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INDUSTRIAL ACTION PROGRAMME
FOR THE LEAST DEVELOPED COUNTRIES*

Recommended by the Symposium

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INTRODUCTION

The group of LDCs, which comprise 42 countries with a combined population of nearly 440 million (1990 estimate), constitutes the weakest segment of the international community. The countries are particularly handicapped and ill-equipped to develop their domestic economies and to ensure an adequate standard of living for their population. Their economies are also acutely vulnerable to external shocks or natural disasters. The economic and social development of LDCs represents a major challenge for themselves as well as for the international community.

Despite national and international efforts, the economic situation of LDCs as a whole worsened during the 1980s. The actual average per capita gross domestic product (GDP) growth rate was only 0.1 per cent, with negative growth in many countries. The marginalization of the LDC group in the world economy became more accentuated, with their share in world exports amounting to merely 0.3 per cent in 1988 (as against 1.4 per cent in 1960). Social conditions in those countries barely, if at all, improved during that period. The generally poor performance of LDCs can be attributed to national problems (such as interaction of population growth, poverty and environmental degradation, problems associated with the design and implementation of structural adjustment programmes, natural disasters) together with adverse external conditions (such as depressed commodity prices, difficulty of access to markets, and lower-than-expected aid flows). External debt servicing emerged as a major problem for most LDCs during the 1980s;

In most of the LDCs, the manufacturing sector still consists predominantly of consumer goods industries, with little capacity for the production of intermediate and capital goods. The lack of linkages between industry and the other sectors of the economy has resulted in a heavy dependence of those countries on imported inputs, hindering the accomplishment of any durable structural changes;

Among the factors that were considered a prerequisite for the successful implementation of the Substantial New Programme of Action for the 1980s was a significant increase in financial resources. However, the low domestic savings ratio (in 1987, the average domestic savings rate in sub-Saharan Africa was estimated at 4.9 per cent of GDP) did not permit productive investment in the manufacturing sector. In addition, official development assistance (ODA) to industries in LDCs was relatively small although per capita ODA to LDCs stood at $30 as compared to $17 to other developing countries (1988).

As for policy constraints in the industrial sector, LDCs as a whole have suffered severely from import strangulation owing to a lack of foreign exchange, over-valued exchange rates and increasing debt burdens. This has been aggravated by the indiscriminate pursuit of inefficient import substitution strategies, involving the shielding of domestic production by high protective barriers and frequently using inappropriate technologies. In many instances extensive reliance on capital-intensive technologies, ill-adapted to domestic skill levels, has discriminated against simpler labour-intensive technologies.
The seriousness of the industrial development problems of the LDCs has prompted experimentation with and adoption of a wide range of basic economic policies. The strategies applied in the 1980s included those based on some combination of import substitution, export promotion and self-reliance. Emphasis was also placed on increasing investible revenues, enhancing the role of the private sector and introducing structural adjustment.

In the 1990s industry in LDCs may well face a problem of survival rather than development, given the present macroeconomic environment in most of those countries. As the manufacturing sector has remained very small in most LDCs, it is not possible to rely solely on that sector to transform their economies, at least not in the short term. It is the fact that in the LDCs the manufacturing sector has an important role to play in providing consumer goods and inputs to agriculture, in processing its outputs and in creating job opportunities.

Referring to the above, the Basic Principles underlying the Paris Declaration and Programme of Action may also be taken as an essential precondition of the success of the Industrial Action Programme. They are as follows:

1: Success depends on a shared responsibility and a strengthened partnership for the growth and development of the LDCs.

2: The least developed countries have the primary responsibility for the formulation and effective implementation of appropriate policies and priorities for their growth and development.

3: The strengthened partnership for development necessitates adequate external support from the LDCs' development partners.

4: Commitments undertaken should be measurable and sufficiently transparent to enable monitoring and assessment of the Industrial Programme of Action for the 1990s.

In the following Industrial Action Programme, a set of actions to be taken by both UNIDO and the LDCs is presented. The role of the International Community is defined through the Paris Declaration, which was adopted by the Second United Nations Conference on the Least Developed Countries.
INDUSTRIAL ACTION PROGRAMME

I. HUMAN RESOURCES DEVELOPMENT FOR THE INDUSTRIALIZATION OF THE LEAST DEVELOPED COUNTRIES (LDCs)

The mobilization and development of these human resources in least developed countries are a crucial factor in promoting sustained and increasingly self-reliant socio-economic development.

Action by UNIDO

- assist in the establishment of policies, strategies and planning related to human resource development at the national, regional and enterprise levels, taking into full consideration the development plans and identified needs of the LDCs;

- strengthen information systems, training institutions, training research and development centres;

- develop training approaches and methodology, produce training materials and evaluate activities related to human resource development;

- establish a network system among training institutions in least developed and developing countries (expert group meetings, workshops, etc.);

- foster co-operation between least developed countries in human resource development and promote regional and interregional training activities;

- develop national training for senior and middle level staff to upgrade technical and managerial skills;

- provide training in design and manufacturing applicable to small-scale industrial enterprises and introduce training for the small-scale entrepreneurs;

- train and upgrade industrial personnel in scientific and technological fields (maintenance and repair, and production of spare parts) etc.

