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SUSTAINABLE DEVELOPMENT AND INTERNATIONAL ECONOMIC COOPERATION: INDUSTRIAL DEVELOPMENT COOPERATION

Note by the Secretary-General

The Secretary-General has the honour to transmit to the members of the General Assembly the report submitted by the Director-General of the United Nations Industrial Development Organization on industrial development cooperation, as requested by the General Assembly in its resolution 47/153 of 18 December 1992; the report is contained in the annex.

<sup>\*</sup> A/49/150.

### ANNEX

# Report of the Director-General of the United Nations Industrial Development Organization on industrial development cooperation

### CONTENTS

			<u>Paragraphs</u>	Page
INTRO	DUCT	ION	1 - 3	4
I.		OR TRENDS AND ISSUES OF INTERNATIONAL INDUSTRIAL ELOPMENT	4 - 26	4
	Α.	Regional trends	4 - 18	4
		1. Africa	4 - 7	4
		2. Arab region	8 - 10	5
		3. Asia and the Pacific	11 - 13	6
		4. Latin America and the Caribbean	14 - 15	7
		5. Countries in transition	16 - 18	8
	в.	Global trends	19 - 26	8
II.		PRIORITIES AND ORGANIZATIONAL REFORM OF THE UNITED IONS INDUSTRIAL DEVELOPMENT ORGANIZATION	27 - 35	10
III.		GRAMME THRUSTS AND SERVICES OF THE UNITED NATIONS USTRIAL DEVELOPMENT ORGANIZATION	36 - 127	12
	Α.	Industrial and technological growth and competitiveness	37 - 43	13
	В.	Development of human resources for industry	44 - 50	15
	C.	Equitable development through industrial development	51 - 58	17
	D.	Environmentally sustainable industrial development	59 - 94	19
	Ε.	International cooperation in industrial investment and technology	95 - 112	27

## CONTENTS (continued)

	<u>Paragraphs</u>	<u>Page</u>	
F. Special considerations	113 - 127	32	
1. Integration of women in industrial development	113 - 121	32	
2. Private sector development	122 - 127	33	
IV. OUTLOOK: ROLE OF THE UNITED NATIONS SYSTEM	128 - 132	35	
Appendix. The Yaoundé Declaration			

#### INTRODUCTION

- 1. The General Assembly, in its resolution 47/153 on industrial development cooperation, inter alia, requested the Secretary-General to invite the Director-General of the United Nations Industrial Development Organization (UNIDO) to report to it at its forty-ninth session on implementation. In that resolution, UNIDO is called upon to take due account in its programmes, projects and activities of the commitments to further sustainable development agreed upon in the United Nations Conference on Environment and Development (UNCED) process (para. 2). It is also recommended that UNIDO strengthen its cooperation with organizations in the public and private sectors in particular areas of industrial development (para. 3), and encourage and support technical cooperation among developing countries in the field of industrialization (para. 6).
- 2. The present report is submitted by UNIDO in response to that invitation. The report presents a synoptic review of major trends and issues of international industrial development (sect. I); elaborates the response of UNIDO in terms of its new priorities and organizational reform (sect. II); describes the key programmes and activities of UNIDO, with special emphasis on those enunciated in the resolution, i.e., environment as well as economic and technical cooperation among developing countries (sect. III); and concludes with an outlook on the role of the United Nations system (sect. IV).
- 3. The present report addresses industrial development and international industrial cooperation as one essential dimension of the overall development process and as a cornerstone of sustainable human development. In his report entitled "An agenda for development" (A/48/935), the Secretary-General emphasizes that each dimension of development is vital to the success of all others, as well as to the core concept of human-centred progress. Successful development cannot be achieved by pursuing any one dimension in isolation, nor can any one dimension be excluded from the development process (para. 211). Accordingly, the present report elaborates the role played by international industrial cooperation in overall economic and social development and establishes the link between industrial development and other key issues, such as environment, equitable development and human resource development.

## I. MAJOR TRENDS AND ISSUES OF INTERNATIONAL INDUSTRIAL DEVELOPMENT

### A. Regional trends

## 1. Africa

4. The 1980s had a negative impact on economic development in Africa. Existing industrial structures were substantially eroded. After a slight improvement towards the end of the 1980s, the following years saw a steady deterioration in the region's economic performance, with average real gross domestic product (GDP) growth rates decreasing from 4.8 per cent in 1988 to 1.9 per cent in 1992. At the subregional level, trends were very uneven. The 11-member Economic Community of Central African States (ECCAS) recorded a

negative growth rate of -1.9 per cent during this period; the 16-member Economic Community of West African States (ECOWAS) showed positive but slowing real growth (average of 5.6 per cent, down to 3.4 per cent in 1992); the five Maghreb countries achieved real growth averaging 2.8 per cent; and the group of countries that are members of the Preferential Trade Area for Eastern and Southern Africa (PTA) recorded an average real growth of 2.3 per cent.

- 5. Thus, after the "lost decade" of the 1980s, Africa still finds itself beset by economic problems. The region has the lowest standard of living in the world and half of its population lives in poverty. The technological gap with other developing regions has widened. As economic performance has deteriorated, the region has found itself increasingly marginalized: Africa's trade represents a mere 2 per cent share in world trade and flows of commercial capital into the region have shown a steady downward trend.
- 6. Yet, some encouraging trends are emerging. Parallel to macroeconomic adjustment programmes, industrial development strategies at the country level are subject to far-reaching changes and attempts to promote subregional integration are being embarked upon with renewed zeal. In the latter context, far-reaching new opportunities, particularly in southern Africa, are likely to result from the new role played by South Africa following the democratization of that country.
- 7. In an era of globalization, trade liberalization, deregulation and privatization, many foreign commercial investors and entrepreneurs should be exploring new business opportunities in African countries, many of which lack the domestic financial resources and capacities to promote industrial development on a large scale without outside help. UNIDO will clearly have a growing role to play in support of industrial development in the region, where impartial advice and technical cooperation are vital for strengthening domestic policies, institutional capabilities and enterprises.

## 2. Arab region

The Arab region has recently recorded a positive growth trend. Growth of GDP for all Arab countries rose from a low level at the beginning of the 1990s to around 4 per cent in 1993. Manufacturing value added (MVA) growth significantly surpassed overall economic growth. The overall economic climate in the region is undergoing a remarkable change. While the Gulf Cooperation Council (GCC) is strengthening the internal cooperation among its member States, Saudi Arabia is also gradually building up economic ties with the newly independent central Asian Republics. In North Africa, Morocco, Algeria, Tunisia, the Libyan Arab Jamahiriya and Mauritania are seeking to integrate their economies and harmonize their industrial policies in the framework of the Arab Maghreb Union. At the same time, the industrial sector has remained scarcely diversified and is predominantly based on oil and gas in many countries of the region. Efforts are under way, however, to move from basic to downstream industries as well as to promote the development of small and medium enterprises. In that context, experience gained in other developing regions, above all in Asia, may be of particular relevance. Industrial diversification will have a strong impact on future industrial investment and technology

transfer and development requirements. Considerable potential exists for the development of downstream mining and metallurgical industries. While the production of minerals and metals expanded in the 1970s and 1980s as oil revenues made it possible to invest in the requisite production facilities, many strategic and commercially viable natural resources are still relatively undeveloped.

- 9. With the exception of the Arab least developed countries, most of the countries in the region are medium-income economies, with a relatively high level of human resources and a sizeable industrial base already in place. However, tough global competition will impose significant requirements for qualitative improvement on the industrial sector, which in turn will necessitate strengthening support institutions and developing consultancy services, particularly knowledge-intensive services in such areas as investment, management, maintenance and post-production services.
- 10. Following the recent peace accord, a consolidated international support strategy for the Palestinian people needs to be developed that will allow UNIDO to actively participate in industrial reconstruction and development efforts.

## 3. Asia and the Pacific

- 11. In Asia and the Pacific, manufacturing industries continue to play the role of the major engine of growth within an overall economic dynamism that is unparalleled in other developing regions. In the 1980s, when many developing countries in other regions were struggling to maintain their income levels, most Asian and Pacific countries recorded real annual growth rates in the 4 to 9 per cent range (7.8 per cent for East Asia and the Pacific; 5.2 per cent for South Asia). That remarkable performance has continued in the first four years of the current decade. In most countries in the region, industrial structures have become more diversified horizontally and vertically; levels of foreign indebtedness have been kept within manageable limits; inflation rates have remained relatively low; and the degree of integration into the world economy has increased. Overall, the region has consolidated its position as being economically and industrially relatively advanced. UNIDO forecasts clearly indicate that in the 1990s, Asia and the Pacific will continue to outperform all other developing regions - as well as the developed countries - in terms of economic growth. The share of the region in world GDP is expected to rise from 13.8 per cent in 1990 to 16 per cent in 2000.
- 12. The region's industrial development is propelled by strong export growth, not only in East and South-East Asian countries, including China, but also more recently in South Asia, including Bangladesh, the largest least developed country in the region. In general, Asian countries have also been the winners in an intensifying locational competition among developing countries for foreign direct investment (FDI). However, as primary targets for FDI flows, the contrast between South-East and East Asia on the one hand and the South Asian countries on the other has been stark, leading to growing disparities. Furthermore, the evidence of rapidly growing intraregional trade and investment flows has also been largely confined to South-East and East Asia. At the same

time, infrastructural bottlenecks are emerging in some countries of the subregion in terms of transport, communications and energy constraints.

