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LIST OF UNIDO PUBLICATIONS ON PESTICIDES
1971 - 1982

Prepared by the
Chemical Industries Branch
Division of Industrial Operations

* This document has been reproduced without formal editing.
UNIDO Meeting on the Development of the Fertilizer and Pesticide Industries in Latin America, Rio de Janeiro, 1970
UNIDO-ID/WJ.80/9

UNIDO-PI/36 + Corr. 1
Publication on the Development of Pesticides Industries in Developing Countries, with Special Reference to the Role of UNIDO. (1) Covers (A) The Economic Implications of Pest Control (B) Factors to be considered in Planning Development of Local Pesticide Industries, according to Level of Industrialization (C) Types of Technical Assistance provided by UNIDO (D) Objectives and Methods of Pesticide Formulation (2) Appends Model Draft Job Descriptions for Assistance Requests.

Joint UNIDO/Romania Centre: Meeting for Identification and Development of Fertilizer and Pesticide Industries in the Developing Countries served by BCE, Bucharest, 1972
UNIDO-ID/WG.127/16

Industrial Production and Formulation of Pesticides in Developing Countries, Volume I: General Principles and Formulation of Pesticides.
UNIDO-ID/75 Vol. I
UN-E.72.II.B.5
Publication (1) Presents Papers covering the History and Significance of Pesticides; Laboratory Analysis; Principles of Formulation; Quality Control; Problems of Industrial Safety (in Connection with Workers' Exposure, Transport, Storage, and Materials Handling); Regulations of Pesticides in the USA (2) Lists Members of the Codex Alimentarius Commission and outlines Procedures for the Elaboration of Codes Standards. Statistics, Diagrams, Illustrations.
Publication covers (1) Chemistry of (A) Chlorinated Insecticides (B) Phosphorus Pesticides (C) Carbamate Pesticides (D) Pyrethrum Insecticides (E) Herbicides, Fungicides and Rodenticides (2) Development of Pesticide Chemicals (3) Economic Aspects of Site Assessment for Pesticide Plants (4) Marketing of Pesticides in Developing Countries (based on Experience in Colombia) (5) Setting up a Pesticide Production Plant. Diagrams, Bibliography.

Workshop on Pesticides, Vienna, 1973: The Formulation of Pesticides in Developing Countries
Vienna, 1973. 9 p.; by C.P. Kohll
UNIDO-ID/WG.154/3
Publication covers (1) Origin and Scope of Formulation Plants, giving Criteria for their Establishment and for Successful Domestic Production, i.e. Identification of Market Volume and Potential; Local Availability of Formulation Raw Materials, Small Pack Containers and Packaging Materials, Manpower, Technological Resources, etc., giving Examples of Production Costs (2) Trends in Pesticide Development.

Workshop on Pesticides, Vienna, 1973: The Manufacture of Pesticides in Developing Countries
Vienna, 1973. 15 p.; Tables, Diagrams, Graphs; by C.J.Lewis
UNIDO-ID/WG.154/4
Publication covers Major Problems of Domestic Production in such Countries (i.a. High Costs of Research and Development, and of Manufacturing; Investment Risks; Economy of Scale Factor; Raw Material Lack), Emphasizing the Need for considering such Problems within the Context of the National Economy in General, and the Chemical Industry in Particular. Statistics, Diagrams.

Workshop on Pesticides, Vienna, 1973: India's Potential in a Regional Co-operation of Pesticides Industries in South East Asia
Vienna, 1973. 35 p. Tables; by V.S. Bhatia
UNIDO-ID/WG.154/5 + Add.1 + Corr.1
Workshop on Pesticides, Vienna, 1973: Pesticides Industry in India; Status, Goals and Problems
UNIDO-ID/WG.154/6
Publication deals with Current Trends and Development Potential in Production and Use, Mentioning Losses in Crop Yield and Stored Food due to Inadequate Supply of Pesticides; their Importance to Public Health and to the National Economy, and Giving Recommendations.