- to encourage the establishment of information systems to monitor the skills required and keep under constant review the interlinkages between education, research, training and industry;

- create and foster training systems for the development of indigenous capabilities and developing indigenous consultancy capabilities to assist industry in its operational as well as training concerns;

- upgrade scientific know-how by providing training opportunities for activities related to industrial research;
monitor and assess training research institutes, to fulfill the needs of industry including university linkages;

assist in improving the effectiveness of activities related to the accelerated development of human resources;

training of trainers and training for training managers in all sectors of industrial development;

give special attention to new communication techniques and computers and to optimize related training systems;

increase productivity and the organizational effectiveness of industrial enterprises, update and improve skills required in business organization and management, basic skills required in practically all the different branches of industry, as well as skills that are specific to the equipment or technological process;

organize and upgrade the knowledge of the decision-makers for the negotiation and acquisition of technology; examine the skills and know-how that need to be developed for the effective transfer of technology;

develop the training capabilities of individual industries to conduct their in-service training programmes through the training of managers and trainers including the development of training materials and software;

Action by LDCs

develop and improve institutional capabilities and efficiency in public administration, ensuring an optimal balance between the public and private sectors (enterprises, co-operative sector, informal sector) in order to foster productive activities;

build and maintain technological and management training institutions at national and subregional levels;

provide adequate incentives to attract and retain trained personnel for the industrial service and other development institutions;

developing indigenous consultancy capabilities to assist industry in their operational as well as training concerns by pulling together teams of well known national experts, firms, key institutions, universities, national training institutions which have the capability in the field of HRD or the potential for providing a range of such consultancy services;

stimulate and motivate the development of entrepreneurship through training policies aimed at creating a more favourable economic environment for the local private sector initiatives which might include appropriate fiscal, financial and credit policies, as well as legal provisions promoting, fostering and protecting private investment;
identify, formulate and implement specific programmes for private enterprise development which should address promotion of domestic and foreign direct investment, management training, promotion of non-traditional exports, promotion of small-scale ventures and micro-enterprises, including those within the informal sector, and the development of entrepreneurial skills, and promotion of small-scale industrial enterprises which base their productive activities on local raw materials in order to ensure a positive contribution to the industrial development of the LDCs.

II. RURAL INDUSTRIAL DEVELOPMENT

Majority of population, particularly the poor, live in rural areas in the least developed countries. Agriculture is the dominant productive sector and the sector will continue to rank high among the objective of the least developed countries. The development of industrial forward and backward linkages with rural economies as well as the promotion of non-agricultural and off-farm employment and income generation opportunities with small-scale and micro-industries in rural areas, thus, constitute an indispensable element of any rural development strategy.

Action by UNIDO

- carry out surveys on international experiences in industrialization and rural development and analyses of lessons learned, and disseminate their results and information of national interest;

- provide support to the governments of LDCs in the formulation of national industrial development plans with particular focus on coherent and effective framework for balanced development between urban and rural economies;

- provide technical assistance so as to strengthen national capabilities to monitor and analyze the effect of industrialization on the rural environment, and design and implement appropriate measures;

- promote rural industrial programmes which enhance self-help efforts in the private sector such as industrial associations, community development groups and cooperatives;

- assist in development of off-farm industrial employment opportunities at grassroots level;

- assist in formulating and applying industrial rural development strategies which create enabling business environment, favourable to creation of competitive industries based on local resource endowment;

- assist in undertaking studies on the transfer of appropriate technologies for conservation, processing and quality control of industrial products, infrastructure development;
Action by LDCs

- establish facilities for basic business skills as well as practical technical training that are focused on productive utilization of natural resource endowment in the country that will enhance the enrichment of human resources in rural areas;

- support research, adaptation and application of new appropriate technologies deemed highly strategic for the country's development;

- direct adequate public investment on infrastructure development to rural areas;

- ensure that laws governing land and other property ownership are conducive to modern business transactions and are promotional rather than regulatory and controlling in nature;

- undertake land policy consolidation wherever feasible and desirable;

- reform farming and land-tenure systems, where appropriate, aiming at productive and non-speculative investment in land;

- create fiscal and legal framework that will give equal opportunities to rural and urban based economic activities, to small agricultural holders as well as to small-scale industrial entrepreneurs;

- adopt appropriate agricultural pricing and credit policies;

- introduce simple technical and managerial training programme at primary and secondary education level in rural areas;

- apply results of agricultural researches and existing technical skills and experiences of farmers in the development of rural small scale industries through flexible and decentralized agricultural extension service programme;