13. In most countries in Asia and the Pacific, government has played an important role in terms of industrial policy formulation, implementation and institutional support, particularly to small and medium enterprises. During the past decade, the global trend of the private sector assuming a leading role in industrial development has been particularly pronounced in the region. Most Governments have turned to stimulating private initiatives through deregulation, trade liberalization and privatization programmes. The pace and extent of such policies have differed throughout the region, with the newly industrializing economies of East Asia and the countries that are members of the Association of South-East Asian Nations (ASEAN) leading reform efforts. The countries of South Asia are following some distance behind, while the socialist economies are just at the beginning of a transition process towards a stronger market emphasis and outward orientation.

## 4. Latin America and the Caribbean

- 14. The severe debt crisis that afflicted many countries in the region in the 1980s has for the most part been overcome - albeit at a high social cost. In many countries in the region, unemployment rates continue to be high, poverty is widespread and internal development disparities are increasing. However, in the 1990s the region is returning to the world stage as a growth area with high potential. Gradually, FDI flows are being redirected to the region and export performance is improving. Some Latin American countries, such as Argentina, Brazil and Mexico, have successfully diversified their range of exports to include selected high technology products, such as biotechnology, computers and peripherals, and other electronic products. Also, increasing export volumes of automobiles and automobile components are notable. Such countries as Colombia and Chile have emerged, after the introduction of economic and industrial restructuring reforms, as stronger recipients of fresh technology and investment flows. However, the situation is rather different for some less developed South American countries (Bolivia, Paraguay) and for the Central American and Caribbean countries, with the exception of Costa Rica. The majority of those countries still require significant support for capacity-building and a profound restructuring programme of the industrial sector to cope with the new competitive challenges arising from free trade movements throughout the region.
- 15. Regarding the economic reform programmes that have been carried out in most of the Latin American and Caribbean countries, a number of common elements have emerged, including the gradual dismantling of regulatory systems for capital, FDI and trade flows, as well as of price regulations; privatization programmes aimed at reducing the role of the State as an industrial entrepreneur; reduced tariff protection and the elimination of non-tariff barriers; and the phasing out of industrial subsidies. Those reform programmes will have to be reconciled with socially oriented industrial development efforts, including initiatives to foster entrepreneurship and to reduce regional disparities, which are now on the agenda in many of the region's countries.

## 5. Countries in transition

- 16. In the countries in transition, recent economic developments reflect the breakup of former systems, institutions, modes of production and patterns of economic exchange. Most of those countries pursue transformation processes towards a market-based economic system and increased global integration. Progress along that path has been varied and will continue to determine the economic agenda, at least in the medium term. Recent growth rates have been generally low, with positive signs, however, in the western part of the region. Following sharp GDP contractions in previous years, 1992 was a turning point for former Czechoslovakia, Hungary and Poland. The Baltic States, Bulgaria, Romania, the Russian Federation as well as the central Asian Republics are still caught in a downward spiral, the brunt of which is being borne by the industrial sector. Over the period 1989 to 1992, industrial output across the entire region declined by over 40 per cent. A special issue requiring urgent attention is the widespread destruction of industrial production capacities in former Yugoslavia, where reconstruction programmes will have to be mounted once a negotiated peace has been reached.
- 17. While the challenges facing the countries in transition are formidable, their successful transformation and industrial restructuring offer significant potential for industrial cooperation with both the Western industrial nations and the developing countries. There are many opportunities to benefit from the transfer of technology, know-how and increased trade with the countries in transition, which offer a wealth of industrial experience and technological skills that can be transmitted to other countries.
- 18. However, the current inefficient structure of industry and the crisis hitting many of the large industries call for significant endeavours and international support for rehabilitation, restructuring, privatization, investment promotion, and managerial and entrepreneurial development, which will have to include transferring technology and promoting new technology, including clean technologies. A key issue is the mobilization of effective financial resources, particularly venture capital, which are urgently required not only for industrial restructuring and investment but also for strengthening the basic physical infrastructure for industrial competitiveness.

## B. <u>Global trends</u>

19. From the above brief regional surveys, it emerges that the pace and economic impact of industrial development in developing countries has varied considerably in terms of both overall economic growth and levels of industrial and technological capabilities. Some countries have registered a remarkable industrial performance and are moving rapidly towards technologically sophisticated industrial structures based on globally oriented strategies. Most developing countries, however, have lagged behind considerably, particularly with respect to technological developments, competitive skills and industrial capability. The least developed countries have managed to establish only rudimentary and vulnerable industrial structures.

- 20. Economic prospects for developing countries as a whole seem brighter for the remainder of the 1990s than in the previous decade, which may be seen as a dividend from the far-reaching policy reforms undertaken in most countries. The five-year projection of UNIDO places the GDP growth rate for all developing countries at an annual average of 4.4 per cent (excluding China, which is forecast to grow at 8 per cent per year). The longer-term World Bank projections bear out a 4.7 per cent average annual GDP growth for the 1992-2002 baseline scenario.
- 21. As former ideological conflicts are fading away, the second half of the 1990s is likely to bring about an increase in financial, technological and marketing cooperation arrangements between enterprises in industrialized and developing countries and among developing countries themselves. The success stories in South-East Asia as well as in a number of other developing countries not only exemplify far-reaching prospects but also demonstrate that results can be achieved within a relatively short period, provided the necessary socio-political, economic, technological and physical infrastructure is in place. However, in many developing countries, particularly in Africa, such infrastructure continues to lag behind. Despite the liberalization of economic policies and the implementation of structural adjustment programmes, the pace of industrialization in African countries has been extremely slow and there has been little inflow of new investments and technology.
- 22. It is true that the developing countries as a group have regained lost terrain in terms of FDI inflows: in 1992, they received \$40 billion, which put their share in global FDI flows back at one third and moreover equalled 70 per cent of official development assistance (ODA) disbursements. However, the degree of country concentration is striking: only 10 countries were able to attract 65 per cent of all FDI flows to developing countries, while in stark contrast, just 2 per cent went to African developing countries.
- 23. As one of the key challenges facing many developing countries and as an important area for international support, this will necessitate the development of promotional institutions and mechanisms for enhancing new investments, rapid growth of endogenous technological capacity and international technology transfer. The enabling environment to be provided by Governments must be such that, through skill development, research support and productivity and quality incentives, the operationalization of competitive industrial technologies can be achieved at the enterprise level. Enterprises in developing countries must recognize that they are operating in technologically dynamic fields and that there is constant need for technology upgrading. This, however, requires that developing countries must, at all stages of development, purposefully strengthen their own technological capability. Only with such capability can they choose the right mix of domestic technology development and foreign technology acquisition. Only with the requisite human skills and technological infrastructure and facilities in place can they be active partners in international industrial cooperation and gain access to new technological developments. For the international community as a whole, it is a major task to extend assistance for such capacity-building.
- 24. There is a clear trend, despite the recent successful conclusion of the Uruguay Round multilateral trade negotiations and the creation of the World

Trade Organization, for intraregional trade and investment links to intensify, as demonstrated, <u>inter alia</u>, by the emergence of the European Union, the North American Free Trade Agreement and the less formalized Asian-Pacific economic cooperation. That trend will have major repercussions for those developing countries outside or not specifically linked to such regional integration schemes. For those countries, particularly the African countries, renewed efforts to foster subregional integration with a view to expanding markets and benefiting from complementarities will be imperative. International cooperation can play an important role in fostering structural change in industry and building up the required industrial support institutions.

