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DECIAL PROBLEMS FACING LEAST DEVELOPED COUNTRIES
IN PROMOTING INDUSTRIAL DEVELOPMENT: ACTIONS AND SPECIAL MEASURES
REQUIRED TO MEET THE NEEDS FOR ACCELERATING THEIR INDUSTRIALIZATION 1

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^{1/} The views and opinions expressed in this paper are those of the consultants and do not necessarily reflect the views of the secretariat of UNIDO. This document has been reproduced without formal editing.

INTRODUCTION

1. There has been an increasing awareness on the part of the United Nations and the international community to provide special assistance to the least developed countries. The subject has been constantly under discussion since UNCTAD III and has been given formal expression and articulation in a series of other international meetings. The criteria for determing whether a country could be classified as belonging to the category of the least developed were evolved after a great deal of thinking and circumspection; the lines on which assistance should be provided were worked out, and the peculiar difficultie and problems of these countries were analyzed in some detail. The United Nations Conference on Trade and Development has been taking a number of initiatives in this matter and they have played a pioneering role in drawing attention to the problems and the acute predicament of the least developed countries. General Assembly Resolution 3201(S-VI) and 3202(S-VI) on the Declaration and Programme of Action on the Establishment of a New International Economic Order, the Lima Declaration and Plan of Action on Industrial Development and Co-operation, and Resolution TD/RFS/98(IV) adopted at UNCTAD IV represent in many ways the points of culmination of the awareness to render special assistance to these countries and of the thinkin- and reflection which has gone into the problem in recent years. The economic situation of the least developed countries, however, has not improved in recent years; it may unfortunately be truer to say that, with a few exceptions, it has taken a turn for the worse. The following table illustrates the widening income gaps in per capita GNP in constant 1972 US dollars 1:

	Developed Market Economy Countries	Socialist Countries of Eastern Europe	All Developing Countries	Least Developed Countries
GNP per capita 1973	3841	1630	247	96
GMP per capita in 1980 (assuming continuance of 1970-73 growth rate)	5089	2294	306	100

^{1/} UNCTAD TD/B/AC.17/3, 10.6.75: Review of Progress in the Implementation of Special Measures in Favour of the Least Developed Among the Developing Countries: Report by UNCTAD Secretariat, p.3.

Nine of the least developed countries showed negative rates of per capital growth during 1970-73 and the average came to less than 1 per cent and is far from the average of 3.5 per cent visualized in the International Development Strategy. There has been a sharp decline in the rate of real GDP originating in manufacturing in the least developed countries, from 12.3% in 1960-70 to 5.2% in 1970-73. It is, therefore, most important to make a spirited attempt in a multi-disciplinary and concerted manner to ensure a speedy industrial development of the least developed countries.

There are many reasons for the economic backwardness of the least 2. developed countries and for the situation which has developed. An overwhelming number of these countries have been liberated in the recent past from colonial rule in the course of which they played the role of supplier of primary commodities, agricultural produce or minerals and importers of manufactured and finished products. The capital base is small and the articles they can export or the capital goods and raw materials they can import are extremely limited. There are handloops arising from their land-locked position in seventeen of the least developed countries. Among the 41 countries listed as 'most seriously affected' under the United Nations Emergency Operation, 19 are among the least developed. There are problems caused by resource gaps, debt service liabilities and increasing unemployment or under-emplyment in a large majority of the countries. There is a pressing need for regional dispersal, decentralized growth and balanced and harmonious development. Literacey rates are low and the educational system they have inherited is a most ineffective vehicle for bringing about a major transformation and structural change. It does not impart vocational proficiency and does not introduce them into the culture of work. It is no wonder, therefore, that lack of skilled manpower seems to characterize the situation in every country.

^{2/} Ibid, p.4. In fact, the performance in the average percentage growth rates of the LDCS, compared with other developing countries brings out the point in sharper outline:

sharper outline.	All Developing Countries	All Developing Countries (exl.major Petroleum Exporters)	Least Developed Countries
Total GNP: 1960-70 1970-73 1970-80	5.2 5.7 6.0	5•1 5•3	3.4 3.2
Per capital GNP: 1960-70 1970-73 1970-80	2.6 3.1 3.5	2.5 2.7	0.8 0.6

One of the most pressingly urgent needs of these countries is for development of manpower from top to bottom with carying degrees of managerial, vocational and technical qualifications and competence for positions at different levels and grades. Above all, a fair number of the countries have yet to survey and identify their potential, and if this has been done there is much leeway to be made up before it is fully exploited.