- strengthen agricultural support services, in particular agricultural credit systems as well as storage facilities and other relevant measure to minimize pre-harvest and post-harvest losses;

III. MACRO-ECONOMIC CONDITIONS AND MOBILIZATION OF FINANCIAL RESOURCES FOR INDUSTRIAL DEVELOPMENT

The objective of macro-economic policy would necessarily mean creating a favourable environment and constituting a basis for sustained economic growth and long-term development of the economy. The macro-economic policy framework should provide a basis for overcoming the structural bottlenecks of the least developed countries, leading ultimately to their industrial transformation and contributing to the eradication of poverty.
Action by UNIDO

- assist in the identification of key/priority industrial sectors, subsectors and enterprises for development;

- strengthen capacity building in ministries of industry to allow effective liaison with ministries dealing with planning and macro-economic policy;

- formulate industrial master plans and policies for industrial investment, rehabilitation and transfer of technology;

- train officials in the identification, screening and promotion of specific industrial projects;

- assist in development of the necessary data banks and information base for effective consultation with all economic agents, including domestic and foreign private investors;

- assist in identification of economic linkages and interface between macro-economic goals and sectoral/subsectoral restructuring;

- provide timely assistance in the formulation of national industrial investment policies and programmes, the identification of investment opportunities and the preparation of pre-investment and feasibility studies;

- assist in identification of domestic (private or institutional) sponsors and potential (domestic and/or foreign) partners providing finance, technology and/or management for investment projects and strengthen local investment project development and promotion facilities and capabilities;

- assist in increasing the flow of resources to productive investment projects, by supporting industrial investment projects by identifying, appraising and promoting industrial investment and rehabilitation opportunities as well as by promoting enterprise-to-enterprise cooperation, involving direct foreign investment and technical co-operation agreements;

- provide direct promotional assistance to selected business agents, public or private, geared to reducing major information and transaction costs;

- convince suitable financial partners in industrial development by establishing closer contacts with national, regional and international development finance institutions and with bilateral development agencies along the lines of the joint business programme with the International Finance Corporation (IFC);

- develop further relations with multilateral development financing institutions such as the World Bank, the Asian Development Bank, the Inter-American Development Bank and the African Development Bank so as to secure the increased involvement of UNIDO in technical co-operation activities financed by those organizations;
- organize promotional events such as investment forums to allow local sponsors to discuss with overseas investors individual investment opportunities;

- establish or strengthen the Investment Promotion Services in developed countries with specific focus on LDCs.

**Action by LDCs**

- introduce special measures to prevent heavy price distortions and further consequential increases in balance of payments disequilibria and to provide protection for the poorest sections of society;

- determine expected future requirements of manufactured goods (including final consumption by households) so as to take account of changing patterns of imports and domestic production needs;

- establish regular channels for full representation of views of the industrial sector;

- establish favourable legal and institutional framework (clear investment legislation) to promote and increase local and foreign savings for industrial development;

- concentrate on incentives to encourage investment that do not require specific approval and award in each case but are automatic in effect, such as differential tax rates and social security contributions;

- establish sound banking and other facilities (viable investment institutions whereby normal investment prospects can be exchanged);

- reform and modernize the systems of central and regional investment banks and establish trade financing schemes for the provision of pre- and post-shipment financing, export credit guarantees and insurance;

- ensure co-operation among LDCs and other developing countries at the regional and subregional levels to help provide enlarged markets for manufactured products in reference to the Generalized System of Trade Preferences among developing countries (GSTP);

- provide easy access to loan funds and credit guarantees, especially for rural small-scale industrial enterprises (RSIEs) and promotion of savings and loans associations to provide small loans to RSIEs;

- introduce the financial sector and establishing of capital markets, strengthening and restructuring domestic finance institutions and banking sector;

- create a network of offices of regional, national development banks in rural areas and decentralize the process for approving loans;
IV. DEVELOPMENT OF INDUSTRIAL SERVICE:
SCIENTIFIC AND TECHNOLOGICAL BASE

The emphasis of public and private initiative of the least developed countries with regard to non-agricultural sectors should focus on three major objectives: rehabilitation, maintenance and upgrading of existing production facilities, expansion of the productive potential in line with dynamic comparative advantages, available resources and internal and external market prospects:

1. Industrial Rehabilitation

Action by UNIDO

- provide assistance, at the specific enterprise and plant level, on diagnostic activities covering technical, economic, management, organizational, institutional and policy aspects of the plants, leading up to comprehensive rehabilitation projects and examination of their feasibility;

- provide assistance, at the level of specific industrial subsectors, including their technical support infrastructures, on the development of programmes for institutional support, structural rationalization and the creation of rational and cohesive production structures;

- provide assistance, at the industrial policy level, in order to remove major obstacles to the viable development of industry, on the policy implications of efforts undertaken at the first two levels and on the promotion of appropriate measures, keeping in view the relevant social economic factors:

- as a whole, assist in improving productivity and production processes so as to ensure an optimum product mix, enhance quality and adjust to new market segments, as well as upgrade organizational, operational and managerial capabilities that can adapt continuously to changing external conditions;

- at the request of LDCs, assist in the preparation of:
  - policy and survey studies,
  - feasibility studies,
  - formulation and promotion of action programmes,
  - technical co-operation at national and regional levels,
  - investment promotion in order to secure financial resources and technical partners to put into effect the intended rehabilitation,
  - monitoring and evaluation of programmes,
  - policy dialogue, in particular Consultations, in which diagnosis of subsector-specific problems and rehabilitation project experience are discussed as a basis for improving the policy environment for industry and exploring mechanisms and arrangements for international co-operation;
Action by LDCs

In reference to the above action by UNIDO, the LDCs may cooperate with UNIDO in:

- undertaking diagnostic studies to gain basic information and to alert relevant parties to the nature and scope of the problem;
- drawing up an improvement plan for public enterprises that are salvageable or that must be salvaged;
- drawing up a contract-plan or some similar mechanism specifying the obligations and expectations of the government and the enterprise;
- preparing national reviews establishing:
  - the extent to which the enterprises are exposed to financial discipline;
  - the importance of financial objectives, including payment of dividends;
  - the clarity of social objectives;
  - the degree of restriction on access to subsidies from the state.
  - access to the markets (national, subregional, international)

2. Privatization

The UNIDO programme in privatization was established to assist governments plan comprehensive long-term strategies and further a process towards the eventual divestment of public assets in industrial enterprises thereby creating conditions more supportive to the development of entrepreneurship and private initiatives especially in the small and medium industries (SMI) sector.

Action by UNIDO

- designing and adapting conceptual frameworks (policy directives, legal instruments, investment and financial incentives);
- assistance in formulating appropriate strategies and valuation methodologies;
- assistance in identifying and training potential local cadres willing and able to facilitate the process and various stages of privatization;
- innovating or adapting transfer models and variations of privatization options and contractual schemes prior to full divestment;
- identifying local investors and employees having entrepreneurial competencies as well as interested foreign parties;
- undertake information-gathering and sharing activities on the experience of various countries and the lessons learned including organizing seminars and workshops to exchange and distil information.
Action by LDCs

- providing the critical basis for Government commitment to the programme by ensuring that the political will and at least a minimum of resources are in place for undertaking technical assistance activities as mentioned above;

- providing the basic conditions conducive towards creating an enabling environment for privatization transactions and UNIDO assistance to take place;

- undertaking nation-wide campaigns in promoting transparency for the programme which ensures support not only from government and private institutions but especially from the public;

- undertaking and making available studies and documented information which facilitates technical assistance and similar interventions;

- mobilizing resources required for technical assistance to the greatest extent possible from bi-, multilateral and financial institutions.

3. Small- and medium-scale industries

In the least developed countries and other developing countries, the formal small- and medium-scale industry sector contributes between 10 and 20 per cent to the industrial outputs, absorbs 40 to 60 per cent of industrial employment and represent around 90 per cent of existing enterprises. The great potential offered by these industries, especially in terms of their contribution to a broader and more resilient base for industrialization, is a challenge in itself, since great difficulties have to be overcome in fostering and accelerating their development. This challenge assumes a note of urgency in many debt-ridden LDCs, given the fragility of import-substitution industries which are dependent on foreign equipment and managerial resources, and imported raw materials.

Action by UNIDO

- support LDCs in developing an economic environment conducive to sustained growth of small- and medium-scale industrial enterprises;

- support LDCs in adopting and implementing policies and strategies to ensure that financial and technical resources are mobilized to meet the development needs of SMI enterprises, as well as encourage and assist in their efforts to modernize the SMI sector with a view to improving productivity and quality;

- support LDCs in mobilizing financial resources for SMI sector;

- support LDCs in expanding productive and technological links between small independent firms and large-scale industries both within and across LDCs;
Action by LDCs

- adopt macro-economic, fiscal and other policies with incentive measures for SMIs;

- assist in modernizing the SMI sector and encourage entrepreneurship with a view to improving productivity and quality;

- improve local technological capabilities, establish financial mechanisms to channel financial resources and support labour-intensive industrial ventures;

- develop joint repair and maintenance mechanisms, quality assurance, instrumentation and standardization, testing and market research for export-oriented industries at national, sub-regional and regional levels;

- create or strengthen the network of focal point for investment in small-scale projects promotion;

- support and promote enterprise-to-enterprise and association-to-association cooperation of the small-scale entrepreneurs at national and sub-regional levels.

4. Transfer of technology

The programme on technology transfer and development has to be a deliberate approach to achieving technological transformation that will expand and diversify the industrial base of these countries. The activities should invariably contain a mix of elements addressing the issues of domestic technological infrastructure, acquisition of foreign technology and technological information capability at the levels of policy, institutional and human resource development.

