11 Selected methodological problems of economic efficiency in capital investment in Bulgaria, by Ivan Ivanov.
- 12 System of appraisal of industrial projects in Yugoslavia, by M.V. Pejovic.
- 12 Application for credit for a cement factory,  
and annex by M.V. Pejovic.
- 13 Experience in industrial project evaluation in Nigeria, by G.A. Fatoye.
- 14 Colombia's experience in industrial project evaluation, I. Parra-Pena.

- CID/IPE/D.14 Una metodologia para evaluar proyectos de  
(Annex 1) ensamblaje automotor, by I. Parra-Pena.
- 14 Estudio y evaluacion de las propuestas  
(Annex 2) para ensamblar vehiculos automotores, by  
J. Otero T
- 15 Project evaluation in a development bank, by  
Nigerian Industrial Development Bank, Ltd.
- 16 Appraising an industrial project in India,  
by The Industrial Credit and Investment  
Corporation of India, Ltd.
- 17 Criterios para la seleccion de proyectos  
industriales en Cuba, by C.P. Angel M. Pernas.
- 18 Iran's experience in industrial project  
evaluation, by Khanbaba Iravani.
- 19 Project evaluation and development planning,  
by S. Behzat Akgur.
- 20 The growth of the internal market in relation  
to the strategy of economic development, by  
Romolo Arena.
- 21 A case study of the textile fabrics corpora-  
tion. Stanford University.
- 22 Operational planning of a sponge iron and  
continuous rolled steel production process, by  
H.A. Havemann.
- 23 Industrial project evaluation in Jordan, by  
S.F. Kawar.
- 24 Estudio de factibilidad planta para fabricacion  
de peroxido de hidrogeno (Agua oxigenada), by  
A.B. Gonzles.
- 25 Evaluation of projects in Bolivia, by Lic.  
C. Alipaz Alcazar.
- 26 Projects for industrial development in Iraq,  
by B. Al-Dabouni.
- 27 A Men's hosiery manufacturing facility for  
Nigeria, by Arthur D. Little.

- CID/IPE/D.28 Feasibility of a cassava starch industry in Nigeria, by Arthur D. Little.
- 29 A study of the feasibility of manufacturing opportunities for construction products in Nigeria, by Arthur D. Little.
- 30 Industrial project evaluation in Thailand, by Krit Sombatsiri.
- 31 Feasibility of producing hardboard and particle board in Greece, by Arthur D. Little.
- 32 The feasibility of an integrated fish-processing plant at Grand Rapids, by Arthur D. Little.
- 33 Feasibility of fixed nitrogen facility in the Philippines, by Arthur D. Little.
- 34 Evaluation of industrial projects - case study on power industries, by E.A. Elohin.
- 35 Technical education in the West Indies: project proposal, by V.A. Richardson.
- 36 Evaluation of industrial projects in Ceylon, by G. Gunatilleke.
- 37 Planning an integrated steel mill in a developing country, K.E. Robberg and R. Berchem.
- 38 Israel's experience in industrial project evaluation.
- 39 Experience of the West Pakistan Industrial Development Corporation in developing the industrial potential in Pakistan, A.M.K. Mazari, Chairman.
- 40 Financing of industrial projects, by Istituto Mobiliare, Italiano, Italy.
- 41 Summary analysis of country experience in industrial project evaluation, by G.C. Nworah and H. Akpan.
- 42 Process and site evaluation for the iron and steel industry in Mexico, by Quintana, Bueno and Gonzales Vargas.