- 25. At the same time, a global perspective on trade issues remains essential. For the majority of developing countries, in particular the smaller countries, trade is the most important vehicle for economic growth and industrial development. Hence, their access to developed countries' markets is vital. The recent trends towards a tripolar regionalization of trading arrangements must not lead to an undermining of the global trade policy agenda. The successful implementation of the Uruguay Round results is important not only for the developing countries outside the emerging trading blocs but also for the global economy as a whole. In that context, recent attempts to incorporate environmental and labour issues into world trade rules require a great deal of caution and sensitivity to the divergent social and economic conditions in developing countries. Any link between export market access, environmental regulations and labour standards will have a significant impact on the industrial development prospects of developing countries.
- 26. In the remaining years of the 1990s, developing countries will face diversified challenges and opportunities in pursing their economic and industrial development. The globalization of industrial production is likely to proceed at rapid pace and innovative responses will be required to counter growing unemployment and associated social unrest in both industrial and developing countries. International cooperation, including UNIDO programmes, will have to meet those challenges by adjusting its priorities, programmes and delivery systems and by strengthening its relationship with broader socio-economic goals.

## II. NEW PRIORITIES AND ORGANIZATIONAL REFORM OF THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

27. Current trends in the global economy towards policy deregulation, private sector development, trade liberalization and regional trading arrangements will offer major opportunities for industrial and trade development but also pose severe challenges, especially for developing countries. Significant weaknesses of and constraints to socio-economic development will be revealed that will need concerted responses at the global, regional and national levels. In that context, the United Nations system has identified the social aspects of economic development, the protection of the environment and human resource development as key issues on its agenda with a view to achieving a sustainable improvement in people's quality of life. The concern of developing countries to build up a base for the development of technologies and skills and a capacity for sustained industrial growth are intimately linked with that agenda.

- 28. The need to respond to those challenges has prompted UNIDO to initiate a process of reviewing and redefining its objectives and priorities, and to launch a major reform of its organizational structure.
- 29. Prior to determining its new priorities, the UNIDO secretariat assessed in all developing regions the demand for its services, which are currently being sought by a greater number of countries and a more diversified range of institutional clients than ever before. While the significant variations in economic and industrial performance among regions were reflected in major differences in demand, none the less certain common features emerged. Given the general acceptance of industry as the primary engine of growth, policy makers across all regions were seen to attach prime importance to creating an environment conducive to sustained industrial development. Hence, major attention was given to enhancing the international competitiveness of the manufacturing industry by stimulating the private sector and promoting foreign investment and technology. Human skills and efficient industrial support services were acknowledged to be key factors, while small and medium enterprises played a major role as agents of change in all regions. The assessment also revealed a general awareness of the role played by regional integration and cooperation, as well as a growing recognition of the need to ensure the long-term environmental sustainability of industrial development.
- 30. With the private sector assuming a greater role in industrial development in the developing countries, UNIDO has strengthened its ties and improved communications with private sector entities in order to ensure that programmes and projects duly reflect the need to support the development of the private sector and promote international cooperation among private sector entities. That process is being pursued in a manner consistent with the role and mandate of UNIDO as an intergovernmental organization and in keeping with the priorities of member States.
- 31. On the basis of its broad mandates, in the light of the demands of the regions and in an endeavour to make optimal use of its limited resources, UNIDO has identified five development objectives fundamental to its operations:
  - (a) Industrial and technological growth and competitiveness;
  - (b) The development of human resources for industry;
  - (c) Equitable development through industrial development;
  - (d) Environmentally sustainable industrial development;
  - (e) International cooperation in industrial investment and technology.
- 32. Those five objectives provide a rationale and conceptual framework for UNIDO services and set its developmental activities in relation to those of other United Nations organizations and aid agencies. Above all, they establish a close link with the developmental endeavours of the developing countries in the various regions.

- 33. Thus, with the support of its member States, UNIDO set new priorities and adjusted its structure to current and future realities. In resolution GC.5/Res.18, which was adopted by the General Conference of UNIDO at its fifth regular session, held in Yaoundé, Cameroon in December 1993, the Conference endorsed the reform proposals submitted by the Director-General. In addition, in resolution GC.5/Res.20, the Conference adopted the Yaoundé Declaration, in which member States, inter alia, emphasized that UNIDO should give special attention to the industrialization of the least developed countries and should accord a high priority to the industrialization of Africa; they also firmly committed themselves to renewing their political and financial support to the revitalized UNIDO. The full text of the Declaration is contained in the appendix.
- 34. The new priorities and organizational structure of UNIDO attach special importance to those areas emphasized in General Assembly resolution 47/153. For the first time, a special organizational unit has been created which is responsible for guiding, developing and coordinating the environmental programmes of UNIDO and in cooperation with other substantive units for implementing environment-related technical cooperation, information and advisory services. Similarly, the need to strengthen UNIDO cooperation with a broad range of industry-related institutions, particularly those in the private sector, has led to the establishment of a new Institutional Support and Private Sector Development Branch. Finally, the programme on economic and technical cooperation among developing countries (ECDC/TCDC) has been integrated into the Industrial Cooperation and Consultations Service with a view to ensuring its close interaction with other relevant programmes of UNIDO, in particular those related to investment and technology promotion.
- 35. The following chapter presents the programme thrusts of UNIDO in a more specific manner under each of its five development objectives. Special emphasis is given to UNIDO activities in the substantive areas highlighted in General Assembly resolution 47/153: environmentally sustainable industrial development, human resource development, investment promotion and technological capacity-building. The presentation is largely based on the revised draft medium-term plan, 1996-2001, proposed by the Director-General to the Industrial Development Board as contained in document IDB.13/19. The new draft medium-term plan has been prepared in pursuance of resolution GC.5/Res.1 of the General Conference of UNIDO, in which the Conference requested the Director-General to ensure the compatibility of activities within the medium-term plan with the policy framework of UNIDO outlined in document GC.5/23 and endorsed by the General Conference in resolution GC.5/Res.18.

## III. PROGRAMME THRUSTS AND SERVICES OF THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

36. As explained in paragraph 29 above, UNIDO has developed its new priorities and programmes in response to revealed patterns of demand stemming from recent industrial development trends at the global, regional and country levels. Similarly, the specific services rendered by UNIDO have been developed with due regard to national priorities (General Assembly resolution 47/153, para. 3). A new tool developed to ensure the responsiveness of UNIDO to recipient country

requirements are the UNIDO country support strategies. The country support strategies are based on a policy dialogue (and related analyses) between UNIDO and a given country's Government and other relevant industrial actors. They formulate the UNIDO response to the needs and demands of industrial development in terms of priority programmes and services, and are linked to and actually complement the overall United Nations system exercise of preparing country strategy notes. Essentially, the strategies will draw upon all relevant UNIDO programme instruments in an integrated manner, i.e., they will commit UNIDO resources - both from the regular budget and from programmable UNIDO-administered funds - and will link them with other non-programmable resources.

### A. Industrial and technological growth and competitiveness

## The issue

- 37. Industrial and technological growth and competitiveness are key prerequisites for the attainment of overall socio-economic development by the developing countries. Through its impact on employment, income, consumption, export earnings and skill enhancement as well as its linkages to the primary and tertiary sectors, industrial growth remains the central issue for all countries. The build-up of industrial growth capabilities in developing countries on a sustainable basis requires forward-looking policies, capacities for generating and applying new technologies, managerial development, efficient information systems and industrial support services. It is through those indigenous capacities and related skills that developing countries can systematically pursue industrial growth and build up their current and future industrial competitiveness or development strength.
- 38. Recent industrial globalization trends have resulted in the emergence of a new paradigm of competition and competitiveness. International competitiveness in the field of industry is becoming an increasingly complex concept. It covers not only cost-price dimensions but also quality considerations and questions of product design, as well as flexible responses through custom-made products, improved marketing and more efficient distribution channels, built-in after-sales services, and the establishment of functioning information systems. In addition to enterprise-level requirements, such as skills, information, technology and management, the concept of competitiveness essentially reflects the systemic interplay of enterprises in production networks and indeed the entire national environment for the production of goods, including a country's physical and institutional infrastructure; its ability to promote domestic savings and investment; and its ability to attract foreign capital and technology.

## The services of the United Nations Industrial Development Organization

39. Support for the build-up of domestic technological capabilities in various subsectors, including the agro-based, chemical, engineering (including electronics) and metallurgical industries, is at the centre of UNIDO services under this objective. Based on a close monitoring of international technological and economic trends, UNIDO has concentrated its technical

cooperation and advisory services on such issues as the supply of technological information; new and competitive technological applications in various industrial subsectors; absorption and adaptation to local factor conditions of new technological processes; and the development of endogenous technological capability through applied research at institutional and enterprise levels. Specifically, its services cover production engineering, process options and related equipment choice, as well as product design and development with a view to increasing the cost efficiency of production, improving the quality of manufactured goods and enhancing competitiveness. That would typically include providing advice on the sourcing, assessment and transfer of technologies and support for their subsequent adaptation to local needs and capabilities. In the latter area, services related to human resource development for industry are playing an important integral role. Furthermore, developing countries are assisted in enhancing the awareness of industrial implications and the applications of new, cross-sectoral technologies, such as informatics, new materials, biotechnology and environment- and energy-related technologies, as well as in strengthening their capabilities to adapt them according to their specific needs.

