OCCASION

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

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 for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org
CO-OPERATION WITH NATIONAL COMMITTEES OF UNIDO

Brief summary of major UNIDO programmes and activities

issued jointly by

Governments and Intergovernmental Organizations Relations Section

and

Public Information Section
CONTENTS

1. Introduction 1
2. General Conferences of UNIDO 2
3. Programme of Technical Co-operation 3
4. Industrial Studies 6
5. Transfer of Technology 7
6. Programme Development and Evaluation 9
7. System of Consultations 9
8. Industrial Investment Promotion 11
9. Assistance to the Least Developed Countries 14
10. Economic Co-operation among Developing Countries 15
11. Energy for Industry and as an Industry 16
12. Senior Industrial Development Field Advisers 18
13. Financing of Industrial Development 19
I. INTRODUCTION

Certain senior Government officials as well as representatives of National Committees for UNIDO have on different occasions complained about the lack of specific information on UNIDO programmes and activities resulting in lost opportunities in which this Organization could have come to the assistance of developing countries. As one of the major functions of these Committees is to promote UNIDO's objectives on the national scene, and to disseminate information on its programmes and activities, it was decided at the highest level in UNIDO to keep these Committees constantly aware of the latest activities carried out by its various Branches/Sections.

This brief summary of major UNIDO programmes and activities could be used as a ready reference by the National Committees for UNIDO and would be updated when necessary. Naturally, this is meant only to supplement the continuing efforts of the field staff, i.e. the United Nations Development Programme Offices, the Senior Industrial Development Field Advisers, the Junior Professional Officers and the UNIDO project personnel who are on the spot.
2. GENERAL CONFERENCES OF UNIDO

The Special International Conference of the United Nations Industrial Development Organization, which was later on considered as the First General Conference of UNIDO, was convened in Vienna, Austria from 1 - 8 June 1971. This Conference adopted a resolution on long-range strategy, structure and financing of UNIDO.

The Second General Conference of UNIDO was held at Lima, Peru from 12 - 26 March 1975. During this Conference the Lima Declaration and Plan of Action was adopted which recommended that the share of developing countries should increase to the maximum extent possible, to at least 25% of the total world industrial production by the year 2000. It also formulated the basic strategy, principles and measures for the achievement of this target.

The Third General Conference of UNIDO was held at New Delhi, India from 21 January - 9 February 1980. While adopting the New Delhi Declaration and Plan of Action which laid emphasis on the System of Consultations, co-operation between developing countries, assistance to the least developed countries, training, transfer of technology and development of energy resources to attain the Lima Target by the year 2000, it expressed disappointment that the share of the developing countries in world industrial production had increased in the meantime only to 9%.

Preparations for the Fourth General Conference of UNIDO are at present under way in which the assistance of the National Committees will be most welcome. This Conference will be held in Nairobi, Kenya towards the middle of 1984.
3. Programme of Technical Co-operation

The programme of technical co-operation is responsible for no less than 80 per cent of UNIDO activities. The delivery of this programme in 1982 was at the level of $91.9 million which when compared to $24.1 million delivered in 1974 demonstrates the dramatic increase in technical co-operation activities of UNIDO. This programme is carried out by the following Branches/Sections and Units of the Division of Industrial Operations.

Agro-industries Branch

Promotes the establishment, expansion and improvement of the technological efficiency of agro-based industries and implements projects in the fields of wood processing and wood products industries and the use of wood in construction, textile and garment industries, food industry, leather, and leather and rubber products industries; and of packaging technology and package production especially for agro-related industries. This includes product development and design, technical appraisal and studies of investment proposals, assistance in selection of process and machinery, plant layout and production planning and control, quality control and technical training in these sectors.

Chemical Industries Branch

Plans, formulates and implements technical assistance programmes in the chemical industry sector including petrochemicals, fertilizers, pesticides, basic inorganic and organic chemicals, pulp and paper, building and construction materials, environment pollution, fuels and chemicals from coal, peat, cellulosic materials and biomass.