Workshop on Pesticides, Vienna, 1973: Brazilian Pesticides Outlook
Vienna, 1973, 34 p. Tables; by H. Teixeira Alves
UNIDO-ID/WG.154/7
Publication covers (1) Present Status of Domestic Production and Imports (with Statistics), Distribution Pattern, Registrator and Licensing Regulations, Measure of Control in Use and Application; Agricultural Extension, and the Role of FAO and Private Enterprise in Development Aid, etc. (2) Future Trends and Incentives, and Including Problems due to Raw Material, Technical and Training Deficiencies.

Workshop on Pesticides, Vienna, 1973: Present Status and Contemplated Development of Pesticides Production in India
Vienna, 1973. 42 p. Tables; by B. Shah
UNIDO-ID/WG.154/8
Publication covers (1) Present Status of Indigenous Production of Insecticides, Herbicides, and Rodenticides, giving Forecasts of Requirements in Capital Goods, Foreign Exchange for Import of Raw Materials, and on Domestic Consumption to 1979 (2) Government Policy for Development by Means of Industrial Extension Efforts; More Rigid Quality Control and Licensing for Safer Pesticides and Pollution Control; Training Programmes, etc. Statistics.

UNIDO-ID/WG.154/9
Publication (1) Covers Development Trends in World Production and World Consumption, with Attention to Prices, World Sales and End User Value, by Country and by Product (2) Gives Information on and Chemical Analysis of Insecticides of Vegetables Origin; and on Pesticides Compatible with the Human Environment (Biological and Pollution Control System). Statistics, Bibliography.

Workshop on Pesticides, Vienna, 1973: The Present and Future Status of the Pesticides Industry in the Arab States
Vienna, 1973. 16 p. Tables; by G.M. Rouayheb
UNIDO-ID/WG.154/10
Publication covers Current and Projected Rate of Growth in the Production of Primary and Intermediate Products for Agriculture in Jordan, Iraq, Kuwait, Syria, Libya, Tunisia, Algeria, Morocco, Sudan, Lebanon, Egypt, giving Statistics on Consumption, Imports, etc.
- Workshop on Pesticides, Vienna, 1973: Technical, Economic and Legislative Factors Determining Choice of Pesticides for Use in Developing Countries
Vienna, 1973. 30 p. Tables
UNIDO-ID/WG.154/11


- Workshop on Pesticides, Vienna, 1973: Feasibility Study of a Multi-Purpose Pesticide Plant in North-East Brazil
Vienna, 1973. 29 p; by P. Barragat
UNIDO-ID/WG.154/12

Publication evaluates (1) Existing Favourable Factors for the Establishment of such a Plant, i.e. Existing Petrochemicals, Caustic Soda and Chlorine Plants; Sufficient Demand and Availability of Raw Materials for Copper Oxychloride (for Coffee Plantations), Benzene Hexachloride (for Sugar Cane), Toxaphene (for Cotton Insects), etc. (2) Investment Possibilities, Government Policy, Tax Incentives. Bibliography.

- Workshop on Pesticides, Vienna, 1973: Pesticides in Mexico
Vienna, 1973. 20 p. Tables; by A. Sisto Velasco
UNIDO-ID/WG.154/13

Publication (1) Reviews Recent Development and Growth Rate, Type of Production, i.e. Manufacture of Technical Products and Formulation of Mixed Insecticides for Agricultural Crops (mainly Cotton); Volume and Value of Imports; Problems and Development Potential (2) Briefly Discusses Control of Standards, and Regulations Regarding Pollution Control.

Vienna, 1973. 25 p. Table; by J.R. Brazzel
UNIDO-ID/WG.154/14

Publication on the Role of Pesticides in Modern Pest Control Practices (with Special Reference to Considerations of Pollution Control) - (1) Covers Advantages and Disadvantages of Pesticides and the Need for Selective Application and Alternate (Non-Chemical) Control Methods (2) Describes Six Types of Selective Insecticides Uses Minimizing Ecological Damage (3) Gives List of Widely Used Insecticides, Rating them with respect to Mammalian and Non-Target Toxicity, and Environmental Persistence. Extensive Bibliography.
Workshop on Pesticides, Vienna, 1973: Patterns and Problems of DDT Formulating, Storage and Use in Developing Countries
Vienna, 1973. 17 p; by M. Sobelman
UNIDO-ID/WG.154/15

Publication covers (1) Controversies on DDT Toxicity and Possible Deleterious Effects on the Environment (Ecology) (2) USA and World Production and World Consumption (3) Problems to be Considered before Deciding on Domestic Production, Touching on Formulation, Storage, Containers, Testing, etc. Bibliography.