3. In the final analysis, each country strikes out its own path and works out its own programme of development. It is neither advisable nor practicable to suggest a uniform solution or pattern of development. For one thing, while each country has low levels of literacy, a small share of manufacturing in GDP and a low per-capital income, there is a large variety of conditions and systems prevalent in these countries. The difference is not merely in terms of social and cultural patterns and political organization. There is a country with nearly the highest population density in the world; and there is another with almost the lowest. There are countries which are recovering from a drought or those which have just emerged as separate political entities; and there are those which are trying to build anew upon the ravages and ruins of a long-drawn There are countries which have a high degree of growth potential in terms of natural resources, and there are those which are not so richly endowed. Thus the problems and pre-occupations of Bangladesh are not exactly the problems of Lesotho; and what afflicts Laos may not be the greatest worry of Tchad or Somalia. Secondly, it is not for lack of models or presciptions that the countries have not been able to make headway. A model which does not take into consideration the social and historical complexities, the cultural pattersn and political realities and exists by itself, will never work. Only that particular system will work which is the local brew coming from the process of fermentation in a given society and which is acceptable. The submissions made in the course of this paper have kept these considerations fully in view.

FORMULATION OF BROAD FRAMEWORK AND OBJECTIVES

- 4. An encouraging and cheerful feature of the situation is that the least developed countries seem to be determined to attain the goal of self-reliance and self-nustaining growth. This is an extremely happy augury for one of the first prerequisites of economic and industrial development is a firm commitment to the ideal of self-reliance. There has been an attempt on their part to utilize their natural resources and endowments and reduce dependence upon imports in degrees and stages of food, consumer articles, processed goods and manufactures. Most of these countries have gone in for programmes of import substitution (although one would wish that they had put greater accent on exports than they have). They have been restricting imports of consumer goods and luxury items. The attempt made in some countries at mobilizing internal resources by taxation, reduction of expenditure and even salaries of employees and greater fiscal discipline is a measure of the increasing consciousness on their part to develop that inner reserve of strength which bends a national situation in the direction the leadership desires. The path of development is not so easy to pursue for countries which have begun so late and have started the journey with unparalleled handicaps. The objective cannot be achieved without a massive flow of financial and technical assistance which is quick, effective, and substantial . in quantity, free from the encumbrance of bureaucratic delay and full of sympathetic understanding. For there cannot be a better case for assistance. It may also be mentioned that instances are not lacking where such assistance was forthcoming in an abundant measure. The point is whether such instances can be repeated with greater frequency and on a vaster canvas.
- 5." It is essential for governments to have a clear comprehension of the broad directions and objectives: they wish to pursue. A positive feature of the situation is that the formulation of objectives and the perception of the malaise which afflicts these countries has on the whole been sound. The scale of priotities seems to run generally on the lines of agriculture, infrastructure and industrial development in that order. Occasionally, infrastructure may have a precedence over agriculture or there may be minor variations on the theme and a difference in shades of emphasis. But this is generally the pattern. This seems to be sound insofar as agriculture and the rural communities or scattered habitations not yet villagized or even nomadic tribes seem to dominate the scene. Agriculture will continue to be the pivot around which industry

will revolve in most LDCs from the point of both backward and forward linkages. The plans invariably emphasize the need for dispersal, for decentralized growth, for labour intensive technologies, for small-size industries, village industries and handicrafts. The importance of basic and prime mover industries is also recognized.

- In quite a few of the least developed countries, however, there is little by way of a comprehensive strategy in actual practice apart from an attempt to prepare a handful of feasibility studies. National plans have suffered from shortfalls and policy goals have not been realized. The need is to take a package of measures since isolated attempts will not produce results. The spheres of activity of the different sectors - private, public, smallscale and village industries, or foreign investment - need to be clearly spelt out. A whole lot of decisions relating to incentives, need to be taken in pursuance of the directions economic development is supposed to take in the country. Economic survey as may be required and promising product lines need to be identified. There has to be a programme of motivation of suitable parties, whether private entrepreneurs or industrial co-operatives to take up those product lines. Focal points of growth may have to be identified and located. and infrastructure provided with reference to them. Linkages between development of agriculture, fishery, livestock or forestry and industrial growth need to be established. Training needs to be organized and information systems built up. Marketing studies need to be carried out. The whole thing is a puckage and everything has to synchronize and fit into a pattern. Often, a whole programme may prove to be futile if one of the inputs is missing.
- 7. In other words, it is not enough to be aware of the broad objectives. Certain policy decisions and executive measures need to be taken on a co-ordinated basis which may take the country forward in the direction of those objectives.