Action by UNIDO

At request of LDC governments:

- assist LDCs in establishing and/or strengthening their domestic technological infrastructure by addressing issues of appropriate technology, technology management and links between research and industry;

- assist in building up awareness and capabilities of LDCs on issues of technology acquisition and development at the levels of policy, institutional and human resource development;

- assist in diversifying and expanding of the network of technological information exchange to include a wider range of institutions from more countries in the developing world and to increase access to UNIDO assistance with regard to technology acquisition and negotiation and technology transfer trends;
assist in developing and expanding of national, in particular, and subregional, regional and sectoral information networks including the installation of technological data bases and standardized application packages covering areas such as technology opportunities, local production capacities and market information;

- establish focal points in least developed countries between national and international technology suppliers and national technology users, including technology centres, if appropriate;

- assist in facilitating the co-ordinated formulation and implementation of technology plans, policies, laws and regulations, further deliver technological and industrial information including the upgrading of technological information capabilities of LDCs;

- continue to provide and strengthen support for programmes of technical assistance for least developed countries from other developing countries; arrangements for least developed countries to benefit from the co-operative exchange of skills among developing countries should also be explored;

- assist in sensitizing LDCs through direct technical assistance, in upgrading technological level of the countries and in developing, innovating and adapting local technologies;

- promote successful and feasible inventions, innovations and local technologies available in selected LDCs as inputs to the local production such as through the establishment of industrial incubators;

- organize training programmes on technology transfer negotiation for government officials and entrepreneurs needing guidance in their negotiations with foreign investors, joint venture partners or technology suppliers;

**Action by LDCs**

- plan the development of systematic institutional support for industry, especially in the fields of industrial standards, testing, supporting exports, quality assurance, packaging, design, training, purchasing, technology acquisition, adaptation and adoption, and legal advisory services;

- promote technology acquisition policies based on proven and well-tested technology adapted to local conditions and encourage initiatives in repair and maintenance services;

- create a technical library to improve access in LDCs to basic information sources (news media, technical and trade journals, etc.);

- Re-assess tariff structures in the light of requirements for technological development and improved access to more advanced industrial technologies especially in the context of increased export orientation, establishing
appropriate legal and institutional framework in LDCs for technology development:

- promote institutional development, especially networking for technology information exchange, with subregional and regional co-operation playing an increasing role;

- promote support to the training process for more efficient use of existing technologies and participate in programmes of research and development of technology in selected areas with the aim of developing indigenous technologies, and promote the adaptation of imported technologies to national requirements (with the assistance of UNIDO);

- in co-operation with UNIDO, start process of acquisition of new and emerging techniques such as biotechnologies which is particularly relevant to food and agriculture, agro-based industries, information relevant to communications and information system in the LDCs.

5. Transport and communications

The severe difficulties and handicaps which many LDCs face arising from their being landlocked and geographically isolated create an urgent need for improving and developing both national and regional transport and communications for industrial development. The problems are especially acute in terms of delays and unreliability of supplies and reaching export markets, together with associated high transport costs of goods. In the longer term these difficulties have fundamental negative consequences for development of technology and market structures.

Action by UNIDO

- assist in developing, improving, maintaining and managing transportation equipment and telecommunications systems, including the use of satellites and other technologies, where appropriate.

- co-operate with ECA and ESCAP in devising special programmes tailored to LDCs in the context of the implementation of the programmes and projects of the United Nations Transport and Communications Decades in Africa and Asia;

- support and encourage the implementation of joint transport and communications projects between two or more LDCs, particularly when envisaged in the framework of subregional and regional economic integration;

- develop and promote use of telecommunication systems and other requisite infrastructure for industrial development, including satellite and other computer-aided communication technologies for industry and enterprises;
assist in taking the necessary measures to ensure the management and maintenance of transportation equipment; further assess feasibility, especially at a regional and subregional level, of production of low cost transport equipment;

Action by LDCs

In the 1990s, LDCs should

- develop, maintain or rehabilitate ports, roads, rural tracks and railways;
- train the human resources required and set up indigenous training institutions to service transport and communication equipments and systems;
- create internal transport facilities, particularly those linking remote areas;
- expand and improve transit-transport and port facilities in transit countries to facilitate transport to and from land-locked countries;
- give appropriate attention to the development of coastal shipping services and of river and lake services;
- develop, where necessary, joint shipping companies or merchant fleets.

6. Environment and energy

Many developing countries are increasingly aware of the hazards of industry. They are introducing environmental protection and resource conservation policies and programmes. Industry has also responded by developing new non-polluting technologies and production processes - an endeavour to which biotechnology and genetic engineering can make a major contribution. The very complexity of the causes and effects of pollution require still more concerted efforts.

Energy policies must take account of the depletion of fossil fuels and environmental concerns. In the short term, efforts must be made to increase the efficiency of energy use and conservation; in the medium term a shift should be made from the use of coal and oil to gas and hydroelectricity. In the long term, policies must display a greater commitment to the development and utilization of renewable energy resources.