Workshop on Pesticides, Vienna, 1973: A Note on the Market for Pyrethrum
Vienna, 1973. 23 p. Tables; by R. Wilson
UNIDO-ID/WG.154/16

Publication on Pesticides with Special Reference to the Market for Pyrethrum Insecticides - Discusses (1) Uncertain Pattern of World Production and Export Volume over the Past Decade, and the Impact of Kenya (as the Major Producing Country) (2) Prices Levels, Export Volume (for USA, UK and Italy), Consumption Trends, and Use as a Safe Product for Household and Horticulture (Pollution Control) (3) The Challenge of Synthetic Pyrethroids as a Potentially Cheaper Substitute. Statistics.

Workshop on Pesticides, Vienna, 1973: Pesticide Production and Problems in Brazil
UNIDO-ID/WG.154/18

Publication covers Domestic Production and Import Volume of Insecticides and Pesticides; Expansion of Research; Technical Aspects and Economic Aspects Determining Choice of Product; Legal Aspects and Pollution Control, etc. Statistics, Bibliography.

Workshop on Pesticides, Vienna, 1973: Present Status and Contemplated Developments of Pesticides in Arab Republic of Egypt
Vienna, 1973. 11 p; by I.A. Kamel
UNIDO-ID/WG.154/19

Publication on Use and Production of Pesticides in Egypt - (1) Covers Demand, Imports and Issues of Domestic Production (Local Formulation) with Special Reference to a DDT Plant (Operating since 1957), Industrial Safety, and Requirements of Pollution Control (2) Gives Suggestions on Role of UNIDO in Relevant Aid to Developing Countries.
Workshop on Pesticides, Vienna, 1973: Present Status and Contemplated Development of Pesticides Production in the Hungarian People's Republic
Vienna, 1973. 16 p. Tables; by K. Gerg
UNIDO-ID/WG.154/20

Publication covers (1) Past and Current Trends in Consumption and Distribution, Imports, Domestic Production and Formulation (2) Development Potential, Exportable Herbicides and Insecticides, etc., and the Need for Co-operation in Technology Transfer (Licensing) to Developing Countries. Statistics.

Workshop on Pesticides, Vienna, 1973: Pesticides Industry in Iran
Vienna, 1973. 9 p. Tables; by K.H. Abdollahi
UNIDO-ID/WG.154/21

Publication covers The Existing Production Capacity for Formulation; Import of Active Ingredients and Consumption Pattern; Problems of Providing Competitive Products for Import Substitution; the Demand Outlook; Development Potential, etc. Statistics.

Workshop on Pesticides, Vienna, 1973: Training Centre for Formulation and Biological Screening of Pesticides, Sponsored by UNIDO
Vienna, 1973. 12 p; by I. Marinescu
UNIDO-ID/WG.154/22

Publication on a Proposed Training Centre in Romania (1) Outlines Scope and Objectives of such a Centre, Serving Research and Development Needs of Developing Countries, with Attention to Training Programmes, Laboratory and Pilot Plant Functions in Pesticide Formulation, Physico-Chemical Analysis, Biological Screening, Toxicology (Pollution Control), etc. (2) Covers Equipment Requirements and Organizational Aspects.

Workshop on Pesticides, Vienna, 1973: Main Factors Determining the Development and Trends of Pesticides Production in Romania
Vienna, 1973. 32 p. Tables, Graphs; by A. Staicu
UNIDO-ID/WG.154/23

Publication reports on (1) Development and Present Status, Based on Growth of Chemical Industry and Trends in Agriculture (2) Trends in Formulation for Effective Pest Control, Considering Need for Competitive Prices Levels and Requirements of Pollution Control (3) Romanian Crops (Giving Cultivated Areas) and Related Pests. Statistics.