Pharmaceutical Industries Unit

Plans, formulates and implements technical assistance programmes in the pharmaceutical industry sector including production of drugs and pharmaceuticals for human use as well as veterinary use including drugs based on fermentation, synthesis, medicinal plants, animal by-products, immunologicals and biomedical equipment and research, development and training related thereto.

Engineering Industries Section

Assists in identifying the needs of developing countries, designs projects that respond to these needs, administers and implements these projects and promotes a general awareness among developing countries in the following technical areas: manufacturing process — including machining, assembly,
inspection, materials handling, testing and shipping; manufacturing and industrial engineering; product design - including value engineering and adaptation; computer aided design and manufacturing - including numerical control machining, graphics applications, process planning, measurements etc.; maintenance and repair - including rework processes, equipments and spare parts inventory; and technical assistance to specific industries - principally machine tools, electrical, electronics, agricultural equipment, rail wagons, motor vehicles, power plants, construction machinery, pumps, scientific instruments, shipbuilding and transportation equipment.

**Metallurgical Industries Section**

Plans, formulates and implements projects in the following branches of industries of extractive and physical metallurgy: light and heavy non-ferrous metals; iron and steel industry; foundries and other metal transformation processes including rolling, forging, extruding, heat and surface treatment and welding; strengthening and development of centres for metallurgical research and development; and operations related to development and adaptation of metallurgical technology, with special emphasis on TCD activities; and processing metallurgical minerals.

**Institutional Infrastructure Branch**

Promotes well planned and properly functioning industrial institutions and institutional infrastructures to serve industry at large and implements projects in the field of industrial research and industrial information; standardization, quality control and metrology; small-scale and rural industry; associations, chambers of commerce and industries, industrial fairs; product design, adaptation and subcontracting; and legislation and patenting.

**Feasibility Studies Section**

Implements technical assistance projects in industrial opportunity, pre-feasibility and feasibility studies as well as supporting studies, such as market surveys and locational studies; acts as actual co-ordinating unit within UNIDO for all pre-investment studies in order to ensure that these studies cover markets, technology, manpower, resources and financial/economic analysis based on UNIDO Manual for the Preparation of Industrial Feasibility Studies, including application of a computer programme for these; assists in the development of national capabilities in pre-investment studies through the establishment of national project planning centres and training workshops in project preparation and evaluation with the aim of strengthening the link between pre-investment and investment.
Training Branch

Promotes and implements projects in the field of training, including design and development of new training capabilities; strengthening of training related institutional infrastructure and promoting the concept of Centres of Excellence; strengthening of existing and ad hoc training projects; implementation of all UNIDO fellowships and study tour operations and group training programmes (seminars, workshops, in-plant programmes) organized in developed and developing countries; and publishes the "UNIDO Industrial Opportunities for Industrial Development" and "UNIDO Industrial Training Offer Programme".

Factory Establishment and Management Branch

Promotes and implements projects aimed at improving productivity of existing industrial enterprises and effective utilization of capacities, including rehabilitation of potentially viable industries, through better management; strengthening of industrial accountancy practices and of reporting and control systems for the management of public enterprises; development of and support to industrial marketing including industrial distribution systems; strengthening of industrial management consultancy capacities and provision of diagnostic consultancy services to industrial enterprises and factories; application of computers for industrial management; fostering industry-university co-operation; strengthening government bodies responsible for the erection and operation of industrial enterprises; developing management information systems at enterprise or corporate level; assistance in introducing energy management at the sectoral level.

Industrial Energy Engineering Unit

Implements technical assistance projects for development of industrial energy strategies, policies and plans; in the design, establishment, expansion and/or improvement of integrated industrial energy systems; for modern industrial energy management, including rationalization, substitution, co-generation, saving and optimization of energy balances; and for the design, production and maintenance of energy equipment and appliances.