- 40. At the policy and institutional levels, UNIDO provides advice to Governments and other actors on strategies for industrial and technological development, and policies conducive to creating an enabling environment for achieving accelerated industrial growth and industrial competitiveness, with special emphasis on enhanced private sector development. UNIDO also focuses on strengthening industrial policy-making and specific promotional government institutions at the national and subnational levels as well as at the level of industrial associations, chambers of commerce and a wide range of industrial support institutions. The latter would cover areas such as industrial technology, research and development, management and marketing, with primary emphasis on enhancing the capability of those institutions to render technical consultancy, advisory and extension services to their industrial members and clients, as well as on creating links between them.
- 41. Given the rising importance of the quality dimension in international competition, in both export and domestic markets, UNIDO has further enhanced its programme on quality control, standardization and metrology. Specifically, UNIDO will render advice on the industry-specific application of generic ISO 9000 standards that need to be adjusted to the requirements of different manufacturing production processes. With a view to reaching a broad base of recipient enterprises, such services will primarily draw on existing institutions and associations (or focus on institution-building) to ensure maximum multiplier effects. Technical cooperation in quality control, standardization and metrology the heart of the UNIDO industrial quality programme are complemented by two additional elements: promotional activities, such as awareness-building seminars, and research and advisory services on company-level statistical quality control tools.
- 42. Small and medium enterprises are increasingly recognized as key actors in the industrialization process. To fulfil their role, they need strong linkages among themselves and with larger business partners as well as efficient support systems. Specifically, the networking of small and medium enterprises (SMEs) and large manufacturing firms through production linkages is an indispensable

dimension of industrial resilience and competitiveness. In its reform process, UNIDO has established a new Small and Medium Enterprises Branch that will further strengthen and integrate its related services in terms of (a) policy analysis and advisory services concerning approaches to inducing and promoting local sourcing by large industries; (b) assistance to small and medium suppliers in upgrading their technical and commercial skills and their capability to meet quality requirements; (c) support in building up transparent information systems on networking potentials, such as through subcontracting exchanges; and (d) the development of networking and linkages between institutions and SMEs in different countries. Furthermore, UNIDO will promote concepts of flexible specialization for clusters of SMEs based on complementarity and cooperation. In general, UNIDO sees its role as an intermediary among the different parties involved in SME development, particularly with a view to enhancing links between Government and private sector institutions, associations and enterprises. Institutional capabilities in designing and managing SME policies and programmes will be strengthened and special attention will be given to coordinating such efforts with financial institutions, particularly regional and national development banks.

43. Finally, enterprise restructuring services constitute a central dimension of UNIDO activities under this objective. Specifically, UNIDO concentrates on integrated restructuring assistance that encompasses diagnostic surveys; the identification of diversified market potentials; the preparation of feasibility studies for modernization or new investment requirements; managerial, financial and ownership restructuring, including privatization; the elaboration of detailed implementation plans and the provision of specialized training. UNIDO then coordinates those activities with measures to be taken at the institutional and policy levels. For instance, UNIDO is involved in providing policy advice to the privatization process in Peru while at the same time providing direct support to the privatization of some large industrial enterprises. In another project, UNIDO is assisting the Government of Poland in the restructuring and eventual commercialization of 10 selected enterprises.

### B. <u>Development of human resources for industry</u>

#### The issue

- 44. With its broad connotations for the human dimension of development, human resource development is a key concern in the industrial context. It is an important precondition for as well as a result of industrialization. For UNIDO, it not only relates to educational and training systems at the regional, national and enterprise levels but is also closely associated with building up capabilities for the development, transfer and absorption of technology and the promotion of industrial restructuring towards skill-intensive activities and industrial services.
- 45. Central to the discussion of human resource development for industry is the need to create and upgrade continuously the skills, motivation and know-how that are required by industry and are essential to achieving dynamic industrial growth. The urgency of that need is also borne out by the new patterns of industrial growth and competition in the world economy which indicate that:

- (a) A high skill level is a key determinant for an economy's competitiveness in terms of both the production, development and application of technology, and the attraction and full utilization of investment and other resources;
- (b) Human resource development is an essential part of a country's industrial structural adjustment process. The capacity of a national economy to carry out efficient and socially acceptable restructuring is largely dependent on the functioning of the system of skill generation and its linkage with both the industrial and the science and technology sectors;
- (c) The ability of a country to generate and upgrade industry-related skills is a key factor in combating unemployment and generating equitable development;
- (d) An economy needs enhanced and focused skill generation in order to seize opportunities in advancing industries and rapidly changing markets, as well as to increase the pace of innovation in production.

### The services of the United Nations Industrial Development Organization

- 46. The services provided by UNIDO under this objective fall into three distinct yet closely interlinked sets of activities: supporting the elaboration and review of strategies, policies and plans for industrial human resource development; strengthening capacities and capabilities for industrial human resource development at the institutional level; and directly carrying out a wide range of training activities, inter alia, at the enterprise level.
- 47. To exercise a strategy and policy advisory function, UNIDO undertakes research and analysis on the main determinants of changing skill requirements in industry, with special emphasis on the impact of new technologies and of new ways of work organization at the enterprise level. Changing relationships between the research and development system on the one hand and industry on the other, e.g., concerning the role of demand-oriented transfer agencies, receive priority attention. Informed by research and analysis, UNIDO advises policy makers on industrial human resource development at the national and sectoral levels with a view to increasing overall industrial productivity.
- 48. Complementary to the above, UNIDO focuses on supporting institutions with an industrial human resource development mandate with a view to enhancing their capabilities to provide technical, managerial and entrepreneurial training. That support increasingly involves industrial associations and chambers of commerce and industry as well as consultancy institutions in view of their strong multiplier effect and direct access to industry, in particular private enterprise. At the same time, emphasis is given to reviewing and reassessing the activities and curricula of existing public sector training institutions that in many cases need to be adjusted to changed economic environments so as not to lose their responsiveness to the changing technical, organizational and managerial requirements of industry. Another area of concentration is the networking and/or twinning of training institutions in developed and developing countries as well as among developing countries themselves to facilitate and encourage the exchange of staff, information and curricula.

- 49. In terms of direct training activities, UNIDO provides advice and assistance in productivity enhancement by upgrading the technical and managerial skills that are essential for mastering and adapting industrial technologies, with emphasis on training industrial consultants and personnel concerned with providing industrial services. Training materials and manuals are prepared on the following priority subjects: standardization, quality control and metrology; repair and maintenance; rehabilitation; energy efficiency; industrial safety; and environmental issues, including environmental impact assessment in industry.
- 50. Given the importance of human resource development for each technical cooperation project, efforts are being continued to extend the network of institutions that are prepared to offer training to UNIDO fellows from developing countries and to make greater use of centres of excellence in developing countries. New training techniques and methodologies will be explored; training will be undertaken for selected target groups that are in a position to multiply the impact of training activities (i.e., the training of trainers).

#### C. Equitable development through industrial development

#### The issue

- 51. In recent years, most developing regions have recorded positive economic growth rates that, in the majority of countries, have exceeded population growth rates, thus resulting in absolute increases in the level of economic welfare as measured by per capita income. It is equally true, however, that the benefits of economic growth have been distributed very unevenly both among and within countries. Income disparities have widened in many economies as has the number of people living in absolute poverty.
- 52. The eradication of poverty has thus been accorded the highest priority in the International Development Strategy for the Fourth United Nations Development Decade. Accordingly, one of the primary aims of industrial development must be to alleviate poverty. It is generally recognized that the gradual transformation of agrarian societies into industrial economies and the resulting productivity improvements are important mechanisms for combating poverty. While sustained industrial development itself contributes to creating new employment opportunities, there are specific issues that need to be addressed with a view to optimizing the distributional and poverty-reducing impact of industrialization.
- 53. It is currently widely recognized that efforts to alleviate poverty are among the most productive investments with rates of return often well exceeding those in physical investment. They also reduce poverty-driven environmental damage as agglomerations of impoverished persons often exert debilitating pressures on scarce natural resources and fragile ecosystems. Particular attention must therefore be paid to the creation of economic opportunities for the disadvantaged and poor segments of the population through the expansion of both employment and entrepreneurial opportunities so as to enable them to enter the mainstream of economic development.