Action by UNIDO

In the wake of the recently concluded Conference on Ecologically Sustainable Industrial Development (ESID), the following specific areas were identified for future UNIDO activities:

- develop an environmental data base containing details of environmental standards and the environmental implications of technologies, as well as monitoring devices for environmental planning;
- assist LDCs, on request, in building the technical and scientific institutional capacity to develop, absorb and diffuse pollution prevention techniques and cleaner production processes essential to ESID.

- assist LDCs in implementing of international environmental conventions and protocols related to industrial activities;

- assist LDCs in incorporating measures in agricultural projects to combat drought, foster deforestation programmes and soil conservation including water preservation;

- assist LDCs in determining the environmental soundness of industrial technologies by, among others, preparing guidelines on environmentally sound industrial practice for selected sectors, and providing assistance for the development of assessment techniques for the identification and measurement of environmental impact;

- assist LDCs in integrating environmental considerations into their industrial strategies and policies by identifying sectoral and subsectoral priorities for environmentally sound industrial activities;

- assist LDCs in incorporating measures to combat drought and promote reforestation programme and soil conservation including water preservation;

- assist LDCs in research and development related to new and renewable sources of energy and associated technologies.

Action by LDCs

- integrate environmental awareness and responsibility at all management levels, taking into account careful analysis of relative risks, introduction of waste minimization and environmental compliance auditing, establishment of emergency, risk and safety management systems and training programmes;

- promote substitute materials and product reformulations, process modifications and equipment redesigns, renewable sources of energy and raw materials, recycling and reuse of waste and scrap materials, as well as develop environmentally sound technologies, know-how and skills, financial and human resources (in co-operation with UNIDO);

- review the environmental impact of current and planned policies, regulations and institutional infrastructure that affect industry and environment so as to identify, adopt and enforce appropriate policies and measures conducive to achieving ESID;

- With regard to energy, activities will focus on:
  - the conservation of energy, the recovery and recycling of energy and the utilization of renewable sources of energy,
  - the direct or indirect utilization of wind and solar energy,
  - utilization of biomass,
  - use of hydroelectric power,
development of appropriate repair and maintenance capabilities for energy-generating facilities,
progressive local production of energy-related capital goods,
adoption of energy-conservation and substitution technologies in the context of rehabilitating, reorienting and expanding existing industries,
and applied research and development related to new and renewable sources of energy and associated technologies;

V. INTEGRATION OF WOMEN IN INDUSTRIAL DEVELOPMENT

Given the interrelationship between the improvement of women's position in the economy and the basic objectives of development policy, providing women with the opportunity to increase and improve their contribution to economic development is an important means of achieving the fulfilment of basic development goals.

Specific measures need to be taken to increase the number of trained and qualified women. Despite certain achievements, serious obstacles such as cultural barriers continue to inhibit the participation of women in decision-making, planning and management in both the public and private sectors.

Action by UNIDO

- ensure that women are equal beneficiaries, especially in projects related to industrial planning, small-scale and agro-industries as well as to the development of appropriate technologies and human resources;
- continue special training programmes for women in technological, managerial and entrepreneurial skills;
- assist training institutes in LDCs in the organization of appropriate courses for women;
- expert group meetings and seminars to discuss specific strategies, refine approaches for the advancement of women in industry, and enhance awareness among policy-makers of these issues.
- develop a statistical data system related to the participation of women in industrial activities, within the framework of the technical co-operation programme, for the collection and dissemination of industrial census data to assist policy-making bodies in LDCs.

Action by LDCs

Appropriate measures should be taken fully to mobilize and involve women, both as agents and beneficiaries of the industrial development process:

- ratify and implement all United Nations conventions against all forms of discrimination towards women; "UN Convention on the Elimination of All Forms of Discrimination Against Women"
greatly enhance the industrial development prospects of their countries in preparing programmes of integration of women in industry, in promoting their professional technical training and in allowing them better access to technology, knowledge and financial resources:

- promote the establishment of business/entrepreneurs women's associations in order for women to be conscious of their rights and to defend these rights themselves;

- create greater awareness among men and associating them with the elaboration and implementation of measures to promote the role of women in industrial development;

- ensuring women's full participation in the decision-making process, particularly in the design and evaluation of industrial projects, and the administration of funds intended to promote the role of women in industrial development.

VI. THE SYSTEM OF CONSULTATIONS

The mandate of the System of Consultations is to promote the industrial development of developing countries and increase their share in world industrial output through international co-operation.

Consultations, with which LDCs have been associated, have been held covering agricultural machinery, building materials, capital goods, electronics, fertilizers, fisheries, food-processing with emphasis on sugar-cane and fruit and vegetable processing, iron and steel, leather and leather products, non-ferrous metals, petrochemicals, pharmaceuticals, vegetable oil and fats and wood and wood products.