- The question them arises why the countries concerned have not gone 8. in for a co-ordinated attempt. There cannot be one single answer to this question. An important reason is that there is lack of expertise to take an overall view, build up syntems, give suggestions regarding policy formulation, look after feasibility studies, suggest a proper pattern of institutional and organization support and provide a wide and comprehensive range of advisory assistance. The need is for a strong nucleus of multi-disciplinary expertise available in the centre of things in the Ministry and in the executive agency of the Ministry, to assist in a number of basic and fundamental initiatives which need to be taken by Government. Lack of an assured flow of financial and technical assistance also stifles initiatives on the part of Government. Lack of co-ordination between the different agencies of the Government is another reason. Sometimes there is hesitation on the part of Governments to provide one input without a reasonable hope that other inputs will be forthcoming.
- 9. It is proposed to take up for a detailed discussion individually some of the essential components of an integrated approach to industrial development and to suggest certain specific courses of action:

ROLE OF FOREIGN INVESTMENT AND OF THE NATIONAL PRIVATE INVESTMENT

a whole spectrum from one end to other. There are those which seem to welcome private and foreign investment in practically every field of action; and there are some which do not seem to allow it in any field at all. There are some others which seem to have left it vague. The policy of each country may have a certain basic validity and inner compulsion of its own. However, it is most important to specify areas where the foreign investor had better keep out lest indigenous capacities are pre-empted. It may be even necessary to debar an existing multinational company of foreign enterprise from diversifying into certain areas of activity. For instance, the establishment of a multinational dollar journey may slam the door against hundreds of little joineries on the threshold of burgeoning in a given environment. It may be best for the foreign investor

to go in for some other items befitting his financial and technical capability like heavy forging for instance.

- On the other hand, it seems important to consider both foreign investment and private national investment as important factors and options in the growth and development of industry in a country, in view of the fact that the most important constraints in the path of industrialization of the least developed countries are lack of finance, resource gaps and shortage of management ability, skilled manpower and technological know-how. It will be best to attract foreign investment where capital involved cannot mobilized internally, where it is not possible to secure technical know-how and management capability. In this context it would be useful to specify clearly the areas where foreign investment is welcome. It may then be worthwhile to create conditions which are not only conducive but even attractive to such investment. At the same time there is need for an attempt to encure that the terms and conditions on which the foreign investor comes are not of an exploitative character, that there is provision for the training of local staff, for progressive replacement of expatriates by the nations and for eventual take-over of the company by them.
 - different sectors is equally valid in the case of the national private sector. The part assigned to it will differ according to the political and idealogical persuasion of the country concerned and its perception of the relative advantages of different sectors. But the point that these roles should be clearly defined remains. The private sector should have a clear notion as to where it stands in the scheme of things and the areas which it can aspire to enter.

ROLE OF SMALL-SCALE INDUSTRIES AND OF ARTISAN AND HANDICRAFT UNITS

13. As one surveys the present situation in the least developed countries, the picture which emerges is one of a handful of large-scale industries and a bigger base of artisan typ of units. The small-scale factory sector is yet to emerge on the scene and develop. There is a need to strengthen the

factories. The skills of the traditional artisan units need to be upgraded and some of them may grow into small-scale factories—themselves. Small scale factories should develop links with large scale and basic units. The pattern of industrialization has to be an integrated fabric in which units of different types and scales have to play a part. Thus, while it is most important to develop basic and large scale industries, the promotion and development of small-scale units should not be neglected.

14. One of the most important things to be done is to define the smallscale sector, for the simple reason that in the absence of a definition there will be practical difficulties in rendering the special assistance this sector needs. The term 'small-scale industry' generally refers to small factories as distinguished from 'non-factory industry' which includes both the traditional and modern artisan establishments. Factory industry can generally be distinguished from non-factory industry by the degree of specialization of labour. One uses specialized labour, the other a less productive artisan-apprentice type of labour. It is however not possible to suggest a uniform definition for all countries because circumstances differ. While in developed countries the tendency is to go in for a ... ceiling represented by the number of employees, developing countries have usually gone by the amount of capital invested in fixed capital. It willbe more appropriate for the least developed countries to go by the ceiling of capital invested in fixed capital rather than by any limit represented by the number of workers employed on account of a general situation of capital shortage and labour surplus. All categories of units, whether factory or non-facotry units, should within this limit be entitled to a certain measure of special assistance. It may even be necessary to provide a special package of measures for tinier operations and artisan and handicraft units. It may also be advantageous in the case of the least developed countries to include within the term small-scale industry different kinds of service industries and repair and maintenance operations. The fixed capital limit in the case of smallscale industry should not be unduly low and should not discourage smallscale units from equipping themselves with machinery and tools.