Workshop on Pesticides, Vienna, 1973: Guidelines for the Development of Pesticides Industry in the Developing Countries
Vienna, 1973. 2 p. Diagram; by S. Damasaputro
UNIDO-ID/WG.154/24

Workshop on Pesticides, Vienna, 1973: Pesticides Use in Mexico
Vienna, 1973. 4 p; by R. Munguia Barcena
UNIDO-ID/WG.154/25

Publication Discusses Developments in Agriculture; Pest Control Measures (Applied Mainly to Cotton Crops); Domestic Production of DDT, BHC, Toxaphene, and Herbicides, Based on Knowhow of Transnational Corporations, Requirements of Research and Agricultural Extension; Further Technology Transfer (with Attention to Lowering Product Costs); Pollution Control, etc.

Workshop on Pesticides, Vienna, 1973: The Pesticides Industry as a Component of the Agricultural Sector: Importance of Measures to Promote Pesticide Consumption in Developing Countries
Vienna, 1973. 16 p. Tables; by A.J. Martley
UNIDO-ID/WG.154/26

Publication (1) Considers Pesticides primarily as a Crop Production Tool, Stressing Overall Economic Implications within Countries Still Mainly Depending on Agriculture (2) Discusses Functions of the Industry and Stages and Factors in Pesticide Application, covering Choice of Product, Import Regulations, Labelling, Packaging, Questions of Domestic Production, Distribution Channels, Advice to Farmers (Agricultural Extension), etc.

UNIDO-ID/113
UNIDO-ID/WG.154/27

Report (1) Summarizes Issues Presented and Discussions with Respect to Modern Pest Control Methods; Future Trends in Production and Use; Formulation Trends and the Developing Countries; Aspects of Pollution Control, Pesticide Use Against Tropical Diseases (Health Services), etc. (2) Gives Information on Brazil, Egypt, Hungary, India, Indonesia, Iran, Mexico, Romania, and the IDCAS Region. Recommendations, List of Documents.

Regional Symposium for Asia and the Far East on the Production and Promotion of Pesticides and on Sub-Regional/Regional Co-operation in the Pesticides Industries, Bangkok, 1977: The Current Situation and Prospects on Pesticide Supply and Demand and Investments Required for Adequate Production in Developing Countries.
Vienna, 1976. 5 p. Tables
UNIDO-ID/WG.223/1/Rev.1

With Special Reference to the ESCAP Region (1) Gives Estimate of Pesticide Consumption and Production, Considering Regional Prospects to 1985 (2) Covers (A) Formulation and Active Materials Production Capacity, Pesticide Classes According to Patterns of Usage, etc. (B) Capital Investment and Working Capital Required. Statistics.
Regional Symposium for Asia and the Far East on the Production and Promotion of Pesticides and on Sub-Regional/Regional Co-operation in the Pesticide Industries, Bangkok, 1977: A 1975 Reappraisal of the Cost for Pesticide Inputs in Indonesia, the Philippines and Thailand, as Compared to Data Presented in the UNIDO/FAO Pesticide Survey in 1973
Vienna, 1976, 10 p. Tables; by W.J. Magee
UNIDO-ID/WG.223/2

Regional Symposium for Asia and the Far East on the Production and Promotion of Pesticides and on Sub-Regional/Regional Co-operation in the Pesticide Industries, Bangkok, 1977: Dynamics of Pesticide Usage and Growth in Agriculture in Developing Countries of ESCAP Region
Vienna, 1976. 48 p. Tables, Graph; by V.S. Bhatia
UNIDO-ID/WG.223/3
Publication covers (1) Problems of the Pesticide Industry; World Consumption Trends (2) New Approaches to Pesticide Production and Formulation (3) Services and Promotional Measures, Research Centres, Agricultural Extension, Private Pest Control Contractors, Distribution and Credit, Training, Know-how, Legislation, Environment and Ecology, etc. (4) Raw Materials Regionally Available or Needed (5) Experience in Brazil and India. Statistics.