### The services of the United Nations Industrial Development Organization

- 54. UNIDO contributes to the creation of more equitable economic opportunities and to the alleviation of poverty by focusing more on economically disadvantaged regions within countries and by developing the full productive potential of rural areas and addressing the issue of urban poverty. At the same time, the equitable development objective implies a special emphasis on the least developed countries, which to date have only marginally shared the benefits of industrial progress and thus constitute the weakest segment of the international community.
- 55. Programmes aimed at a more equitable regional distribution of industrial development are expected to receive priority in an increasing number of developing countries and, accordingly, will be of major significance in guiding the services of UNIDO towards a stronger regional dispersal of industrial development. It is essential that successful regional development be initiated and carried out by the regional actors themselves. UNIDO supports that process by (a) providing assessed information on efficient mechanisms of regional development, such as the various manifestations of the industrial district concept and their applicability in different development contexts, and (b) providing advisory and promotional services to regional (provincial) industrial institutions and policy makers in such areas as regional development concepts and plans, industrial zoning approaches, targeted investment promotion and environmental impact assessment.
- 56. UNIDO fully recognizes the immense potential of SMEs for balancing social inequalities; reducing poverty; integrating the rural and urban poor into the productive sectors; providing products and services required by the rural poor; creating demand for produce supplied by small-scale farmers; and repositioning women and other disadvantaged groups. Furthermore, they are an important vehicle for stimulating productive activities in the context of post-conflict reconstruction and development efforts. The promotion of SMEs, particularly in rural areas, is thus pursued vigorously, with special emphasis on natural resource processing and the manufacture of simple consumer goods as a means of creating non-farm employment.
- 57. In that regard, the priority services of UNIDO consist in:
- (a) Assisting in entrepreneurship development programmes for industry through training in basic managerial and technical skills, with a special emphasis on women;
- (b) Providing information, advice and operational support on the establishment of common service facilities, business incubator schemes and other institutional approaches for small-scale industry and/or entrepreneurship development;
- (c) Encouraging subcontracting relationships between rural small industrial enterprises and larger manufacturers;
- (d) Providing information and advice on technology upgrading options, with emphasis on the efficient blending of traditional and modern technologies;

- (e) Stimulating self-organization for small industrial enterprises, such as in the form of subsectoral associations based on clusters of informal sector producers;
- (f) Promoting linkages between small-scale industries and the service and agriculture sectors;
- (g) Reviewing the functions and impact of national small industry development agencies and provincial and municipal authorities and elaboration of programmes to enhance their effectiveness.
- 58. In terms of subsectoral priorities, the equitable development objective calls for priority attention to be given by UNIDO to agro-related industries and thus entails the strengthening of linkages between small-scale agriculture and manufacturing with a view to raising rural productivity, employment and incomes, particularly among the poor. The processing of food largely taking place in small industries and in a regionally dispersed manner sets a critical dimension in poverty alleviation strategies. UNIDO programmes emphasize the selection, adaptation and diffusion of processing technology, including extension services for cottage and small industries; the modernization/ rehabilitation of ailing food-processing plants; quality control throughout the processing chain; the introduction of health and environmental standards for food products; and packaging for preserving quality and facilitating transport and storage.

## D. <u>Environmentally sustainable industrial development</u>

#### The issue

- 59. With industry being at the centre of the process of achieving sustainable development, the growing importance of environmental issues necessitates their effective integration into industrial activities at both the policy and enterprise levels to achieve environmentally sustainable industrial development. In June 1992, UNCED adopted the Rio Declaration on Environment and Development,  $\underline{1}$ / and Agenda 21,  $\underline{2}$ / which have put the global community firmly on the road to sustainable development. Progress down that road will depend on adherence to the principles enunciated in the Rio Declaration and the achievement of Agenda 21: sustainability requires the addressing of environmental issues as an integral part of the development process.
- 60. In decision IDB.11/Dec.18, which was made at its eleventh session, the Industrial Development Board requested the Director-General to support the implementation of Agenda 21 and singled out the following priority areas: integrating environment and development in decision-making; protecting the atmosphere; the environmentally sound management of biotechnology; strengthening the role of business and industry; the transfer of environmentally sound technology; and chemical safety. The Director-General was also requested to engage UNIDO in global efforts to protect the ozone layer in accordance with the Montreal Protocol on Substances that Deplete the Ozone Layer.  $\underline{3}/$

- 61. UNIDO is actively involved in the environmental initiatives of the United Nations system and plays a leading role in their industry-specific programmes. Along with the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and the World Bank, UNIDO is one of the four implementing agencies of the Multilateral Fund for the Implementation of the Montreal Protocol. It is also a member of the Inter-agency Committee on Sustainable Development and, under Agenda 21, has been designated as the United Nations system task manager for the environmentally sound management of biotechnology. More recently, along with the Food and Agriculture Organization of the United Nations (FAO) and the Organisation for Economic Cooperation and Development (OECD), UNIDO was designated as a partner in the International Programme for Chemical Safety which hitherto had UNEP, the International Labour Organization (ILO) and the World Health Organization (WHO) as its members.
- 62. In accordance with the high priority UNIDO attaches to the promotion of environmentally sustainable industrial development, it has significantly strengthened its capabilities in that respect. Its related services cover a broad spectrum and are generally centred around the concept of cleaner production, i.e., on eco-efficient, energy-efficient and waste-minimizing processes that combat industrial pollution at its source.
- 63. The main activities of UNIDO in following up the commitments and recommendations made at UNCED in the field of industry are summarized below. The presentation follows the structure of the chapters contained in Agenda 21.

## The services of UNIDO

#### Chapter 9. Protecting the atmosphere

- 64. Energy and greenhouse gases. The field of efficient energy generation and utilization offers opportunities that are uniquely suited to combining industrial profitability with environmental protection. The efficient utilization of energy by industry, often with minimal or no incremental capital investment, both reduces energy related emissions and enhances commercial profitability. Furthermore, energy supplies from more efficient fossil-fuel-based generators could enhance the profitability of utilities. Finally, several non-fossil-fuel-based energy sources are now developed and available as cost-effective energy alternatives, especially for rural areas. UNIDO is active in energy conservation in industry in the areas of more efficient production and process management; the adoption of new energy-efficient technology in industry; the development and implementation of technologies for alternative sources of energy; the environmentally benign use of fossil fuels (especially coal); and the enhanced efficiency of existing energy generating and distribution systems.
- 65. Under the United Nations Framework Convention on Climate Change (A/AC.237/18 (Part II and Add.1 and Add.1/Corr.1)), the promotion of energy efficiency in industrial processes takes on special significance. Advisory services and support related to reducing the environmental impact of energy-generating systems, promoting energy conservation, and new and renewable sources of energy in the context of the emphasis on greenhouse gas issues under the Global Environmental Facility will be strengthened by UNIDO. Finally, the UNIDO initiative towards the industrial applications of safer

energy, which got under way with the recent establishment of the National Centre for Applied Solar Energy in Australia, will be enhanced in terms of establishing and further networking such centres.

66. Phase out of ozone-depleting substances. Within the context of the Multilateral Fund for the Implementation of the Montreal Protocol, UNIDO concentrates on direct plant-level advice and assistance, including the assessment of incremental costs for chloro-fluorocarbons (CFC) phase out; the transfer of technology for CFC phase out, on the basis of carefully assessed options and the most favourable terms available; and institutional support, through applied research and development and training, to the introduction of non-CFC technologies. The sectoral focus of those activities is in the refrigeration, foams and solvents sectors. UNIDO is at present implementing some 30 projects under the Montreal Protocol in all developing regions. By concentrating its services at the level of individual industrial plants - providing specific technical inputs and undertaking a wide range of assessments - UNIDO establishes a concrete basis from which appropriate institution-building measures and regulatory frameworks can be developed.

### Chapter 16. Management of biotechnology

- 67. Among the numerous industrial applications of biotechnology, the following deserve special mention: the development and improvement of pharmaceuticals; the development of processes and products that minimize the use of synthetic chemicals, reduce waste generation and remove pollutants from the environment, particulary accidental oil spills; and the development of environmentally safe agro-industry products, such as pesticides and fertilizers.
- 68. Advanced biotechnologies can play an essential role in fostering the economic and social development of developing countries. New and powerful diagnostics, vaccines and drugs can be obtained through biotechnology for some diseases that are prevalent in developing countries, such as malaria, trypanosomiasis and hepatitis. As populations grow, biotechnology can help raise the productivity of major food crops. In many countries where large quantities of biomass are underutilized or wasted, biotechnology can provide a means for their conversion into useful value-added products. Furthermore, with proper planning and management biotechnology lends itself to decentralized applications and can therefore be used as a tool for rural, small-scale industrialization and micro-enterprises that provide better opportunities for the participation and advancement of women.
- 69. UNIDO promotes capacity-building and safety procedures for biotechnology research and applications; the consolidation and networking of national, subregional and regional biotechnology programmes; and the establishment of partnerships among developed and developing countries' biotechnology institutions and the private sector. To support that process, UNIDO has established the International Centre for Genetic Engineering and Biotechnology (ICGENB). UNIDO services are being expanded into bioinformatics, with assistance in the development of databases at regional and subregional centres of biotechnology, and the development of biotechnology information packages. Successful cases of commercialization of biotechnology are being developed and

packaged for dissemination and promotion with emphasis on small-scale bioindustries.

