



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th 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.

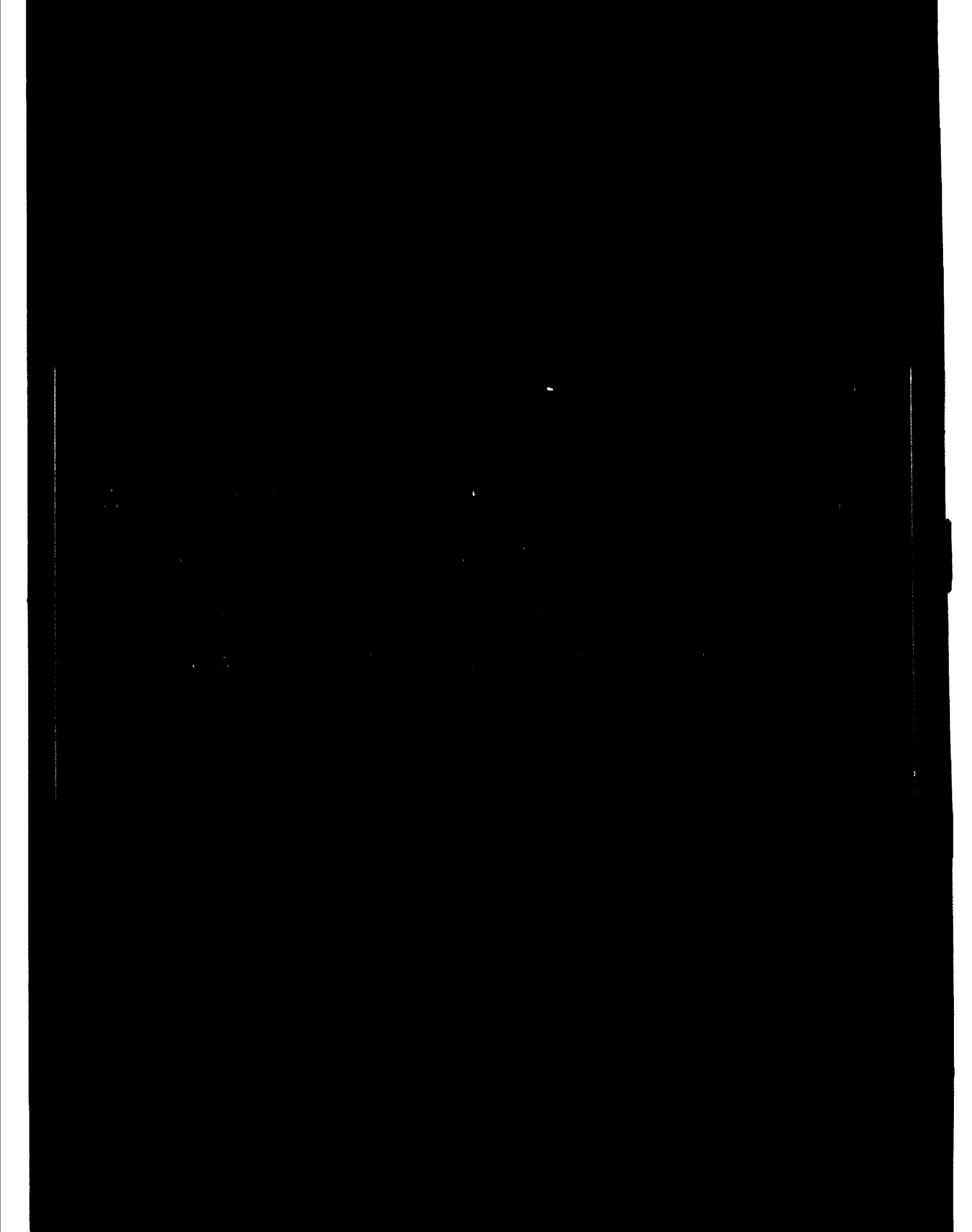
FAIR USE POLICY

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 for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org





07235



Distr.
LIMITED

ID/WG.237/7
16 November 1976

ENGLISH

United Nations Industrial Development Organization

Meeting of Top-Level Industrialists
on Factory Establishment Projects
in Developing Countries
Vienna, Austria 18-20 November 1976

OPPORTUNITIES AND PROBLEMS FOR
FACTORY ESTABLISHMENT IN
DEVELOPING COUNTRIES¹

Issues for Consideration

prepared by the
Secretariat of UNIDO

¹ This document has been reproduced without formal editing.