Industrial Planning Section

Implements technical assistance projects in the field of planning and programming with major emphasis on the formulation of national industrial development plans and strategies; the strengthening of national planning institutions, sectoral planning and programming; surveys and analytical reports of industrial policies and constraints on industrialization including technology, manpower and capital; and promotion of regional industrial integration and co-operation.
Project Personnel Recruitment Section

Plans, co-ordinates and conducts the recruitment of all project personnel and OPAS experts on behalf of requesting Governments.

Purchase and Contract Service

Arranges the procurement of equipment and the purchase of services required for the implementation of technical assistance projects and for UNIDO Headquarters requirements and the Vienna International Centre.

4. INDUSTRIAL STUDIES

The genesis of the Division for Industrial Studies stems from the Declaration and Plan of Action of the Lima Conference, where UNIDO was requested to reshape and improve its study programme so that the organization would build up knowledge in global, regional and sectoral trends in industrialization, analyse and obtain a better understanding of the main problems confronting the developing countries in their industrialization processes.

The overall objective of the Global and Conceptual Studies Branch is to carry out analytical work devoted to the examination of long-term economic and social trends in industrialization and to provide information and scenarios on the global industrial restructuring process: the subsidiary objectives being to maintain systematic surveillance of that process, monitor the progress made in implementing the Lima Plan of Action and the International Development Strategy for the Third United Nations Development Decade and contribute to the revision of relevant policies necessary for its achievement.

In the Regional and Country Studies Branch, studies and research are carried out on the structure, pattern and trends of industrial development at the country, regional and subregional levels for use in the formulation and implementation of industrial development plans, policies and strategies. The subsidiary objectives are to collect, monitor and classify information in relation to industrial development at the country, regional and subregional levels; to provide Governments, and in particular those of the least developed, land-locked, island and most seriously affected countries, with supporting studies and guidance for their long-term industrial development.
The objective of the Sectoral Studies Branch is to develop sectoral strategies and broad sectoral plans for international action directed towards the promotion of specific industrial sectors in developing countries, strengthening co-operation between developing and developed countries, and between developing countries and regions; the subsidiary objective being to conduct analyses of past, present and future developments in specific industrial branches, to identify major problems, and to propose measures for their solution, with emphasis on international co-operation and assistance to national policy-makers in the elaboration of sectoral strategies and programmes. Sectoral industrial studies serve as an instrument to bridge the gap between global assessments of the long-term development of the world industry and operational activities which include, inter alia, the technical co-operation activities of UNIDO. These studies are discussed at the consultation meetings where the findings serve as a basis for providing the conclusions and recommendations.

5. Transfer of Technology

Interrelated and converging technological advances currently taking place in fields such as micro-electronics and biotechnology are expected to profoundly affect economies and societies. Realizing this, developed countries have started systematic action to respond to these advances. In developing countries, while varying degrees of awareness exist, action has hardly started and even the potentials and implications of the technological advances for the developing countries have not been fully assessed. The advances, unless applied and assimilated, can be expected to lead to an irreversible widening of the technological gap between developed and developing countries; alter the pace and pattern of industrial development; and leave unexploited opportunities and potential benefits in the vital fields of food, energy and environment. The particular applications which are specific to developing country conditions and requirements are hardly likely to be taken up by the developed countries, even though several of the technologies lend themselves to applications in developing countries in terms of scale, investment and skill requirements. It is widely recognized that developing countries should lose no further time if they wish to avoid new and more portentious technological and economic asymmetries.
Given this general scenario, each developing country has to assess for itself the implications with reference to its own conditions; and start action by building its own technological capability and readiness. Several countries with their efforts in technological development and the progress already achieved have an opportunity they can ill afford to miss. While action has been initiated on several fronts in regard to these technologies, further coherent and concerted programmes would emerge if the several technological advances were considered in their totality and interrelationship, and with an accent on policy action, by a round table of leading policy-makers, technologists, development specialists and persons drawn from industry and other sectors.