In addition, topics cutting across all sectors have been the subject of Consultations, such as industrial financing, industrial rehabilitation and restructuring, small- and medium-scale enterprises and training of industrial manpower.

For the 1990s, the System should specifically support the industrial development policies for LDCs through:

- conducting follow-up meetings and workshops on topics specifically relevant to LDCs;

- holding regional Consultations at the request of the countries concerned to foster the dialogue between LDCs on the one side and developing and developed countries on the other in determining an industrial development strategy for LDCs;

- organizing country Consultations to support multidisciplinary and multi-sectoral co-operation of all economic agents required for a balanced industrial development programme;
- conducting workshops and other meetings to elaborate industrial development strategies for LDCs based on their economic and social structure supported by the relevant Governments in co-operation with various indigenous economic agents.

Within the framework of the Programme of Action and the Industrial Development Plan and the Medium-term Plan, the System of Consultations should play an active role in promoting the systematic exchange of experience between policy-makers and small-scale entrepreneurs or their representatives from both developed and developing countries. The development of small- and medium-scale industry will also demand a more intensified approach to the information and policy aspects of such institutional infrastructure as marketing co-operatives, sub-contracting exchanges and hire-purchase programmes for equipment.

Efforts will also be made to integrate many of the ad hoc expert group meetings being convened outside the System of Consultations. Those expert groups will also be used to assist in the formulation of operational policies for UNIDO.

VII. INTERNATIONAL ECONOMIC CO-OPERATION

Strengthened co-operation between LDCs and other developing countries, as appropriate at regional and subregional levels, can play an important role in the development efforts of the LDCs during the 1990s. Arrangements in this connection should aim at providing greater and preferential access of LDC industrial products to regional markets, importing LDC products on a long-term secured basis, providing financial and technical assistance for the benefit of LDCs, enhancing exchange of information and know-how, increasing collaborative ventures and, as regards land-locked LDCs, facilitating the flow of goods in transit.

- utilize and strengthen existing institutional bases at the national, subregional and regional levels and promote pilot industrial projects for subregional co-operation;

- undertake supply and demand surveys to identify products representing particular opportunities to be encouraged on regional and subregional markets;

- develop the process of the establishment of multinational industrial enterprises among LDCs and other developing countries;

- develop clearing houses for exchange of technical expertise among LDCs, and between LDCs and other developing countries;

- enhance exchange of information and know-how in the manufacturing sector;

- carefully monitor aid and service inputs to ensure efficient use of products, expertise and services available in the recipient LDC or another LDC;
prepare industrial databases and/or directories containing information on potential LDC suppliers to development aid projects and on their products and/or services.

establish partnership relations, and co-operate with local NGOs, thus influencing policies concerning major international issues affecting the industrial development of the least developed countries.

VIII. ARRANGEMENTS FOR IMPLEMENTATION
FOLLOW-UP, MONITORING AND REVIEW

Effective follow-up and monitoring mechanisms should support the development efforts of the LDCs and are a key to the successful implementation of the Programme of Action for the 1990s. The leadership of the LDC Governments is central to the implementation of the Industrial Action Plan, assisted by development partners such as UNIDO to strengthen their capacity to fulfil this role.

Action by LDCs

- increase national administrative capacity for necessary policy development, co-ordination and review;

- harmonize role of ministries of industry and relevant ministries, so that their activities can be co-ordinated to benefit industry.

- broaden country review groups so as to encompass all the donors concerned and organize them on a more systematic base, while those LDCs which currently do not have regular country review groups should be encouraged to adopt this process.

- introduce administrative reform as an integral element of the country review process in order to reinforce the responsibility of the LDC Governments;

- improve the overall institutional capacity of the Government in order to enhance the capacity of LDCs to play a central role in aid co-ordination and management.

Action by UNIDO

UNIDO within its mandate to coordinate the activities of the United Nations System in industrial development should ensure that aid co-ordination which is indeed the key element to maximize the efficiency of the external support should:

- harmonize and co-ordinate in an appropriate manner industrial development plans and objectives in a regional or subregional context;

- undertake critical analysis of existing regional and subregional structures and co-ordination schemes and mechanisms;
- monitor the implementation of the commitments and measures adopted at the Paris Conference, related to the industrialization of the LDCs:

- ensure that attention be given to the special needs of the group of the land-locked and islands least developed countries;

- assess, on a regular basis, the industrial performance of the LDCs, delineating the respective impact of the international environment and the domestic factors on this performance;

- analyze the comparative experience and lessons learned from formulating and implementing LDC own-policy framework plans;

- assess and monitor the progress of donors and international agencies in directing and adjusting their assistance programme modalities to the special needs and priorities defined in the LDC policy framework plans for the industrial development of the LDCs;

- monitor involvement of women in industrial development;

- undertake regular industrial sector appraisals by national and international agencies;

In co-operation with other organizations of the United Nations system, UNIDO will serve as the focal point for the provision of support to the industrial development programmes of LDCs as follow-up to the Paris Declaration and the Programme of Action of the Second United Nations Conference on the Least Developed Countries.
Action by
the international Community,
in particular the developed countries
for the implementation of the Industrial Action Programme

In reference to the Second United Nations Conference on the Least Developed Countries, the action by the International Community for the implementation of the Industrial Action Programme is materialized by the

PARIS DECLARATION

We, the participants in the Second United Nations Conference on the Least Developed Countries, meeting in Paris from 3 to 14 September 1990, have agreed to concrete measures under a Programme of Action in order to revitalize the development of these countries.