70. In the area of environmental biotechnology, UNIDO works to create greater understanding and appreciation of the need to apply biotechnology consistent with safety. It works with UNEP, WHO and FAO in an informal working group to promote the environmental applications of genetically modified organisms (GMOs) for industrial development in an ecologically sustainable manner. UNIDO developed and promoted on behalf of the working group a voluntary international code of conduct on the release of GMOs into the environment. Other ongoing activities in that area include the preparation of a biosafety manual; the holding of training courses; and the establishment of a Biosafety Information Network and Advisory Service (BINAS) that will provide expert advice to developing countries on biosafety issues at both technical and policy levels through promotional projects. While some of those activities were initiated well before UNCED, they clearly respond to its major concerns with respect to the environmentally sound management of biotechnology.

## Chapter 18. Management and use of water resources

- 71. While industry consumes a relatively smaller share of water supplies than agriculture, its pollution impact is higher than that of the agricultural sector. Although 80 per cent of water used for cooling and cleaning is returned, that returned water is often contaminated by industrial effluents and thermal pollution. Industry can therefore contribute to water resource conservation in three respects: by lowering if not eliminating its pollutant loads on water resources utilized; by reducing total water resources utilized; and by producing cost-efficient equipment for recovering and distributing water resources.
- 72. The present activities of UNIDO in that area can be broadly classified into three categories. The first concerns mitigating the adverse impact of industry on water quality by supporting cleaner production and waste-water treatment; providing technology options for lower water consumption in manufacturing; and supporting government policy formulation, with particular emphasis on small-scale industries, which in some instances exercise a particularly deleterious impact on water resources. Ongoing projects include assistance to Sri Lanka in reducing pollutant discharges from selected industrial sectors, inter alia, through establishing a demonstration waste-water treatment plant, and the setting up of a common waste-water treatment facility for handicraft industries in Nepal.
- 73. The second category relates to identifying and treating the major sources of pollution on coastal waters and oceans. For instance, UNIDO is developing, in cooperation with UNDP, a regional support project to prevent pollution and conserve biodiversity in the marine ecosystem in the Gulf of Guinea.
- 74. The third category concerns UNIDO activity in expanding the use of the existing water resource base, including the manufacture of water-treatment equipment for supplying process and drinking water; the manufacture of irrigation equipment; and the manufacture and use of water-related environmental monitoring equipment. Ongoing projects include assisting in the provision of

high quality industrial process water in China and providing equipment for monitoring sea-water pollution in Bulgaria.

### Chapter 19. Environmentally sound management of toxic chemicals

- 75. Chemicals are vital to many industrial processes and are consequently vital to developing countries in the course of their industrialization. At the same time, many of the chemicals that industry handles, whether as raw materials, intermediates or finished products, can be harmful to the environment, to people and to animals if not properly processed or used. The severity of the chemicals' effects depends on their inherent toxicity and the nature of the exposure.
- 76. The risks of damage by toxic chemicals are particularly high in developing countries. Many developing countries have a chemicals industry based on outdated technology and have neither the expertise nor the financial resources to modernize their technology. In many cases, they choose the cheapest option for investment and thus acquire obsolete technologies that do not meet current standards of quality, safety and effluent limitations.
- 77. UNIDO, with its detailed technical experience and expertise in industrial processes in general and in the chemicals sector in particular, is well placed to assist developing countries in handling their toxic chemicals in an environmentally sustainable manner. UNIDO also maintains close links with other organizations that cover issues related to toxic chemicals, including FAO, UNEP, WHO, the World Bank and such non-governmental organizations as the International Union of Pure and Applied Chemistry (IUPAC), the International Pesticide Analytical Council, and the International Group of National Associations of Manufacturers of Agrochemical Products.
- 78. In its technical cooperation, UNIDO advises Governments and recipients on the hazards involved in handling toxic chemicals and on possible alternatives they could consider, and encourages Governments to introduce legislative measures to monitor and control industries handling toxic or hazardous chemicals.
- 79. While the use of fertilisers and pesticides has reached a peak in developed countries, a UNIDO study has shown that the use of agrochemicals in most developing countries is increasing. Although pesticide manufacturing technology is very closely held by a few companies, pesticide formulations are readily available to developing countries. UNIDO recommends user- and environment-friendly pesticides and their formulations, and aims for an overall reduction in the volume of pesticides by moving to low-volume/high-activity/low-risk pesticides in support of integrated pest management. It promotes zero discharge for pesticide formulation, and also advises on the decommissioning, where appropriate, of pesticide plants. As an example of recent activities, in early 1994 the Ecotoxicology Research Centre, which had been established with UNIDO assistance, was inaugurated in Pakistan.
- 80. Information on toxic chemicals is vital for designating hazardous areas and planning the appropriate safety and emergency measures that should be adopted by both Governments and industries. UNIDO regional and global networks assist in

the collection and dissemination of information. The Regional Network on Pesticides for Asia and the Pacific (RENPAP), which operates a database for pesticide supply covering 14 countries in the Asia region, has been a model for regional networks. It cooperates with a number of international agencies and national organizations to promote safety in pesticide formulation and use, and also supports integrated pest management.

### Chapter 30. Business and industry

- 81. The primary UNIDO role in the area of business and industry relates to industrial partnerships and cooperation. UNIDO operates through such mechanisms as subcontracting exchanges between large- and small-scale enterprises on national or international bases. In addition, the potential of enterprise level partnerships and cooperation may embrace such issues as:
- (a) The networking of firms and technology sources to enhance the transfer of environmentally sound technologies and services;
- (b) Techno-economic assessment and promotion of business opportunities in areas that utilize agricultural or industrial by-products and wastes;
- (c) Process optimization, development, diversification and quality assurance, with a view to conserving the inputs utilized by industry.
- 82. Through those mechanisms, the transfer of environmentally sound business practices can be advanced, particularly in connection with the implementation of ISO 9000 standards.
- 83. In addition, operating through national institutions, UNIDO provides entrepreneurs with standardized training tools and methodologies in basic business practices, such as environmental protection, inventory control, quality assurance and marketing, the objective being to provide training that can ensure the business viability and environmental sustainability of small-scale enterprises.
- 84. UNIDO can also play a role in the establishment of national councils for sustainable development. However, international development cooperation has to come to terms with the fact that the creation and operation of such institutions, whether in the public or the private domain, is primarily the responsibility of developing country counterparts. What international cooperation can do is provide support in such specific areas as exchanging country experience; conferring broad legitimacy on those councils; and providing a basic network of institutional contacts.

## Chapter 34. Transfer of environmentally sound technology

85. While industry is one of the major sources of environmental pollution, it also offers the most favourable conditions for moving to paths of sustainable development by developing and adopting cleaner technologies. Technological transformation is the main source of expanding wealth and productivity and, if properly managed, can also hold the key to environmental sustainability. Current technological developments in numerous areas offer prospects for

enhanced industrial profitability through resource conservation; such developments further belie the perceived conflict between industrialization and environmental protection. In that context, the issue of energy efficiency assumes particular significance.