- It is not, however, simply on the ground that small-scale 15. industries and artison typ or handicraft vortatops are important for the economy and necessary for the overall industrial development of a country that there is a need for special measures. While all industries irrespective of scale suffer from lask of finance and sechnological information, in the case of small operations there difficulties are far more acute. The capital structure of these units is weak and the need for technical counselling far more pressing. Moreover, there are certain additional handicaps. The large industry can make its our arrangements for some of the basic infristructure such as electric power while the small investor has of necessity to depend on the existing infractructure. It is far easier for larger industries to get foreign firms to make licensing arrangements, for providing technical assistance or capital. This may not be possible in the case of a smaller unit. The person running a small industry (unless it happens to be a so-operative) tends to be the sole person upon whem all responsibilities of production, management, marketing and finance devolve. He becomes the central figure, the here of the drama, his own production, marketing and management man. But that is precisely why he needs special support.
- 16. One of the important needs 'n this aphere of activity is for a powerful and effective extension service. The releasing service can assess the prospects of industries, select a location, estimate capital requirements and potential markets. It can provide guidance on the choice of raw materials, machinery and tools and their most productive utilization. It should cover ravice or management development which includes finance, production planning marketing etc. Industrial extension may include individual counselling by visits to factories, providing unformation and organizing regular courses of raining. The need is for a decentralized network of extension service.
- 17. Small units have often difficulties in obtaining credit and have often to depend upon money-lenders. There is a tendency for development banks to reject the applications put in by some small units as these are not well prepared. The small unit also needs guidance as to how to make the best use of credit. An important need is to integrate credit with technical

assistance. In other words, there is an imperative need for the extension agency to be in direct touch with the Development Bank or commercial banks. The need is for what is called supervised credit. In some instances, it is necessary for Government itself to supervise a programme of credit assistance by budgetary support. It may be necessary to give financial assistance speedily to small-scale units especially units with tiny operations by the extension staff itself, without their having to go through a great deal of form-filling and red tape.

- 18. An important part of the strategy will be to awaken the people in all parts of the country to newer possibilties in the field of industry. For this it may be necessary to produce a large number of project profiles which show how this is possible. It is important also to demonstrate how initial margins of investment can be reduced by various forms of Government assistance, like availability of factory sheds and machinery on a hire purchase basis.
- 19. It is also crucially important to identify product lines which had better be set up in the small-scale sector. It may happen quite often that a single large-scale enterprise may pre-empt capacities for manufacturing i ems which may advisably be set up by small-scale units. Thus the chances of a series of smaller and much more labour-intensive units coming up in different parts of the country may be eliminated. This is a point constantly to be examined at the stage of licensing or approval. This can be done only if the country has an approximate idea of the sort of units which can be promoted only in the small-scale sector. Depending upon the exisiting and potential capability of the small-scale sector, a few items may even be reserved for manufacture exclusively in the small-scale sector.
- 20. It is important to ensure that the relationship between large-scale and small-scale units is one of complementarity. It has been observed in both developed and developing countries that often the larger firm finds it in its own interest not to make everything under one single roof but to farm out parts and components to sub-contracting units. It turns out to be economical for the larger firm to do so and allows it time and energy to devote to the bigger and more urgent problems. The smaller unit develops an expertise of its own, gives greater attention to the item, and produces it

cheaper due to lower overneads. The sub-contracting firm has assurance of part of the market and can in many instances has the benefit of counselling and testing from the parent firm. Another important advantage which accrues from the development of incillar industries is in the sphere of area development. Many large undertakings tend to become petty islands of industrial complexes surrounded by a sea of stagnation. The development of ancillary industries will help in this respect.

Rural Industries Projects

The links of this sector with the rural economy need to be 21. strengthened. It will be really worthwhile to take up intensive projects in the rural areas, first on a pilot basis and subsequently on a wider scale. The initiative and effort of the local communities will have to be stimulated and mobilized. The intention of these projects should be to attain an even spread of industries throughout the countryside. The projects should take into account two important factors: (1) local resources, both human and material and (2) local needs. 'Local' does not mean a mingle village; it may mean a village, a group of villages, a district, depending upon the nature of the industry and the technology used. The aim of should be to convert the present purely agricultural communities into agro-ind strial communities. It is most important to choose the location of such projects carefully. Generally, a good location will be where agricultural conditions are favourable and a considerable effort in the field of agriculture is being organized. A favourable feature will be availability of power. It will also be a good idea if some of these projects are located in areas where large industrial projects are being located. These projects should be in addition to any industrial estates that may be set up. The main objective is to bring whout a diversified and decentralized growth of industry with significant stress on the growth of non-farm employment and production based on local resources and needs. This will be essentially an extension programme with different components made available in the form of credit, technical and management assistance, factory sheds and training. In areas where potential for the modern small-scale industry does not exist, stress should be laid on the improvement of traditional village industries and on training the local artisans and craftsmen.