14.76-6601

TABLE OF CONTENTS

	<u>Page</u>
1. The Need for a New Approach to Close the Factory Establishment Gap	1
1.1 A General Perspective	1
1.2 Issues for the Participants	2
2. Opportunities to Accelerate Factory Establishment	4
3. Increasing "Benefits of Industrialization" for the Host Country	5
4. The Role of UNIDO and Other International Organizations	7
5. UNIDO's Factory Establishment Programme	9

1. THE NEED FOR A NEW APPROACH TO CLOSE THE FACTORY ESTABLISHMENT GAP

1.1 A General Perspective

Officials of many, if not most, developing countries point to less than hoped-for results from their industrialization programmes. They may cite the following indicators of sluggish performance:

- Many project proposals never get beyond the idea stage;
- Many favorable project studies are never acted on;
- Many projects which are implemented turn out to have been poorly designed, poorly negotiated, untimely, or otherwise inappropriate.

Many theories are advanced in explanation of the above. For example, we frequently hear that there is a severe shortage of bankable projects in developing countries because the markets are "too small" to support diversified industrial development. This simplistic statement falls far short of explaining the situation, and UNIDO experience strongly suggests that (1) every country has project opportunities which can be developed and (2) the industries established in a given year can be designed and managed to contribute to a cumulative "snowballing" of industrial development in following years.

Certainly the developing countries expressed their belief in this principle through the Lima Declaration.¹ And the ambitious target of increasing developing countries' share of industrial production to 25% by the year 2000 requires reliance on every available linkage among industrial branches to achieve a cumulative growth rate higher than in past years.

One of the models of global industrial growth considered by UNIDO for the remaining quarter of this century postulates a 10.5% annual rate of production increases for the developing countries. The assumptions employed in one case of the model,² result in projections of capital investment increments rising from \$70 billion in 1976 to \$915 billions in the year 2000. Although these figures are subject to major revision, there is no doubt that the task (or, better, the opportunity) facing the developing countries and their overseas partners is very large.

Model builders can extrapolate from these gross investment figures to arrive at further estimates of the numbers of factories which will have to be designed, financed, built, staffed, and managed. They can also estimate the value and numbers of man-years of effort required to prepare feasibility and design studies and to oversee construction and start-up. They can also make educated guesses on the number and type of technology licensing agreements and management contracts that will have to be negotiated.

¹ Lima Declaration and Plan of Action on Industrial Development and Cooperation, especially paragraph 38(f).

² Constant growth rate, value added at 40%, capital-output ratio at 3: Reported in "Issues in the Organization and Follow-Up of Feasibility Studies," ID/WG.23/1, 11 October 1976.

Most of the resulting numbers are impressively large. For example, if we use the model referred to above, developing country industrial investment ten years from now, in 1986, will be about \$190 billion.¹ If the cost of project development and design comes to, say, 7% of this total, then \$13.3 billion will be spent on professional services. If half of this sum were spent on professional skills at a rate of \$50,000 per man-year (including support costs), the equivalent of 133,000 full-time professionals would be employed on projects for the developing countries.

Although interesting, a gross model such as the above does not help much in making action decisions leading to the establishment of factories in a particular host country. But taking the ambitious future objectives and the less than satisfying present performance, we can safely say that new approaches to factory establishment are badly needed.

1.2 Issues for the Participants

The top industrialists participating in this meeting all have experience with establishing factories in developing countries. Some have gained their experience as host country executives and others as foreign investors or managers. By sharing their experiences with each other and with the UNIDO staff, they will contribute to the common effort to help promote sound industrialization.

Many of the participants will informally describe some of their experiences to the group. The discussion will highlight successful techniques, problems and hints as to how the difficult task of creating new industrial enterprises might be accelerated, the country's potential better utilized, and the way prepared for self-sustaining action in this area. This paper will suggest a number of issues, or topics, which may assist in setting up a framework for the discussion. These issues may also be considered by the meeting as one possible means of organizing findings and recommendations.

The following sections of the paper present the suggested issues in the form of questions and with only a minimum of elaboration. It is left to the meeting to expand on the suggested topics, and to modify the list, as appropriate. Three broad issues are suggested:

Issue No. 1

- a) What opportunities exist to accelerate the establishment of sound new industries?
- b) What constructive actions on the part of Governments, local sponsors, and foreign partners or prospective participants would help?