- 86. Cleaner production has been the subject of one of the four subprogrammes of the UNIDO environment programme since 1990 and was endorsed by UNIDO member States in the recommendations of the UNIDO Conference on Ecologically Sustainable Industrial Development (ESID), held in October 1991.
- 87. Cleaner production, with its emphasis on process improvements, is similar to process optimization, which aims to reduce waste generation in order to increase the competitiveness of industry. Cleaner production builds on process optimization by justifying process improvements on environmental as well as on financial grounds. UNIDO has the capacity and experience to provide technical assistance in the field of process optimization, both at the industry-wide (sectoral) and at the subsectoral level. Special emphasis is given to the needs of small and medium enterprises, with a particular focus on economic solutions to the environmental problems of clusters of such enterprises. Examples of the extensive work of UNIDO in the field of process optimization are:
- (a) In the textile sector, operating through the SENAI-CETIQT Applied Research Unit in Brazil, UNIDO has assisted several enterprises to reduce dyestuff and chemical usage, energy inputs and process times. Those changes resulted in cash savings as well as reduction of pollution generation, often up to 40 per cent of the effluent, by minimizing redyeing that needs to be treated by end-of-pipe technology;
- (b) In the leather sector, operating through the Leather Development Centre in Kenya, UNIDO has assisted enterprises in enhancing process and product technologies that have boosted their domestic and export potential and at the same time reduced the volume of pollution generated;
- (c) UNIDO is working with the National Productivity Council of India to strengthen its capacity in the field of cleaner production and to lay the basis for an expanded government policy on cleaner production. The project has produced a waste auditing manual that is designed for the small-scale sector in India. The manual and general approach are being tested in three sectors: agro-based pulp and paper, pesticide formulation, and textile dying and finishing;
- (d) Another activity at the institutional level is the support UNIDO provides to cleaner production programmes within environmental management agencies. UNIDO is working on such a project with the Central Environment Authority of Sri Lanka. It is building the capacity of the Authority to use waste reduction measures as the first step in achieving industrial compliance with environmental norms and is also providing seed money from a revolving loan fund for low-cost cleaner technologies. UNIDO is starting a similar effort with the environmental authority of Nepal;
- (e) In the area of chemical process industries using hazardous or toxic chemicals, UNIDO has assisted in a pilot-scale operation of cleaner production

for cereal herbicides in Poland. It has also assisted in a pilot-scale operation of applicator- and environment-friendly pesticide formulation in India.

- 88. UNIDO recognizes the importance of establishing well-trained, well-equipped and well-informed public and private sector institutions to promote cleaner production. It is providing institutional support and information about cleaner production to both environmental management agencies and productivity organizations. It is cooperating with the World Bank and UNEP in the preparation of guidelines for pollution prevention and abatement in more than 50 industrial sectors, and is contributing to the in-depth UNEP technical reports on cleaner production.
- 89. At the institutional level, UNIDO, in cooperation with UNEP, has intensified its cooperation with industry-oriented institutions, such as national productivity councils and chambers of commerce and industry. Also in cooperation with UNEP, it has launched a new programme to support National Cleaner Production Centres (NCPCs) in approximately 20 countries for a five-year period. The NCPCs will play a coordinating and catalytic role in developing cleaner production technologies and training industry and government professionals.
- 90. Through its Energy and Environment Information System (EEIS) project, UNIDO is establishing networking mechanisms in member States to strengthen their ability to collect, store and disseminate industrial environment and energy information in both conventional and machine-readable forms. The aim is to give small and medium industries with limited communications and data-handling capabilities easier access to the information necessary for clean production.

#### Chapter 37. Capacity-building in developing countries

- 91. Rather than being a passive or reactive partner in the national policy dialogue, industry should be supported to become a leading agent of change given the nexus between industry and environment. To that end, it needs to have the analytical, technological and advocative support to enable it to participate in achieving social consensus and adopting technological solutions and business practices that can lead to a path of sustainable development.
- 92. The first step in national capacity-building for the formulation and implementation of ecologically sustainable industrial development strategies is the formulation of national objectives for sustainable development, which should be set in a decentralized manner with the due participation of all principal actors in the system, including government institutions at the central, intermediate and local levels. When working with countries, UNIDO concentrates on setting up a multilevel decision-making system that re-examines industrial policy objectives, ensures an interface with other related policies, formulates the right mix of instruments and monitors the results of the application of policy. The creation of an institutional framework and the provision of decision support systems are the key features of UNIDO support. At present, UNIDO is supporting the elaboration and implementation of national strategies for environmentally sustainable industrial development in a number of countries, including Algeria, Morocco, Mozambique, Nepal and Tunisia. In addition, UNIDO

is engaged in formulating area-wide environment quality management plans for critically polluted industrial areas in India and Nepal.

- 93. Industry associations and non-governmental organizations are of special significance, since they act as intermediaries between government or national and local decision makers, on the one hand, and enterprises or individuals on the other. At that intermediate level, UNIDO work concentrates on training and institution-building to develop consulting capabilities within industry associations and consulting companies. UNIDO also trains non-governmental organizations in public awareness campaigns.
- 94. The main capacities that are required for the formulation and implementation of a strategy for ecologically sustainable industrial development include:
- (a) The capacity to collect, analyse and disseminate industrial and technological information, including information relating to the environment;
- (b) The capacity to formulate market-based economic incentives and policy instruments to reduce negative environmental impacts and encourage the adoption of clean production technologies;
- (c) The capacity to enact and enforce appropriate legislation and regulatory measures;
- (d) The capacity to formulate the appropriate spatial policies needed for the siting of industry;
- (e) The capacity to undertake environmental impact assessments of industrial activities.

## E. <u>International cooperation in industrial</u> investment and technology

## The issue

- 95. With markets being liberalized and economies deregulated, international industrial cooperation is assuming increasing significance for all actors in the global industrial development process. The objective of international cooperation in industrial investment and technology is thus directly related to the central coordinating role that UNIDO plays in the common system in the field of industrial development. Generally, international industrial cooperation has a wide scope that includes cross-border investment flows, technology transfer, international subcontracting, licensing, the activities of research consortia and strategic company alliances. The role and responsibility of UNIDO is to lay the foundations for enhanced international cooperation in the field of industry.
- 96. It is increasingly recognized that FDI and technology transfer are closely intertwined and their effective absorption depends on similar preconditions. FDI and technology inflows are not only to be seen in terms of individual contracts but also in terms of the creation of a national capability to access

such inflows and utilize them effectively so as to secure a return for all parties involved. The establishment of a conducive investment climate, the generation of matching domestic investments and the creation of an adequate infrastructure for the utilization of technology in industry are to be seen as an integral part of the same process.

97. In the current changing industrial landscape, the role of UNIDO is increasingly focused on the creation of global partnerships so as to support collaborative efforts between countries with complementary interests, experience and/or resources. Industrial and industry-related institutions, increasingly also from the private sector, act as efficient vehicles to foster such partnerships, which often occurs in specific subsectoral contexts.

## The services of UNIDO

- 98. FDI is an essential dimension of international industrial cooperation and UNIDO continues to offer an integrated investment promotion programme to support the process. The main components of that programme comprise the monitoring and assessment of pertinent trends in international FDI flows; preparing country-specific investment guides on relevant legislation, infrastructure, procedures, incentives etc.; active support in identifying, preparing, appraising and promoting investment projects so as to create a viable and bankable portfolio for subsequent promotion; the building up and strengthening of national investment promotion agencies and advising Governments on suitable policies; organizing investment forums and "invesmarts" (as a mechanism to bring together local project sponsors and foreign partners); and following up and facilitating investment and business agreements, inter alia, through feasibility studies, in the framework of a project completion facility. The UNIDO global system of World Investment Network Services (WINS) is the key institutional mechanism for investment promotion and its further expansion through additional Investment Promotion Service (IPS) offices is foreseen. At present, UNIDO operates IPS offices in 12 different countries. They are located in Athens, Beijing, Cologne, Milan, Moscow, Paris, Seoul, Tokyo, Vienna, Warsaw, Washington, D.C. and Zurich. In addition, two UNIDO investment promotion initiatives were recently established with the United Kingdom of Great Britain and Northern Ireland (UNIDO-UK Investment Promotion Initiative/IPI) and Australia (Trade and Investment Promotion Service/TIPS, with offices in Canberra, Melbourne and Sydney). Further IPS and IPI offices are planned for Hong Kong, Spain and Portugal in the near future.
- 99. UNIDO will focus its investment promotion services primarily on medium-sized investors. Not only is there ample evidence that they are gaining in relative importance, but medium-sized investors are also most in need of support services, given their limited expertise on foreign markets and their generally higher risk-aversion compared with large transnational corporations. It is also medium-sized investors who attach particular value to the neutrality of UNIDO as an impartial adviser and intermediary. In addition, the successful approach of promoting investment in specific subsectors as well as in particular regions within a country with a focus, where feasible, on less developed regions will be continued and broadened. Special emphasis will be given to investment-related environmental issues.