THERASTRUMENCE FOR INDUSTRIAL DEVELOPMENT

Physical Infrastructure

- One of the major reasons for the continued backwardness of certain 22. areas in a country is assuredly lack of infrastructure; and a definite way of igniting and triggering off the process of industribation is to provide the basic facilities. Industry will grow where these facilities have grown; and it will not grow where nothing else grows. The aircotions which any plan for developing infrastructure take will necessarily have to cohere with the general pattern of development the country desires. From the point of view of industrial development it seems best to identify potential centres of growth on techno-economic and social considerations. Some conthese focal points have already a basic infrastructure available. The best course of action may therefor: be to concentrate on these points. In the record phase it may be important to concentrate on areas which have promise from the point of resource endowments. At some of these points Rural Industries Projects, suggested above, can come up. At others there can be general inquestrial complexes where industrial estates and other facilities are provided. Some of these focal points will become models for surrounding areas and will trigger off a great deal of economic activitiy. These centers especially the ones which may be taken up in the second phase may require an immense mount of physical infrastructure support; and this is a point where a great deal of help and assistance from external sources will be necessary.
 - 23. There are some places where an outstanding resource is available mining for instance. The project however can be verthwhile only if there is among ohters connecting road and electricity. Provision of physical infrastructure in such cases will be worthwhile; and it is no use computing its worthiness only on the basis of what is available at site in disregard of the composite package of advantages which flow from it in the sense that the entire economy and the entire society beaefits from it. For the point between the mine and the twon with which it is connected will 2so develop an account of infrastructure support. Since the intention is to help the least developed countries and provide special assistance, there is an overriding necessity to relax the normal standards of evaluating the visbility of such projects. It is recommended that international agencies should provide these additional inputs by way of aid and assistance in order to make the proposition feasible. There are instances

where the least developed countries have received outstanding support from international agencies and aganizations. (In one case, for example, EEC has given a sum of £ 45 million on a grant basis for infrastructure and some other projects.) Instances of this kind need to be multiplied. The requirements of each country need to be looked into in detail and a serious and concerted attempts should be made to provide this input in a substantial measure.

- 24. Some of the least developed countries have tremendous hydro-electric potential. In fact, the potential of one is equivalent to the installed capacity of the USA, Canada and Mexico! While it may be a long time before it is realized, as much use of this resource should be made as quickly as possible. As it happens, nome of these countries are land-locked and by supplying power to the transit country, a position of greater interior dependence can ensue. Moreover, the very supply of power and consequent electrification in the countryside can itself act as a powerful stimulant of economic and industrial activity.
- 25. Thus the following conclusions flow from the foregoing discussion:
 - (i) The requirements of each country should be studied as a whole and enternal assistance provided on a massive sole. Special assistance will be needed at focal points of potential growth to be identified and for connecting them with markets and outlets.
 - (ii) The usual rules for determing the viability of mining and manufacturing projects should be made more flexible considering the infrastructure requirements as a necessary input.
 - (iii) Governments may like to study the subject in a comprehensive manner, prepare Master Plans for infrastructure support and expertise should be provided by international agencies in identifying infrastructure needs.
 - (iv) At the regional level, there is need for co-ordinating programmes of infrastructure development of contiguous territories.

Organizati nal and Institutional S.pport

- A matter of crucial importance in the implementation of a programme of 26. industrial development is that the instruments of execution should be effective and well-organized. In a large number of the LIMs, the Ministry is found to be wanting in qualified staff with a techno-economic bias. There are some countries where there are just a couple of secretariat officials looking after the entire programme. Another disquieting feature of the present situation is that in many of the LDCs the executive arm of the Ministry is lacking. This would be bad enough anywhere in the world, but in the case of countries which have rightly placed the greatest accent on decentralized growth, the situation provides no room for comfort. It is impossible to think in terms of decentralized growth without conceiving a decentralized network of motivation. The one consequence of such a situation is that the metropolis tends to become the Mecca or Jerusalem of all the people far and near. In fact, the reverse ought to be true if the exettion of the programme is in tune with what is sought to be achieved. In a few countries a minimum of qualified staff at regional or district levels has been appointed. The attempt is to provide technical and management counselling at the doorstep as it were. This kind of technical or management counselling or provision of information to an intending entrepremeur cannot but have motivational aspects; for, it cannot advisably be a one-way street, a passive kind of set-up which acts only in response to requests. In any dynamic programme of promotive endeavour, counselling and provision of guidance and supervision can never be dissociated from direct initiatives at motivation. In many of the countries a fairly respectable modicum of expertise is available, bug it is to be found only at Headquarters. It tends to concentrate on a handful of big projects and it also appears as if motivation or evoking positive response to a good idea is none of its business.
- 27. Most of the least developed countries need tremendous support in this sphere. They need experts to guide them in policy formulation; in building up information systems; in carrying out economic surveys and studies of industrial prospects for products; in preparing project profiles and carrying out pre-feasibility and feasibility studies; in advising Governments as to the types of machinery available the world over, and with regard to the suitability of parties. Many of the LDCs need this assistance not for

just a month or two but for long stretches of time, say 5 years or more, with some assurance of continuity. Moreover, there is need for an executive arm of the Ministry. Most of the least developed countries need to grow on a decentralized basis. Under each region or division of the country or in important industrial complexes there is need for a certain complement of staff and a certain set—up. There is need for a certain amount of extencton service at divisional Industrial Service Institutes which need to be set up. These institutes should have a certain amount of expertise in management and technical counselling. The institutes need to take an initiative in motivation. Similarly, extension staff will be required in the Rural Industries Projects visualized above.