Issue No. 2

- a) To what extent can the potential benefits of industrial projects to the developing countries be preserved or enhanced?
- b) By what mechanism(s) can project design and implementation be influenced to take practical account of the above?

¹ $70 \times (1.10)^{10} = 189.99$

Issue No. 3

- a) What is the practical role of international organizations in advancing factory establishment programmes?
- b) What are the practical limits of the above?
- c) How can present limited financing for technical assistance be supplemented?

2. OPPORTUNITIES TO ACCELERATE FACTORY ESTABLISHMENT

In considering the processes by which industrial projects are created in developing countries, we can observe a "system" involving various institutions and resources, and including a number of more-or-less discrete steps and decision points. The actions of the participants are usually influenced by natural endowments of the country, by legal and administrative requirements, and by the often-mentioned "investment climate," i.e.

As implied in Section 1, there seems to be at least one situation which many countries experience in common. A number of "old" project studies exist in a country but have not been acted upon, while at the same time there is said to be a shortage of bankable projects. At the risk of over-simplifying, it may be convenient to consider two related questions as a means to trying to solve this apparent impasse. The first might be how the decision and action machinery could be speeded up so that project studies would not become outdated before they were really acted upon. The second would be how the quality of project preparation could be improved so that host country officials and foreign investors could make decisions with a reasonable degree of confidence that they would not have regrets later. There is also an essential factor of trust based on personal relationships. An appreciation of this factor may contribute strongly to gradual strengthening of the system.

The issue of accelerating the output of the system is complex and its parameters vary markedly from country to country. Yet perhaps the following general formulation and partial checklist will prove helpful in stimulating practical suggestions:

ISSUE No. 1

- a) What opportunities exist to accelerate the establishment of sound new industries by focussing on the following:
1. Number and sources of project ideas
 2. Quality and timeliness of project studies (e.g. market estimates and financial analysis)
 3. Access to alternative technological approaches
 4. Speed and suitability of decision channels for project approvals and financing
 5. Incentives such as tax holidays, duty rebates, work permits, foreign exchange facility, procedural simplification
 6. Availability of capable foreign and/or local project managers to organize and implement projects
 7. Security of foreign investments and of profit transfers
 8. Factors (probably including at least some of the above) arising from an analysis of
 - Why individuals and organizations from industrialized countries consider participating in projects in developing countries?
 - Why investors of developing countries consider investing in industry?
 - Why host country investors consider inviting participation (financial, technical, managerial) from industrialized countries?
 9. Other important factors
- b) What constructive actions on the part of Governments, local sponsors, and overseas partners or prospective participants would help?

3. INCREASING "BENEFITS OF INDUSTRIALIZATION" FOR THE HOST COUNTRY

Whatever the motivations of the commercial participants in an industrial venture, authorities of the central Government generally consider that resources are allocated to industry as a part of the national programme of economic and social development. These authorities wish investment and project design decisions to be made in accordance with a broader set of criteria than those normally considered by "businessmen." This section seeks to introduce discussion of how this legitimate and vital interest may be constructively advanced.

It is probable, or at least arguable, that an industrial project which is designed and managed to maximize beneficial linkages within the industrial sector and with other sectors (e.g. agriculture and infrastructure) will be more profitable to its sponsors in the long run than one which merely seeks to maximize immediate financial return. For example, a new plant can be installed as a turnkey package with all equipment imported. Spares and expansion capacity may also be imported as needed. Alternatively, the same plant could probably have obtained an important fraction of its needs from local fabricators by supplying drawings and possibly a bit of coaching (e.g. cranes and other materials handling equipment, piping, tanks, structures, and fittings). If local sources were developed from the start the effect would be cumulative and the skills and capacities developed in parallel would reinforce each other (time and performance factors must be evaluated).

Even if the original project were no better off, the spin-off and linkage effects would benefit the economy, providing a cumulative boost to industrial development, and a compounding effect upon industrial growth. Similar reasoning applies with respect to the beneficial effects of minimizing foreign exchange outlays. The "savings" are available for alternative uses, and the national economy is stimulated by the resulting local productive activity.

A classic example of a project which is 'feasible' technically and financially and yet which has limited or questionable value to the economy is one in which a product (for example television sets for the local market) is assembled by a joint venture from components imported from the foreign partner's plant.