- CID/IEE/L.43 Technical and economic industrial project evaluation, by Tzenov, Kostor and Dantohev.
- 44 L'importance du cadre institutionnel dans l'evaluation des projets industriels, by T. Mazizh.
- 45 Criteria for evaluation of industrial projects, by Industrial Finance Corp. of India.
- 46 Project evaluation of state enterprises in Ghana, by T.M. Dade.
- 47 Industrial project evaluation in Czechoslovakia: selected studies, by Research Institute for Building and Architecture.

f. Miscellaneous Documents

- CID/IEE/Misc. 1 Summaries of documents submitted to the symposium on industrial project evaluation, by Centre for Industrial Development, UN.
- 2 Definitions and explanation of selected terms used in industrial project evaluation, by J. Sonny.
- 3 Issues and problems, by Centre for Industrial Development, UN.



XVIII. UN INTER-REGIONAL SEMINAR ON PROMOTION OF INDUSTRIAL  
STANDARDIZATION IN DEVELOPING COUNTRIES, DENMARK,  
4 - 25 OCTOBER, 1965

a. Report 43 p. and annexes. 1966

E/C.5/103. English, French, Spanish, Russian.  
Proceedings are not being issued.

b. Papers of which master copies are in Ref. & Doc. Unit

What is standardization? Its aims and possibilities, by  
H.M. Glass.

The role of the United Nations, by R.C. Desai.

Experience in standardization efforts in a newly industrialized country, by S.K. Sen.

Standardization: its significance, aims, and possibilities for developing countries, by H.A.R. Binney.  
Re-issued as CID/VI/Background paper No. 8

Standardization in the USSR, presented by USSR.

XIX. EXPERT GROUP ON SECOND-HAND EQUIPMENT FOR DEVELOPING COUNTRIES,  
NEW YORK, 7 - 22 DECEMBER 1965

a. Report 59p. 1965

Transmitted by E/C.5/104 & Corr.1. English only.

b. Working papers

- CID/CONF.7(65)
- 1 List of participants
  - 2 A. Working programme and agenda  
B. List of working papers
  - 3 The potential of second-hand equipment in the industrialization of developing countries, by A. Wiener
  - 4 The use of second-hand equipment in developing countries, by Centre for Industrial Development, UN.
  - 5 The use of second-hand equipment in developing countries, by the Centre for Industrial Development, UN.
  - 6 A general survey of the used textile machinery market in the United States, by M.H. Rubenstein, Werner Textile Consultants.
  - 7 An analysis of the used machine tool market in the United States, by C.A. Simmons, Jr., Simmons Machine Tool Corporation
  - 8 Use of second-hand computers in the developing countries, by D. Wilson, Auerbach Corporation
  - 9 Second-hand automotive equipment with special reference to use in developing countries, by M. Alth
  - 10 Used chemical process equipment sources. Use, selection criteria, with particular regard to its application in developing countries, by M.H. Parker
  - 11 Second-hand machinery and economic development, by Netherlands Economic Institute

- CID/CONF.7(65) 12 The use of second-hand machinery in developing economies, by A. Waterston, IBRD
- ESA/CID/TD/IS/1 A general survey of the used textile machinery market in the US, by H. Rubenstein, Werner Textile Consultants
- 2 Use of second-hand computers in the developing countries, by D. Wilson, Auerbach Corporation
- CID/JGSM/JP.1 A study for the UN concerning used chemical process equipment sources, use, selection criteria, with particular regard to its application in developing countries, by N.H. Parker

XX. MEETING OF EXPERTS ON MANAGEMENT OF INDUSTRIAL RESEARCH  
INSTITUTES IN DEVELOPING COUNTRIES, NEW YORK, 7 SEPTEMBER -  
7 OCTOBER 1965

a. Report

Summary of deliberations (In: Industrial research news, vol. 1,  
No. 1, Sales No. 66.II.B.6)  
Summary report. E/C.5/117. English, French, Spanish, Russian.