- 28. The need in most of the LDCs is for regular long-term Industrial Extension Support Services Projects which function both in the Ministry and in the field and which have the following objectives:
 - (i) to evolve a policy and strategy for the development of industries in both urban and rural areas;
 - (ii) to organize a programme of industrial support services which will include building of information systems, project identification and feasibility studies;
 - (iii) to help organize a technical and mangement extension service;
 - (iv) to establish an effective link between the extension service and the banking institutions of the country;
 - (v) to help in operating industrial service centres, common facility services and mechanical workshops in industrial estates;
 - (vi) to organize and operate a network of rural industrial services through Rural Industries Projects which may include service workshops and
 - (vii)to train national officials who may be able to carry on a support services programme.

This kind of assistance has been given by UNIDO to some developing countries including LDCs and has been found to be useful. It is important to extend it to all LDCs and to ensure that is continuity is not broken or disturbed.

- 29. The exact to which the LDCs have been able to a plement their organizational structure with cortain institutions differs from country to country. There are a few outstanding examples. There is, however, a certain amount of ground to be covered in this sphere. Most countries will be greatly helped in their programmes if they are able to set up parastatal institutions like Industrial Development Corporations for carrying out a type of activities. The scale on which the programme needs to be conceived makes it compellingly necessary to create a parastatal institution which is relieved from the iron-clad rules of a Government set-up and which has a business orientation in spite of a certain promotive slant. There is need for an effective organization which has all the strength, capability and motivation of a commercial organization combined with a crive for promotion and development. The fields and spheres of activity: of the Corporation can be the following:
 - (i) construction of industrial estates;
 - (ii) procurement and supply of raw materials and ancillary items to industry;
 - (iii) procurement and supply of machinery on a hire purchase basis;
 - (iv) marketing of industrial products;
 - (v) direct equity participation in ventures

The establishment of such corporations may need substantial external assistance, including grants and credit lines.

There is need for a closer association of the extension network with the Development Bank and even commercial banks. Sometimes some really good projects tend to be rejected. The Development Bank may consider the advisability of setting up advisory committees consisting of Industrial Engineers and Economists of the extension wing of the Ministry of Industry. The Bank may also like to have a frequent dialogue with industry.

- Scheme of hire purchase operations for machinery and equipment. 31. Substantial reductions in the initial margin money can be effected by introducing a scheme of nire purchase in the matter of machinery and equipment mentioned above, especially in the case of small and medium industries. The scheme will consist of supplying machinery to existing or potential investors on a small down payment of say 5% of its value. The remaining sum of money will be recovered over a period of 7 years at a concessionary rate of interest. This will be a case of supervised credit and the extension agency should be fully integrated and associated with the programme. It should scrutinize applications, help the investor in filling the forms and push them through the agency deputed by the country to procure and supply such machinery. It should keep in constant touch with the party till the instalments are repaid. This experiment has been= highly successful in some developing countries of the world. It is a matter of satisfaction to find that at least one LDC has introduced this scheme and that a sea change has been brought about in the investment climate in consequence.
- 32. Credit guarantic scheme. An important step which can impart a certain arount of courage and dynamism to the lending policies of commercial bank is the credit guarantee scheme which her been adopted by some developing countries with significant secces. The best course of action will be for the Central Bank of the country to operate the scheme on behalf of the Government. In other words, the Central Bank should become for this purpose a guarantee organization. Commercial banks should participate in this scheme and should pay to the Central Bank 1/10th of one per cent per annum on the amount sanctioned or outstanding. The amount so deposited can go into a reserve of money with the Central Bank on the strength of which something like 75% of the risk can be underwritten.
- 33. Quality control and standardization will have to play an increasing role as industry develops in the LDCs. The need for these is already felt especially in the area of food testing. External assistance in this sphere ... should be forthcoming urgently.

- for groups of countries on a regional basis. These Institutes should train workers in the principles of extension covering a number of areas such as scientific demand analysis, principles of productivity, preparation of feasibility reports. Some actual and potential entrepreneurs or members of industrial co-operatives should also be put through these courses. As potential investor may, for instance, while under training like to make his own feasibility study. He should be enabled to do so. Thus the Extension Training Institut can be actively involved in the programme of entrepreneurial development for both private entrepreneurs and members of industrial co-operatives
- 35. Other regional institutions could concentrate on research aimed at adaptation of technology evolved in other countries, especially developing countries. There can also be regional institutes of tool design and manufacture.