The final cost of the sets is likely to be higher than when purchased completely assembled from overseas. Despite this, there is likely to be a handsome "profit" for the joint venture, which arises through its ability to import the components duty free, while assembled sets pay a duty of 50% or more. Such a project exists simply because it is heavily subsidized by the national treasury through giving up the previous revenue.

And there are few linkages created. The treasury pays a subsidy in order to gain a number of semi-skilled jobs. But the cost per job may be quite high. On five million dollars worth of sets per year, the treasury may have lost \$1.5 billion in duty revenue. If the plant employs 200 people the recurring cost of the subsidy is \$7500 per job per year. And the workers probably average about \$1500 each in annual salary. So the national economy has not received a very good bargain: the annual subsidy (not to mention the investment cost) is five times the value of the jobs created.

The above example is admittedly an extreme one, but the problem it illustrates is common enough. There is clearly scope for designing and managing projects in ways which will make a positive contribution. In most cases the project's private profitability need not suffer in the long run, although some windfall profits such as the above, would obviously be candidates for the scalpel.

The issue is tentatively summarized for discussion as follows:

ISSUE No. 2

- a) To what extent can the potential benefits of industrial projects to the developing countries be preserved or enhanced by considering:
1. Design of projects incorporating beneficial linkages to increase national value added and encourage expansion of technologically related enterprises
 - Equipment and structures for plant
 - Local raw materials, supplies, services
 - Local component production (e.g. foundry)
 - Spare parts
 - Product design simplification
 - "Extension service" to local enterprises
 - Distribution and maintenance networks
 2. Emphasis on "leapfrogging" development of local technical and managerial personnel
 3. Selection of technology in relation to national socio-economic characteristics
 4. Integration of industrial projects with agricultural and infrastructural development, i.a.
 5. How to reduce foreign exchange cost (investment and operating)
 6. Minimum reliance on foreign inputs
 7. Number, types, and locations of jobs created
 8. Other aspects
- b) By what mechanism(s) can project design and implementation be influenced to take practical account of the above?

4. THE ROLE OF UNIDO AND OTHER INTERNATIONAL ORGANIZATIONS

As indicated in Section 1, future industrial project generation and implementation is characterized by some very large values: numbers of projects; amounts of investment, technical and managerial staff; and quantity of technical services required. By far the greatest part of professional services will be procured on commercial terms, sometimes financed through international project loans involving international organizations. International organizations provide supplementary assistance, frequently in sensitive areas, and in situations where commercial services are inappropriate.

UNIDO and its sister United Nations organizations, primarily ILO and ITC, currently assist industrialization of the developing countries with professional staff of about one thousand in field locations and a comparable number in headquarters operations. Only a fraction are actively involved with project generation and implementation, i.e. factory establishment.

UNIDO has the challenge of coordinating the activities of the United Nations system in the field of industrial development. It also faces the direct challenge posed by its member states to provide operational and supporting assistance to the developing countries. The current challenge posed in Lima is to multiply its impact at the project-implementation end of the industrialization process. Yet in view of the evident shortage of bankable projects and the defects in many of those which are technically "bankable," UNIDO must approach the challenge as a systems problem, and not as a batch of compartmented functional tasks. In our view it does little good to "identify" projects or to "promote" them or to "implement" them or to "rehabilitate" sick plants unless the other complementary tasks are going to be performed to some acceptable level of competence and unless the decision and action mechanisms are going to operate before the projects become obsolete. Thus UNIDO has developed a factory establishment decision and action model and begun to identify and attack the problem areas - and to exploit opportunities - in what we conceive to be a systematic manner.

But the task is far bigger than our immediate resources and we are striving to identify opportunities for multiplying our effectiveness. We are looking for situations where small inputs can contribute to sizeable results. And we are trying to improve our understanding of the industrial development processes so that our necessarily modest long-range efforts will be aimed at worthwhile targets.