UNIDO is in a position to contribute to the organization of such a round table by placing at its disposal leading international experts in the selected fields together with specific documentation analyzing the implications for, and action to be taken by, developing countries. The UNIDO Secretariat is already implementing a programme on technological advances at the international level and is involved in a related national programme in Mexico. Such round tables are planned in Mexico, Brazil, Egypt and India. The fields of microelectronics, and biotechnology and genetic engineering have already been considered in depth by two expert meetings convened by the UNIDO Secretariat resulting in a series of recommendations for national and international action, as also in considerable useful documentation. A similar expert meeting has taken place in the field of sea-bed mining. A study on technological trends in machine tools has been completed, while one on selected petrochemicals is nearing completion.

UNIDO's Industrial Inquiry Service together with the Industrial and Technological Information Bank (INTIB) answer questions relating to industrial development received from developing countries in every sector of industry and at every level of concern by drawing on various sources of information available in and outside the organization. It is intended to serve local industrial planners, managers and engineers by providing them with an additional source to which they can turn for information. It also provides information on alternative technologies through the preparation of industrial profiles.
6. Programme Development and Evaluation

The Programme Development and Evaluation Branch is the focal point within UNIDO for all initiatives in the development of technical co-operation activities. In particular, it is responsible for co-ordinating UNIDO participation in the UNDP country, intercountry, interregional and global programming exercises as well as for the development of operational programmes of UNIDO irrespective of the sources of funds used to finance such programmes. It also acts as the Secretariat of UNIDO's Programming Committee.

This Branch is further responsible for the design and monitoring of UNIDO's self-evaluation system and for providing assistance throughout the Secretariat in planning and implementing project evaluation and preparing project evaluation reports. It also plans, manages, supports, and participates in special field projects and performs programme evaluations.

7. System of Consultations

The System of Consultations which has become a permanent activity of UNIDO is one of its major programmes that captured the attention of the greatest majority of member States. More and more countries are becoming aware of the importance of this programme.

Between 1977 and 1982, 18 Consultation Meetings covering nine sectors and two common topics took place; over 2,800 persons have participated in the Consultations held so far.

Its basic objectives and characteristics are contained in the rules of procedure adopted by the Board in May 1982. They include the following:

1. To serve as a forum for developed and developing countries in their contacts and consultation directed towards the industrialization of developing countries;

2. To identify problems encountered with the industrialization of developing countries, to consider ways and means to accelerate their industrialization and to contribute to closer co-operation with member countries;

3. To seek action-oriented measures from a policy, economic, financial, social and technical point of view towards increasing the share of developing countries in world industrial production and in creating new industrial capacities in developing countries;
4. To also permit negotiations among interested parties at their request, at the same time as or after consultations;

5. To formulate a report, which shall include conclusions and recommendations agreed upon by consensus and also other significant views expressed during the discussions. The Industrial Development Board then considers these reports and the conclusions and recommendations contained therein, and decides and provides guidance on appropriate follow-up action.

These Consultations cover for the first time in an international forum a wide spectrum of participants: officials of Governments from all member States of the United Nations, as well as representatives of industry, labour consumer groups and others as deemed appropriate by each Government. The System of Consultations has been in operation for six years. This is the only United Nations forum where all interested parties participate together in discussing the problems of industrialization of developing countries. The representatives of industry have usually numbered at least one-half of the total number of participants; this has averaged 180. However, there have been only a few representatives of labour at most Consultations, although the World Federations/Associations of Trade Unions have usually participated.