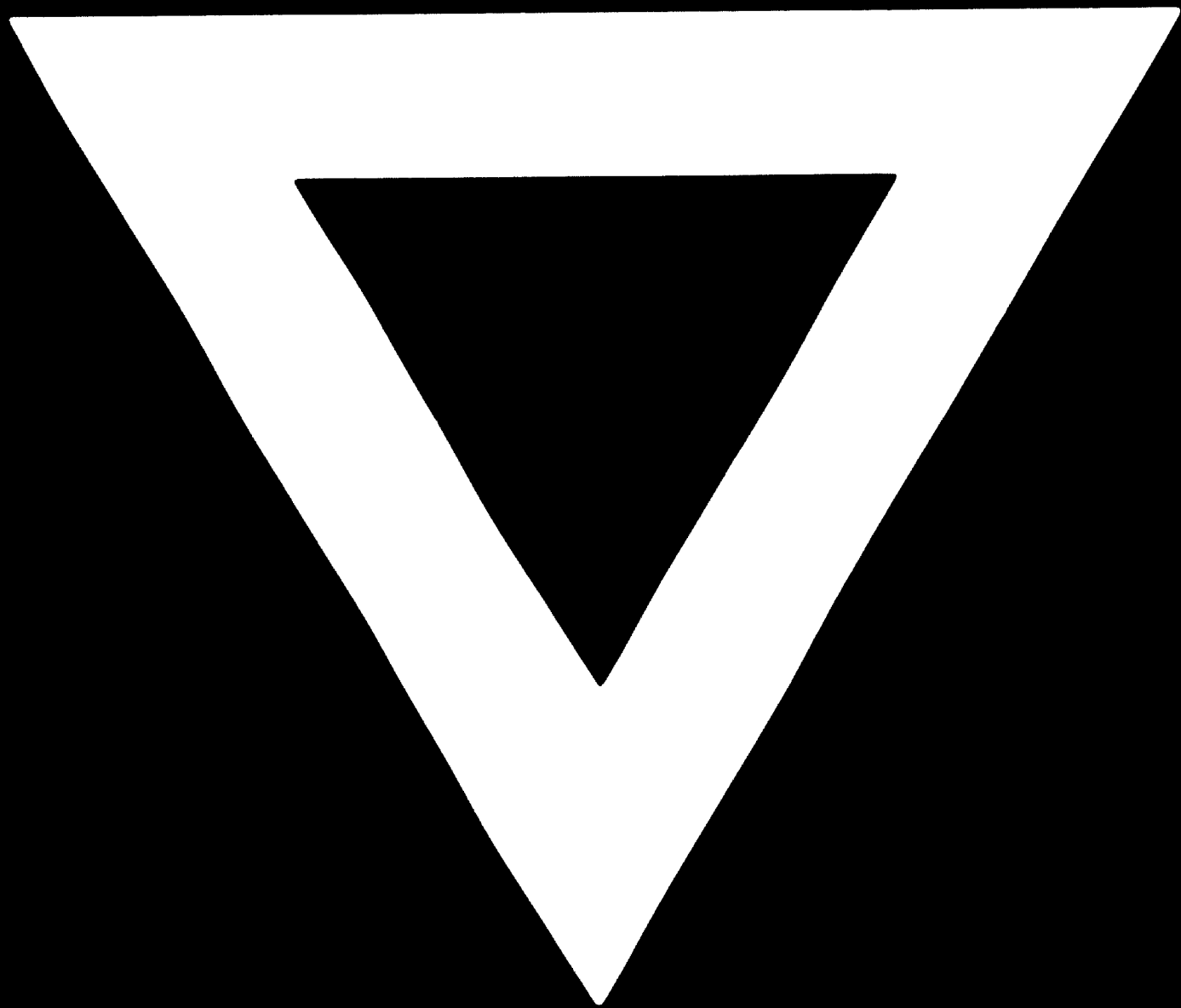
Meeting resulted in publication of: Manual on the manage-  
ment of industrial research institutes in developing  
countries. Sales No. 66.II.B.3 (ST/CID/6).

b. Working paper

No. 1            Managerial practices for industrial research  
                 institutes in developing countries, by L. A. Bass,  
                 Centre for Industrial Development.



**C-672**



**78. 11. 09**