To this end UNIDO invites the meeting to freely offer suggestions for shaping the efforts which collectively aim at operational assistance for factory establishment. Although the list of possible discussion points surrounding this issue is potential endless, we have selected the following items as a beginning point:

ISSUE No. 3

- a) What is the practical role of international organizations in advancing factory establishment programmes through:
1. Direct assistance to project departments of development corporations and development banks, and to ministries of industry for preparation, verification, promotion, and packaging of projects
 2. Provision of a project coordinator and/or specialized technical and management advisers to a new enterprise during planning, construction and start-up of operations
 3. Providing specialized manuals to expand and improve bankability of projects, for example: "How to Plan and Implement Factories for the Progressive Assembly/Manufacture of Agricultural Implements, Tractors and Commercial Vehicles in Developing Countries"
 4. Advice on negotiating contracts for the acquisition of specialized technological and management know-how without unnecessary concessions
 5. Assistance in securing sources of finance for studies and implementation and in negotiating for financing and equipment procurement.
 6. Other types of assistance
- b) What are the practical limits of the above?
- c) How can present limited financing for technical assistance be supplemented?

5. UNIDO'S FACTORY ESTABLISHMENT PROGRAMME

At the beginning of 1976 UNIDO restructured its organization to better address the tasks assigned by the Lima Declaration and Plan of Action. The Factory Establishment and Management Section was formed at that time and has been organizing its programme during the year. (This meeting is designed to obtain advice from top-level industrialists as an important input to the Section's continuing programme on development activity.)

To the extent possible in the short time during which the present factory establishment team has been functioning, the interim programme recognizes the needs, problems, and opportunities outlined in this paper. It has been tailored to (1) lead to definite, measurable results within one to two years, and (2) to attract additional resources to expand its impact later. The principal features of the programme - as currently being discussed and refined within UNIDO - is as follows:

Range of Services

The programme deals with identification, promotion, implementation and start-up of operation of factories. It will ensure that project preparation meets a reasonable standard of quality so that the decision making process may function promptly. The services provided will be flexible. They will be selected and adapted to suit the needs of each country and of each project.

Pilot Basis

Because the subject is inherently broad, the programme will begin on a pilot scale, probably with a **development bank, development corporation** or a "department of industries" depending upon the local situation. The programme will expand as successful operation is demonstrated (and as more resources are attracted).

Selection of Projects ("Target Industries")

There are no special restrictions on types of projects to be handled, but emphasis will be placed on developing exceptional strength in the following areas which will be referred to as "target industries": food processing, textiles and clothing, pharmaceuticals, small and medium chemical plants, construction materials and components for low-cost housing, and basic metal-mechanic industries as well as including agricultural implements, production of low-cost tractors and commercial vehicles and related products. In general the programme will handle medium size factories, individually or in industrial complexes.

Field Links

It is expected that the programme will rely upon very close operational links with UNIDO field personnel already posted in the cooperating countries. It is intended to increase the effectiveness of such experts by a) providing proper motivation as well as active technical backstopping from Headquarters; b) supplying the field with contacts or direct assistance for locating finance, technology, management, specialized consulting advice, etc., and c) building upon the lessons learned by these experts in a systematic way, for improving subsequent projects.

Operations

The day-to-day headquarters operation of the programme will be in the hands of a task force which has direct links to those sections of the organization whose help may be needed. It will operate through consultancy from Headquarters and staff visits to the field. The programme will concentrate on selecting and accelerating the progress of a small number of projects in each cooperating country. This may involve assistance for any of the steps in preparing, packaging¹ and implementing the projects. UNIDO's role will be to pool existing knowledge to catalyze the process, to supply "tools" and contacts and a measure of initiative, depending on agreements with the host country.

Selection and Development of "Tools"

The programme will identify methods and techniques which have been shown to be successful and encourage their more widespread use as well as find and apply new ones based on field experience and studies. It will make use of handbooks and manuals, and person-to-person contacts for this purpose. Where gaps in current practice still exist, new development will be programmed.

Existing manuals on preparing project studies, promoting investment, setting up factories and contracting for technology, i.e., will be reviewed and updated to incorporate more recent practical experience. New handbooks on setting up industries in the selected sectors (e.g. low cost housing components or garments) will be prepared, based on field experience in the pilot programme and elsewhere.