SOME OTHER AREAS OF EXTERNAL ASSISTANCE

Preparation and Follow-up of Feasibility Studies

36. In several countries a substantial amount of work has been done in this sphere and in any case, a great number of feasibility studies have been conducted. It is , however, observed that a good many of these studies tend to remain where they are, without fructifying into actual running projects. There are various reasons for it. One is that many feasibility studies have been done without the benefit of industrial surveys and national inventory of potential resources previously carried out. Another stumbling block is the fact that information systems and statistics are far from perfect if they exist at all. The more direct cause of lack of progress is the fact that local expertise for carrying out detailed feasibility studies is lacking. A good deal of ground can be prepared by pre-feasibility studies carried out by the industrial support services projects recommended earlier. The fact remains, however, that no matter how determined a country may be, and irrespective of the ground prepared by indigenous effort backed by expertise made available for the time being, direct financial assistance in the matter is required in a substantial measure. In the course of visits and studies, excellent examples of such assistance have come to light in some of the LDCs where substantial

amount of money was placed at the disposal of the Development Bank of the count ies on a grant basis in order to enable them to prepare a shelf of such studies by entrusting them to firms of repute. The important thing is to increase and intensify such assistance in countries where it has actually been given and to multiply such examples with a view to covering each one of the least developed countries of the world.

of feasibility studies and their actual implementation by combining technical assistance with financial assistance. Therefore closer co-operation among technical assistance and financial institutions from the very beginning is strongly recommended. It may also be a good idea if an adequate amount of documentation is carefully built up by UNIDO as to the firms and partners which are interested in specific items for different projects in LDCs.

UNIDO may also advisably supply to the LDCs standardized technical agreements for different kinds of projects and render necessary advisory services. There is also ample scope in this area for technical co-operation among developing countries. Some of these countries have proven capability in certain kinds of industries. They have highly developed organizations which can carry out pre-feasibility and feasibility studies and can even help in securing turnkey jobs and joint ventures.

Assistance to Existing Industries

38. In some countries the void created on account of the withdrawal of foreigners from the scene has resulted in serious dislocation and it would appear that any short-term programme must needs be directed towards rehabilitation and consolidation of the existing structure rather than stimulation of new enterprises. The problem can only be solved by a specially tailored programme of management and technical assistance at different operating levels and in some cases by direct appointment of internationally recruted managers and technical personnel for some years together with appropriate counterparts. An attempt has been made in such cases by UNIDO to include such measures in country programmes.

39. It has been found frequently that capacities in many public sector and private units are under-utalized. This may be due to a large number of circumstances such as lack of appropriate manpower or a faulty project report to begin with or lack of demand for the time being. The matter needs to be studied and assistance needs to be given. UNIDO has already requested LDCs to let them know if they need assistance in this regard. Some LDCs have already indicated their interest to be helped.

Turnkey projects

- 40. This can be an important source of technology transfer. The turnkey project can be a package consisting of:
 - (i) selection of established manufacturer whose know-how and technology is suitable to the country;
 - (ii) preparation of a feasibility report;
 - (iii) supply of know-how and other details including drawings;
 - (iv) training of technicians and workers
 - (v) installation of machinery and
 - (vi) solving for a given period any bottlenecks during production.

These turnkey projects can prove to be quite suitable in the case of small scale operations also. It will be a good idea for UNIDO to develop a certain amount of documentation about firms interested in such operations throughout the world with special reference to developing countries.

Export Assistance

41. A most important sphere where LDCs have yet to cover major ground is that of export promotion. While there is rightly a pronounced accent on import-substitution in the plans and programmes of all these countries, it is quite obvious that it will not be possible for them to make the required headway without an effective drive for exports. The countries need resources and foreign exchange for capital investment in any industry. Moreover, it is important for ensuring the quality and competitiveness of products to enter the export market. An interesting and useful way of assisting the LDCs would be in the form of integrated assistance projects which offer a package of trade promotion assistance in response to a number of related needs. Some of these programmes are already in operation in several least developed countries,

with UNCTAD and ITC assistance. It will be useful if these efforts lead to multi-d sciplinary ansistance; ojects with an in reasing participation of UNIDO and other UN agencies.

Manpower Development

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- 42. A most prescringly important need of LDCs without exception is for a strong and effective programme of manpower development. There is no point in finding patchwork solutions to this problem which will have to be attacked on a fundamental basis. The LDCs by definition have extremely low literacy rate A massive programms of educational development and reconstruction is of crucial importance. Equally important is the need for introducing elements of vocational and technical training and the culture of work into the educational system. Secondly, there is need for a programme of both management and technical training designed for industry which harmonizes and coheres with the overall objectives of national development plans. Perhaps it will be a good idea to field special UNESCO/UNIDO/ILO missions in order to work out the requirementr of training in the LDCs. In many LDCs the first step will be to survey the present and future needs and to work out a plan of assistance.