Regional Symposium for Asia and the Pacific on the Production and Promotion of Pesticides and on Sub-Regional/Regional Co-operation in the Pesticide Industries, Bangkok, 1977: Malathion: An Industry Profile
Vienna, 1977. 27 p. Tables, Diagram; by C.L. Dhawan
UNIDO-ID/WG.223/5
With Special Reference to the Insecticides Malathion, Publication presents an Industry Profile, Covering: Chemical Analysis and Insecticidal Activity; Aspects of Product Safety; Formulation and Marketing; Process Description; Raw Materials; Water, Steam and Power Consumption; Capital Costs and Production Costs; Equipment Needed; Specifications of End Product; By-products and Effluent Waste Disposal. Process Flow Chart, List of Manufacturers.

Regional Symposium for Asia and the Pacific on the Production and Promotion of Pesticides and on Sub-Regional/Regional Co-operation in the Pesticide Industries, Bangkok, 1977: Report
UNIDO-ID/WG.223/9
- **Pesticide Formulation**
  Vienna, 1978. 61 p. Flow-Charts, Tables; by W.L. Kepplinger
  UNIDO/IOD.148

  Publication (1) Describes Processes and Gives Equipment
  Specifications and Equipment Costs for the Formulation of
  Dusts, Wettable Powders, Pesticide Solution, Emulsifiable
  Concentrates and Granular Products (2) Lists Suppliers of
  Equipment and of Ingredients Required for Formulations.
  Diagrams, Statistics.

- **International Technical Workshop on Appropriate Industrial**
  **Technology for the Control of Tropical Insect Pests and**
  **Disease Vectors, Nairobi, 1979: The Production of Pesticides**
  **in Developing Countries Including Natural Products**
  Vienna, 1979. 27 p. Tables
  UNIDO/EX.87

  Expert Report on Production of Pesticides in Developing
  Countries, Including Pyrethrum and Other Botanical Insecticides,
  Covers: Importance of Pest Control; The World Market in
  Pesticides; Setting Up a Local Production; Pyrethrum Production
  in Tropical Countries: Technical Aspects and Economic Aspects;
  Other Plant Products Insecticides; Benefits of Local Formulation;
  Need for Regulations, Product Safety Standards, Testing and
  Adaptive Research, Additional References: Agriculture, Environ­
  ment, Pollution Control, Toxicity.

- **Report on the Use of Pesticides in Latin America**
  Vienna, 1980. 139 p. Tables; by C. Maltby
  UNIDO/IOD.353

  Expert Report Covers (1) Estimated 1978 Pesticide Consumption;
  Forecast (2) Pesticide Producers, their Production Capacities
  and Estimated 1978 Production (3) Pesticide Formulators and
  their Estimated Capacities by Type of Product and Formulation
  (4) Domestic Production of Chemical Intermediates and Pesticide
  Formulation Additives; Selling Prices. Additional References:
  Chemicals, Bilateral and Regional Co-operation, Herbicides
  Insecticides, Fungicides, Argentina, Bolivia, Brazil, Central
  America, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru,
  Uruguay, Venezuela, Statistics.

- **UNDP/UNIDO Preparatory Meeting for the Regional Programme for**
  **Development and Control of Pesticides for Asia and the Pacific,**
  **Jakarta, 1980: Report**
  UNIDO/IOD.362

  Report (1) Covers (A) Reasons and Scope for such a Regional
  Programme (B) Components and Mechanism of Intercountry Co­
  operation Based on Links Between Industrial Institutions, with
  UN Co-ordination and Technical Assistance (2) Summarizes
  Country and Regional Reports from Bangladesh, India, Indonesia,
  Iran, Malaysia, Philippines, Korea R., Thailand, ARSAP and E/CAP.
  Additional References: UNDP, Role of UNIDO, Information Exchange,
  Pest Control, Agriculture. List of Participants.
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