Contacts

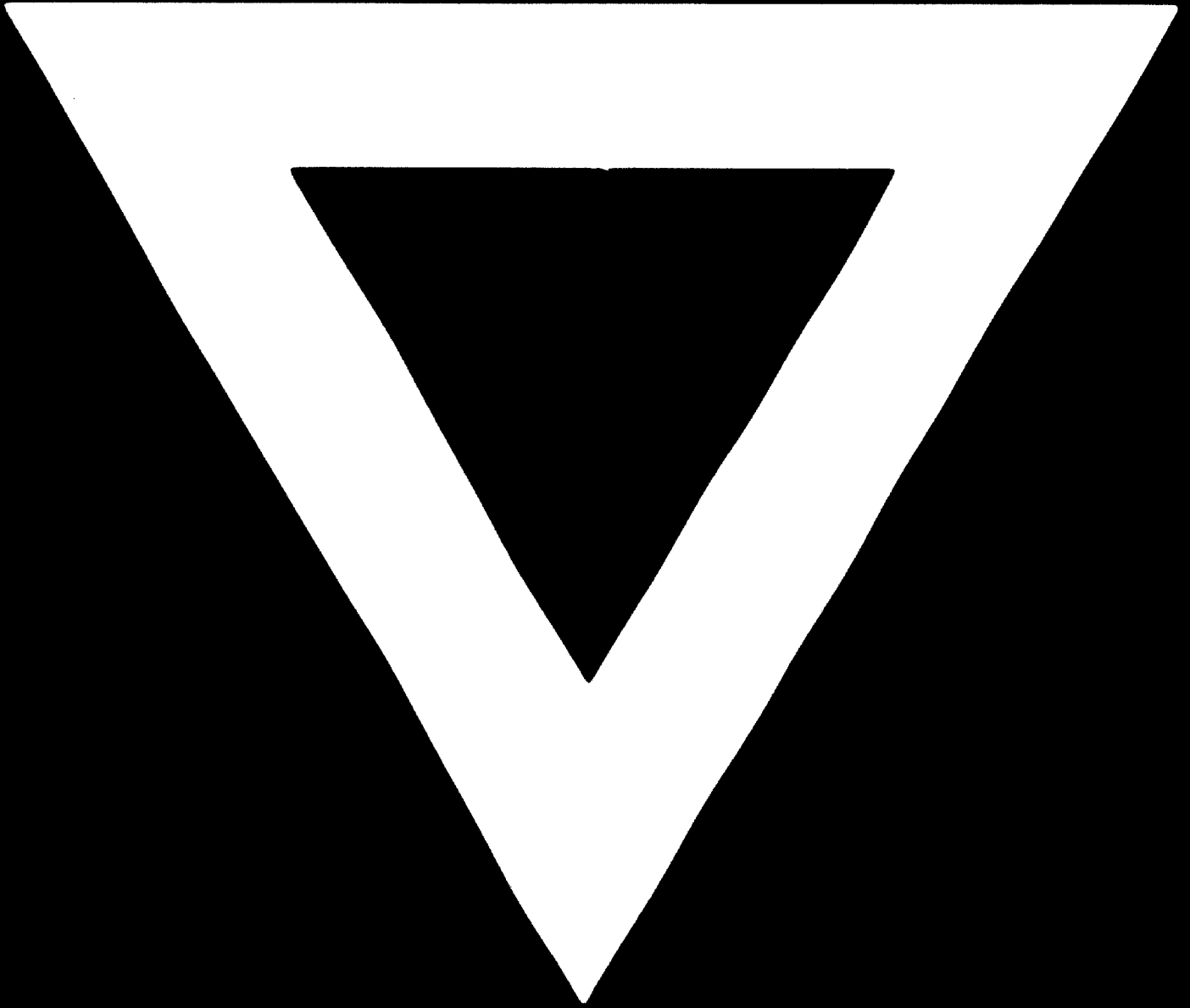
The developing countries have many channels of their own for identifying and communicating with prospective project participants (financial, technical, managerial). When needed, UNIDO will supplement these channels in accordance with its experience of the past decade aiming at the establishment of a cohesive network of selected contacts. Efforts will be made to build up the usefulness of UNIDO's contacts by carefully screening projects and the contact organizations to which they are sent. UNIDO will complement the normal direct promotional channels, rather than replacing them. At the same time UNIDO's inputs will be aimed at tailoring projects to better serve the economic and social development objectives of the host countries, and at supporting negotiations among the parties with this in mind.

Measurements of Results

A log will be kept for each country, reporting milestones in the progress of each investment project and summarizing actions taken by the task force and by the national project organization. These reports will be analyzed periodically to monitor the programme's results and assist in guiding its further development.

¹ "Packaging" as used here means identifying the necessary technical managerial, and financial components in a project and bringing participants to the stage of decision-making and of signing agreements to execute the project.

C-266



77.06.27