 ILO which is playing a very important role in this sphere may have to put a special focus on LDCs in its programmes.
- 43. UNIDO has a number of well-organized training programmes but the needs of LDCs are special and far more pressing. What is good for Mexico or Egypt may not suit these countries. The organization of mobile courses in the countries themselves can cover certain problems like management accounting. Followships and study tours in developing countries which are close to the LDCS are also very useful. Certain institutions need to be put up on a national or regional basis.
- assistance for evolving prototypes of simple machinery which could be taken up for fabrication in the LDCs, like agricultural implements, hullers, power tillers or threshers. Simple machinery required for the leather industry is another example. An attempts should be made to set up such centres at least on a regional basis if it is not possible to establish them in each country

Prime Mover Industries

45. Recently, ESCAP has evolved the concept of 'prime mover industries' for land locked countries. The objective is to develop a central innovative activity with possibilities of rapid development. The intention is to identify an industry with rich local endowment, providing a dynamic and cumulative impetus for diversified development of the national economy of the land-locked countries concerned, with the help of donor countries. It can be a dairy industry in one instance; timber in another. Sugar can be yet another with many possibilities with bagasse, molasses, alcohol. "Kishmish" or dried grapes can also be considered. The technology is simple. It is agro-based. It has export and employment prospects. Its development and promotion will not require a complicated programme of development of skills. It is proposed to launch a programme which visualizes the examination of the various projects with a view to identifying the industry which could play the role of a prime-mover industry for each country and undertaking field missions to 3 land-locked countries which are also least developed for examining such infrastructural, organizational and managerial skill availability, and marketing and other inputs as would strengthen the proposed prime-mover industry and ensure its success. It is intended to prepare a model which may serve as a basis for the development of the prime mover industry and to extend it to other land-locked countries.

TECHNICAL CO-OPERATION AMONG DEVELOPING COUNTRIES

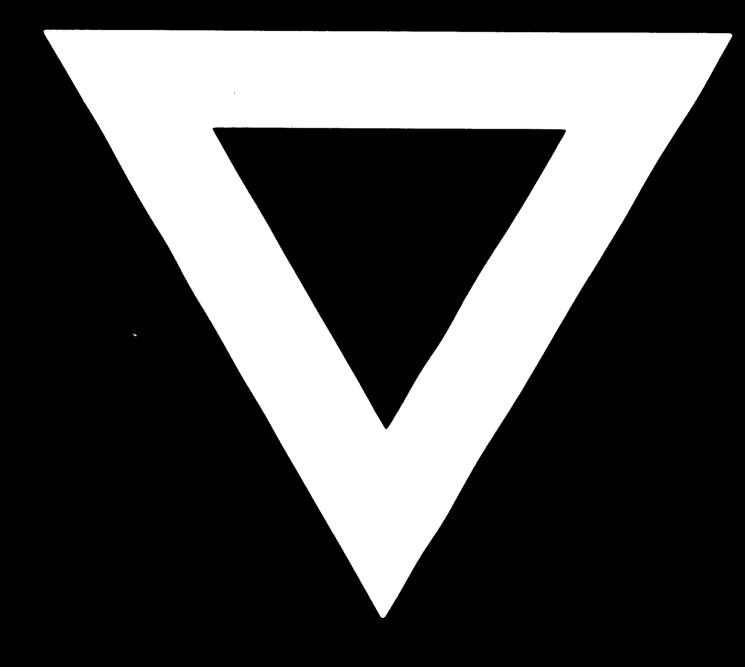
has been emphasized at a number of fora and there can be no question that this can be an important input in any programme of industrial development. The question of promoting a consortium of some of the developing countries which have already made considerable progress in developing indigenous capability with the specific object of assisting LDGs seems to be worth exploring. Some of the developing countries have already expressed willingness to help the least developed countries with technical assistance. The possibilities of this kind of co-operation are endless provided financial assistance from international and bilteral sources is forthcoming.

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If the consortium could help the LDCs with the fruits of technological research and with pilot demonstration plants, he assistance rendered will be invaluable. These countries can also help LDCs in locating suitable parties for setting up turnkey projects. In fact, in some cases, some developing countries may be able to help the LDCs in manufacturing their own plants based on their experience. Some of their consultancy organizations may carry out pre-feasibility and feasibility studies for LDCs at no cost provided their cost of international travel is met by international agencies. An important area in which such assistance can be particularly useful is that of study tours and training. Some developing countries have excellent institutes of extension training where nominees of LDCs have received training for a year or so to advantage. Other kinds of training can also be imparted and in fact special courses specifically designed for LDCs can be arranged. Apart from awakening LDCs to exciting possibilities and unsuspected avenus, the consortium will go a long way in promoting a feeling of solidarity and fellow-feeling among countries.

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