A basic consideration in the System of Consultations has been to discover the form and content of international co-operation which would supplement the national efforts of the developing countries in their drive to achieve the Lima target till the year 2000. In these Consultations, views are sought from concerned parties on the possible share of developing countries in a specific sector of industry, then efforts are made to reach consensus agreements on principle which give an authoritative indication as to their share in the year 2000 and serve as an acceptable point of convergence for the interests involved. Some of these 'agreements on principle' are as follows:

1. The developing countries could reasonably expect to reach 30 per cent of the world output in the iron and steel industry by the year 2000;

2. In the fertilizer industry, the developing countries should become self-sufficient in the production of nitrogenous and phosphate fertilizers as soon as possible;

3. In the leather and leather products industry, growth should be predominantly in the developing countries.
After reaching these 'agreements in principle', participants discuss mutually acceptable arrangements which would assist in the achievement of these goals, for example:

1. In the leather and leather products industry the drafting of ground rules for the rationalization of world productions, trade and marketing;

2. In the pharmaceutical industry, arrangements to overcome technical and economic problems related to the production of intermediates and bulk drugs in developing countries;

3. The development of a frame of reference which would provide policy guidelines for a comprehensive approach to the acquisition of technology, financing, marketing, etc. in the food processing industry.

Finally, they try to translate the positive general intentions related to industrial co-operation into specific instruments designed to balance the different interests involved in international industrial co-operation. One of the most important results has been the formulation of model contracts in the fertilizer industry which are balanced between obligations, liabilities and financial compensation and which with moderate modifications could also be applied to any other processing industry. In the leather and leather products industry, the checklist of points to be covered in contractual agreements was approved by the Leather and Leather Products Panel, and would be circulated to members of industry as well as to other interested parties.

**Industrial Investment Promotion**

In UNIDO, the responsibility of promoting industrial investment projects in the developing countries rests with the Investment Co-operative Programme Branch (ICPB) which assists developing countries in their efforts to generate foreign investment in industry. The first step in these promotional activities is the identification of suitable industrial investment projects through fielding missions of individual staff members or teams of experts. Basic information on a project is compiled on an industrial investment project questionnaire which contains information for prospective foreign partners to make a prima-facie judgement on the soundness or otherwise of a project.
Feasibility studies are undertaken once foreign partners interested in the project have been located and a detailed study is considered essential before commitment of funds.

The next stage in the process is locating the right resources to bring the project to fruition. These resources may take the form of joint venture partnership, cash investment, supply of technology, provision of management expertise etc. With its network of Investment Promotion Services, UNIDO assists the developing countries in obtaining these resources from public and private entrepreneurs in the industrialized and advanced developing countries. It renders valuable service by identifying potential partners from developed countries for investment and brings projects to the attention of entrepreneurs in three ways:

a. At present, UNIDO maintains seven Investment Promotion Services in Brussels, Cologne, New York, Paris, Tokyo, Vienna and Zurich. These Services seek to establish a direct link between the project sponsors and the enterprises in the developed countries. Project proposals reaching UNIDO are sent to these Services for promotion in the countries in which they are located. The activities of these Services are fully supported by their host Government who extended financial assistance in the setting up of these offices. During 1980–82, the Investment Promotion Services were instrumental in promoting 144 industrial investment projects (with total investment cost of $2,0 billion) in 43 developing countries, eight of which are least developed. UNIDO is considering setting up of more Investment Promotion Services especially some in advanced developing countries. Investment Promotion Services in the advanced developing countries would promote the concept of economic co-operation among developing countries, emphasizing the transfer of know-how and technology and some investment promotion from these countries to other developing countries.

b. The Investment Promotion Meetings, which cover a specific geographical location, bring project promoters face to face with potential partners. During 1981/82, investment promotion meetings were organized in Bangladesh, China and Sri Lanka. Two more meetings, namely in Chile and Senegal are also proposed.

c. Industrial investment projects are also promoted by direct contacts with enterprises located in countries where UNIDO does not have investment promotion services. Over the years, as a result of efforts made as well as through approaches made by interested firms, the Investment Co-operative Programme Branch has built up a dossier of interested firms willing to participate on a long-term basis in projects in developing countries.
To help carry out this work, five promotional tools are issued:

i) **Industrial Investment Project Proposals** list current projects which are being actively promoted. Here projects are mentioned under the relevant country and are cross-indexed by industrial classification.

ii) **Industrial Investment Profiles** contain general country and economic data, a summary of government investment policies, rules and regulations concerning foreign private investment, examples of existing manufacturing enterprises etc.