By this Declaration, we solemnly commit ourselves to implementing this Programme throughout the coming decade.

We believe that the deterioration in the economic, social and ecological situation of most of the least developed countries during the 1980s is not irreversible. It can be reversed if these countries and all their partners, taking advantage of the new climate of confidence in international relations, combine their efforts in a spirit of genuine solidarity, particularly through new forms of co-operation, so as once again to give the least developed countries the prospect of sustained and sustainable development within the context of growth in the world economy.

This Programme of Action demonstrates our unanimous determination to promote an ambitious development policy. Its success rests on the effectiveness of national policies, a favourable international economic climate and a strengthened partnership based on mutual commitments:

- By the Governments of the least developed countries, which have primary responsibility for their development, to define and implement appropriate policies ensuring the involvement of populations in the decisions taken, the efforts called for and the results obtained;

- By their partners, to make available adequate resources in support of these policies and efforts, to improve the quality of this assistance and to match it more closely to needs.
In order to inspire national action by the least developed countries in their struggle against poverty, we have defined five priority areas in our Programme of Action:

- To conduct a macro-economic policy, taking account of market signals and aimed at accelerating long-term growth and development, showing concern for the situation of the most vulnerable groups of the population;

- To develop human resources, by making populations, both men and women, the actors and beneficiaries of development, by respecting human rights and social justice, and by applying effective population, health, education, training and employment policies;

- To reverse the trend towards environmental degradation, to manage the environment with a view to the effective and durable utilization of natural resources and to reinforce action to deal with disasters;

- To promote an integrated policy of rural development aimed at increasing food production, enhancing rural income and expanding the non-agricultural sector;

- To develop a diversified productive sector based on private initiative, efficient public enterprises, regional co-operation, increased access to the international market and international action in the field of commodities.

In order to help achieve these priorities, we agree on the need to reinforce the efforts of the least developed countries with external support measures.

Complementing national efforts to mobilize domestic savings and to create a favourable climate for foreign investment, we recognize the essential role of official development assistance for the least developed countries. Its amount should be substantially increased. The bulk of assistance should be provided in the form of grants and it must be managed effectively and with transparency.

We are determined to pursue our efforts to adopt and implement a variety of measures in the context of the international debt strategy in order to ensure that the various activities initiated to revitalize growth in these countries are fully effective.

We are also determined to contribute to the improvement of the international economic climate and to the integration of the least developed countries into the international trading system so as to associate them better with the benefits of trade expansion.

We call upon the competent non-governmental organizations to combine their efforts with those of the Governments of the least developed countries and the international community so as to contribute to the success of the Programme of Action.
In order to monitor the effective implementation of our commitments, we agree on a system of national, regional and global follow-up to ensure the operational, adaptable and evolutive character of the Programme of Action; we intend to associate with it all Governments, international institutions - primarily UNCTAD - regional development organizations and non-governmental organizations.

Refusal to accept the marginalization of the least developed countries is an ethical imperative. It also corresponds to the long-term interests of the international community. In an increasingly interdependent world, the maintenance or deepening of the gap between the rich and poor nations contains serious seeds of tension. Our world will not enjoy lasting peace without respect for the United Nations Charter, international commitments and shared development. These are the objectives of our Programme of Action.
### EXPLANATORY NOTES

<table>
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ECA</td>
<td>Economic Commission for Africa</td>
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<tr>
<td>ESCAP</td>
<td>Economic and Social Commission for Asia and the Pacific</td>
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<td>ESID</td>
<td>Ecologically Sustainable Industrial Development</td>
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<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
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<td>GSTTP</td>
<td>Generalized System of Trade and Preference</td>
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<td>HRD</td>
<td>Human Resources Development</td>
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<td>IFC</td>
<td>International Finance Cooperation</td>
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<td>IST</td>
<td>In-service Training</td>
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<td>LDCs</td>
<td>Least Developed Countries</td>
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<td>NGO</td>
<td>Non-governmental Organizations</td>
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<td>R&amp;D</td>
<td>Research and Development</td>
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<td>RSIES</td>
<td>Rural Small Industrial Enterprises</td>
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<td>SMI</td>
<td>Small- and Medium-scale Industries</td>
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<td>SNPA</td>
<td>Substantial New Programme of Action</td>
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<tr>
<td>UNCLDC II</td>
<td>Second United Nations Conference on LDCs</td>
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