iii) **Financial Resources for Industrial Projects in Developing Countries** contain information on institutions all over the world willing to finance projects in developing countries. Two volumes of this publication are already available and the third is under preparation.

iv) **Manufacturing Ideas** cover a modest range of medium-sized manufacturing units. Each leaflet contains a brief description of the manufacturing process involved, the necessary machinery, an indication of costs etc. This document helps promoters in identifying suitable products for manufacture at home.

v) **Roster of Resources** consist of lists of products grouped by industrial sector. Against each product appears the name of the enterprises willing to offer resources for the manufacture of the product in developing countries. It is updated once or twice a year and is distributed widely among institutions in developing countries.

Training in "investment promotion" is gaining in importance. The programme covers short training courses as well as courses lasting for one year or more. The trainees from developing countries, after an initial training period, are encouraged to establish contacts with the industrial institutions in the country of their training to promote investment of projects of their own country. This programme started with the New York service and is now extended to other Investment Promotion Services also. Since the beginning of the programme, more than 100 executives have been trained in investment promotion and a number of them were from the least developed countries. This programme is yielding practical results; in 1980, a Philippine participant successfully promoted a project in the manufacture of plastic tubing for agricultural purposes and construction, and a Sri Lanka participant arranged for the building of a $22 million electronics factory in his own country, which is expected to employ over 2,600 workers when it reaches full production.
9. Assistance to the Least Developed Countries

The Least Developed Countries Section focusses on the industrial development needs of the least developed, the land-locked and the island developing countries. As part of the Policy Co-ordination Division, the Least Developed Countries Section assists in formulating appropriate policies and developing technical co-operation programmes and projects to meet the particular requirements of the least developed countries and, in close co-ordination with the Programme Development and Evaluation Branch, in developing inter-country programmes and projects to benefit the land-locked and the island developing countries. The Section further assists in mobilizing financial resources for the expanded programme of assistance to the least developed countries and monitors activities throughout the organization that are designed to benefit the least developed, land-locked and island developing countries.

The New Delhi Declaration and Plan of Action placed further emphasis on the need to strengthen the capacity of UNIDO to deal with the special problems of these countries in the field of industrial development.

In close co-operation with other units of UNIDO, the Least Developed Countries Section performs more specifically the following functions:

1. Reviews all requests, initiates programmes and projects of technical assistance in favour of the least developed countries. Finalizes the necessary project documents and project data sheets for approval;

2. Initiates and follows up the necessary action related to UNDP country programming exercises in the Least Developed Countries;

3. Initiates and develops, in close co-operation with the Programme Development and Evaluation Branch, special inter-country programmes and projects for the land-locked and island developing countries;

4. Develops programmes and projects for special assistance to the Sudano-Sahelian zone;
5. Watches the progress of programmes under various funds with a view to ensuring the full utilization of resources specifically ear-marked for the LDCs, and suggests appropriate policies, guidelines and conclusions concerning the development of future programmes and activities;

6. Maintains, in close co-operation with the UNDP Resident Representative and UNIDO Field Advisers, contacts, consultations and exchange of views with the authorities concerned in the least developed countries with a view towards identifying requirements and priorities for technical assistance;

7. Collects, compiles and disseminates basic information relating to the industrial development of the least developed countries;

8. Initiates consultations with the potential bi-lateral and multilateral technical and financial assistance institutions with a view to increasing the flow of the resources required for the implementation of the industrial projects requested by LDCs;

9. Identifies suitable programmes and projects in co-operation with the other UN organizations in order to ensure integrated technical assistance programmes to benefit the LDCs; and

10. Prepares analytical reports on UNIDO's technical assistance and other activities in favour of the least developed countries, as required by the various governing bodies, including the UN General Assembly.

10. Economic Co-operation among Developing Countries

To enhance economic and technical co-operation among developing countries, UNIDO has launched a number of promotional, operational and research programmes and projects. One such programme is to assist in the industrialization of a number of least developed countries through co-operative endeavours by the developing countries.

An innovative mechanism in this case has been the organization of Solidarity Meetings of Ministers of Industries. This mechanism consists of preparing a specific portfolio in areas where a host least developed country seeks co-operation from other developing countries and subsequently presents these specific proposals to a ministerial meeting of selected donor countries.
In the course of this meeting, at which the economic and industrial environment of the host country is described, individual projects of interest to specific donor countries are discussed in detail. So far, eight such meetings have been held in Afghanistan, Bangladesh, Haiti, Sudan, United Republic of Tanzania, Upper Volta, Mauritania and Lesotho. A ninth one is being scheduled for December 1982 in Nepal and a substantial number of projects are already under implementation.

A significant development of these solidarity meetings is that in addition to launching industrial training and infrastructure projects, agreements are now being reached between some developing countries and the host least developed countries on the supply of complete plants and other capital goods on credit terms. Although the immediate impact of this programme on the flow of resources to the industrialization efforts of the least developed countries concerned is modest, it does offer considerable potential for the flow of both technology and trade. It is felt that the programme would moreover provide some of these countries with the initial experience in launching the larger consortium-type meetings suggested in the substantial new programme of action which would cover all socio-economic sectors. In the latter programme, which is expected to grow at the initiative of the least developed countries concerned, UNIDO would be prepared to contribute within its resources. It should, however, be emphasized that although experience has proved the usefulness of these solidarity meetings, UNIDO has been forced to keep the programme at a modest level, on an average of two meetings per year, owing to resource constraints.

11. Energy for Industry and as an Industry

It has become increasingly clear during recent years that social, economic and, particularly, industrial development are inextricably connected with energy development and utilization. More than 85 per cent of world energy is consumed either directly in industry or, indirectly, for the use of capital and consumer goods produced by industry. The existence of an "energy gap" can only be bridged through a much greater use of conventional and new and renewable sources of energy. Although other factors, such as technology, finance, human resources and raw materials are also essential, energy is at present one of, if not the critical factor affecting the operation, establishment and/or expansion of industry in developed and developing countries. It is also a decisive factor determining international trade and finance.
The impact of the "energy emergency" on industrialization creates problems and opportunities for the developing countries. It is the view of UNIDO that the latter more than outweighs the former. The energy-related programme of UNIDO, in terms of studies, technical assistance, technological development and investment promotion should expand in the next few years along three main guidelines, namely (a) "energy for industry" (b) "industry for energy" and (c) "energy management":

a) Energy is a basic, critical input to the industrial sector. The diversity and amount of energy resources available determine, to a great extent, the expansion and structure of the industrial sector. There is a strong correlation between the pattern of energy availability (type, quantity, location, timing, cost, environmental impact) and the corresponding industrial pattern that can be established (sectors, size, processes, products, investments, production costs, location, export potential, environmental impact, etc.) For developing countries in particular the role of new and renewable sources of energy and their potential contribution to industrial operations and industrial development must be examined. Thus, effort will have to be directed at the development of "energy appropriate" and "energy efficient" processes and products.

b) Industry is also a supplier of inputs or services to the energy sector. The contribution of industry includes the production of equipment and special materials for the energy sector (for petroleum exploration, coal mining, hydropower stations, transmission lines, pipelines, etc.) and the industrial processing of primary fuels or of special raw materials for production of secondary, higher quality or special fuels.

c) Energy management has always been a primary concern in industrial operations. Well managed medium or large scale industrial plants have, for decades, included an energy management unit of some sort and/or appropriate energy control programmes. The problem has, however, become acute in recent years, with the scope and urgency of such programmes being increased to the point where energy management is receiving the closest attention from both industry and Governments, at national, sector and plant levels.

Industrial energy management must consider, analyse, plan and programme action relating to the "MEANS" required in developing countries to enable the successful, expeditious and effective implementation of the concurrent goals of energy development and its utilization and industrialization, which include:
scientific and technological development to secure the basis of knowledge and know-how essential for energy-related activities;

ii) education and training (including "recycling") to ensure the availability of proficient energy-engineers, energy-economists, energy-technicians and skilled workers needed for the operation of energy, industry and other sectors;

iii) adequate financial machinery to promote and sustain the energy/industry development effort;

iv) legislative, fiscal and promotional framework to originate and provide incentives for expansion or improvement of patterns of energy production and consumption.

The "Report on energy-related industrial development activities" (UNIDO/CED.130, 11 February 1981) presents an overview of UNIDO's mandate, activities, arrangements and agreements relating to energy development and use in connection with the industrialization process. Since the publication of the above document, the main facts, principles, aspects and broad goals needed to work towards a comprehensive and balanced UNIDO effort in the area of energy/industry development have been identified. Another comprehensive report entitled "Energy Development and Industrialization" has been finalized and is now being processed for reproduction and distribution.

12. Senior Industrial Development Field Adviser

The Field Reports Monitoring Section provides the link between UNIDO Headquarters and the field services in developing countries. At present, it comprises of about 30 Senior Industrial Development Field Advisers (SIDFAs) and about 50 Junior Professional Officers (JPOs), who, in co-operation with the Administrator of the United Nations Development Programme, administer, design and manage the industrial development activities in the field in developing countries. This Section receives system quarterly reports from each of its 70 duty stations, which are either covered by SIDFAs or JPOs, or both.

The SIDFAs (and JPOs in a minor, but related way) co-ordinate UNIDO's operational activities in the field and function as industrial advisers, both to the technical authorities of the recipient Governments and to the Resident Representatives of the UNDP Office, on matters relating to technical cooperation. They have direct contacts with technical authorities of the
recipient Governments on programming, execution and evaluation of UNIDO projects and provide guidance to all UNIDO experts. The SIDFAs and JPOs report directly to UNIDO Headquarters. They closely follow-up on UNIDO projects from the primary concept to their successful implementation by conducting, monitoring and observing the effectiveness of the projects. Advice, if requested, is given to the Government concerned on how industrialization could be promoted and the role that UNIDO could play in it.

Additional activities of a SIDFA are to negotiate and plan non-IPF projects i.e. those which are funded by other programmes, to keep a general oversight of the economic development of countries, following up of UNIDO's National Committees, representing UNIDO in conferences, meetings, seminars etc.

13. Financing of Industrial Development

"1. The New Delhi Declaration and Plan of Action called for an initiative for accelerating the flow of external financing to industry in developing countries. In following up on this recommendation, the Secretariat has analysed the specific requirements of industrial financing in the developing countries as well as the presently decreased international economic situation. As a result of this evaluation, it appeared that the principles and objectives of providing adequate finance on appropriate terms for industry in the developing countries, would be fulfilled more rapidly and effectively by setting up a new mechanism for mobilizing additional funds likely to be available in the international capital markets.

"2. A proposed mechanism has been developed by the Secretariat and tested and refined through two meetings with a Special Advisory Group of Experts on International Industrial Financing. The experts, mostly practicing central or international bankers, participated in their individual capacities. They strongly endorsed the UNIDO proposal to set up an International Bank for Industrial Development which, operating on a commercial basis, would work alongside existing international financial institutions to ensure a more efficient channelling of additional funds to areas where they are most needed for industrialization. The new mechanism would borrow short-term funds from the money and capital markets, transform their maturities, and provide long-term loans for industrial projects in developing countries. It would be based on principles of universal participation, mutual interest of all participating countries, and equitable control in decision-making and management. It would be capable, finally, of applying innovative techniques of borrowing not currently practiced by multilateral financing agencies." (12/3/261/add.7)
This subject has been under consideration during the 15th and the 16th sessions of the Industrial Development Board. While recognizing the importance of financial flows to industrial development in developing countries, the Board was unable to come to an agreed decision and therefore this question will revert to the seventeenth session of the Industrial Development Board.