- 100. In the field of international cooperation in technology transfer, UNIDO assigns priority to supporting the build-up and operation of relevant information capacities, which involves the provision of information itself, mainly through the Industrial and Technological Information Bank (INTIB) and the Technological Information Exchange System (TIES); the setting up/upgrading of national technology information mechanisms; and their link with UNIDO international networks. Furthermore, international technology transfer trends are monitored and studied, with special emphasis on innovative forms, such as build-operate-transfer arrangements and strategic alliances, and developing countries will be supported in their beneficial application. Particular support is given to the strengthening of local institutional capacity to deliver consultancy and advisory services as well as training programmes in the area of technology choice, evaluation, acquisition and negotiation. Governments are advised on implementing appropriate legal and institutional measures to facilitate technology flows, and specific programmes, such as "techmarts", are applied for their promotion.
- 101. While UNIDO is one of several institutions promoting investment in developing countries, it is the only one with a sound background in both industrial development and technology transfer. UNIDO thus concentrates on linking investment promotion with technology upgrading and the enhancement of technological capabilities through promoting integrated investment and technology policies. Based on the specific conditions prevailing in different countries, UNIDO will design integrated packages of services to be implemented within the framework of a partnership initiative in close cooperation with the Government, industrial institutions and enterprises.
- 102. Specifically, international cooperation is promoted through international and regional centres and networking arrangements under the aegis of such bodies as the International Centre for Genetic Engineering and Biotechnology (ICGEB) and the International Centre for Science and High Technology (ICS), with particular emphasis on long-term capability building in new generic and cross-sectoral technologies.
- 103. Also, the conclusion of cooperation agreements between industry-related institutions and industrial associations in various member States is being promoted with a view to establishing twinning arrangements and multilateral networks, which could serve as umbrellas for promoting innovative schemes of region-to-region cooperation encompassing a broad range of investment and technology cooperation at the policy, institutional and enterprise levels.

### Economic and technical cooperation among developing countries

104. The mechanism of ECDC/TCDC has generally been the subject of increasing attention. It is now recognized that ECDC/TCDC works best on the basis of initiatives taken by developing countries and their enterprises themselves, with the needs and capabilities of partners being clearly identified. A significant opportunity is offered by the increasingly important role that regional and subregional groupings of developing countries are assuming in the 1990s. External assistance in the field of industry could catalyse the opportunities offered by those groupings, enabling them to benefit from each others'

experience and to avail themselves of the potential economies of scale and complementarities of production promised by those groupings.

105. Within UNIDO, the placement of the ECDC/TCDC function in the Investment and Technology Promotion Division, in particular its linkage with the International Cooperation and Consultations Service, stresses its promotional role and its mission to seek viable opportunities for effective and meaningful industrial cooperation among the developing countries, with particular emphasis on investment and technology cooperation. It also reflects a move towards exploring the full cooperation potential inherent in the private sector.

106. While the promotion of ECDC/TCDC is specifically linked to the international industrial cooperation objective, it is obviously not confined to investment and technology issues and is given particular attention within all relevant UNIDO programmes. That promotion comprises, inter alia: the strengthening of the institutional infrastructure for ECDC/TCDC activities at all levels; the implementation of suitable mechanisms, such as centres of training and technological excellence, networks and workshops; the consideration of ECDC/TCDC dimensions in the design of UNIDO services; and the increasing use of experts, services and equipment from developing countries in UNIDO technical cooperation projects. In response to UNIDO General Conference resolution GC.5/Res.10, UNIDO addresses ECDC/TCDC primarily in regional and subregional contexts and seeks close cooperation with existing regional intergovernmental organizations. The focus is on identifying the preconditions for successful industrial cooperation schemes among developing countries as well as analysing their replicability. UNIDO provides a platform for the exchange of such experience among subregional groupings in the same or in different regions.

107. ECDC/TCDC activities received much stimulus during 1993 from several UNIDO programmes. For example, the integrated investment promotion programme for PTA included the identification, formulation, screening and promotion of investment projects, with the aim of enhancing industrial cooperation both within the subregion and with potential foreign partners from industrial and other developing countries.

108. Similarly, ECDC/TCDC was also a significant component of the investment promotion forums held in Asia and the Pacific, Africa, and Latin America and the Caribbean. Moreover, two workshops were organized to prepare for investment forums to be held in 1994 for the Arab countries and for the Black Sea countries. UNIDO held an investors' forum for central Africa in Yaoundé, Cameroon, in November 1993, in cooperation with the European Union and the Centre for the Development of Industry. Potential investors from the member countries of ECCAS participated in the forum, giving it a very distinct ECDC/TCDC orientation. In general, investment promotion is an area of growing importance for UNIDO as it capitalizes on the increasing trend of investments between the developing countries, particularly in the south-east Asian region.

109. The Investment Promotion Services Office in Seoul, Republic of Korea, and the UNIDO Centre for International Industrial Cooperation in Beijing, are both engaged in inward and outward investment promotion activities. The Seoul Office has been successful in mobilizing funds for investment in other developing countries, notably in South-East Asia, while the Beijing Centre places a greater

emphasis on inward investment, attracting resources from developing countries in certain cases, again mainly from South-East Asia.

- 110. Through the Technological Information Exchange System (TIES) network, UNIDO continues to promote cooperation among research and development institutions on technology transfer, adaptation, development and use. Specific activities worthy of note in 1993 included engaging experts from developing countries, such as Argentina, Egypt, Hungary, India, Nigeria, Pakistan, the Philippines and Senegal, to assist in the UNIDO capacity-building programme as lecturers, resource persons or training experts; training selected Nigerian officers in India in the adaptation of technology profiles for prevailing local conditions; arranging a study visit by high-level officials from the United Republic of Tanzania to technology transfer institutions in Brazil, Egypt, India, Nigeria and the Philippines; and convening an expert meeting on technology transfer trends to review the current world-wide status of technology transfer at the national and international levels.
- 111. A number of recent and ongoing activities are aimed at strengthening ECDC/TCDC-related aspects of information sources, including the assignment of the TCDC-INRES (Information Referral System) database to the Industrial Information Section of UNIDO as a logical extension of its information work in support of South-South cooperation. In order to enhance the information flow within, to and from the African countries, including possibilities for the establishment of national and subregional Industrial and Technological Information Bank (INTIB) networks with linkages to international information systems, a project is being implemented for the development of an INTIB industrial and technological information network for Africa. The project includes the preparation of an assessment report covering 10 African countries (Cameroon, Egypt, Ghana, Kenya, Nigeria, Senegal, the Sudan, the United Republic of Tanzania, Zambia and Zimbabwe). Through its cooperation with the Solidarity and Assistance Fund for the Development of the West African Economic Community (FOSIDEC), UNIDO is also helping to establish an INTIB subregional focal point to serve the seven member States of FOSIDEC.
- 112. The UNIDO ECDC/TCDC programme gives special attention to the development of interregional, regional and subregional programmes. Efforts to increase support for ECDC/TCDC continue to include the collaboration of regional intergovernmental organizations, as well as the regional commissions. For example, a regional project was formulated for the promotion and development of agro-related metalworking industries in the least developed countries in Asia and the Pacific in close cooperation with ESCAP. Cooperation also continued with ESCAP under the Regional Network for Pesticides for Asia and the Pacific (RENPAP). In 1993, several regional training programmes were implemented, including those provided by India to other Asian countries on environment-friendly pesticides and by the Philippines and the Republic of Korea on quality control in pesticides. Other recent ECDC/TCDC activities under RENPAP include workshops held in Malaysia on pesticide application technology and in the Republic of Korea on impurities in technical grade pesticide materials.

## F. Special considerations

## 1. <u>Integration of women in industrial development</u>

#### The issue

- 113. Any policies and measures that address the development of the manufacturing sector must take into account the crucial role that female industrial labour and entrepreneurship assume both for economic and industrial progress and for the achievement of social development objectives. There is every evidence that the participation of women in the formal industrial sector has resulted in elevated social and human development indicators.
- 114. Despite the major contribution that women have made to manufacturing, their participation has taken place on unequal terms and has been characterized by patterns of vertical and horizontal segmentation: women have generally been confined to a narrow range of manufacturing branches and are disproportionately concentrated in low-skill production jobs at the lower end of the occupational hierarchy.
- 115. That pattern of female participation in the economy and manufacturing is also the result of sociocultural factors that influence women's status in society and the economy at large: they demonstrate gender-specific constraints. The overall objective for the plan period is to enhance the contribution of women to the industrialization process of developing countries in order to enable them, inter alia, to participate on an equal basis in industrial decision-making and the benefits of development. The thrust of the programme is directed towards assisting women to meet the challenges posed by the industrial restructuring, technological change and economic reforms that many countries are undergoing.

## The services of UNIDO

- 116. The approach adopted within UNIDO and by the United Nations system as a whole to promoting the integration of women in development has been termed "mainstreaming". The focus is on acknowledging women as an integral part of the target group of UNIDO activities, allowing them to benefit on an equal basis. However, women-specific programmes and services will remain all the more necessary in order to address specific constraints that impede women from participating in "mainstream" development.
- 117. The services of UNIDO focus on providing policy advice and specific recommendations to Governments with a view to creating a policy environment conducive to the participation of women in industry by removing policy, legal and institutional barriers thereto. At the same time, recommendations are provided to industry and industrial institutions encouraging them to pay more attention to the potential of women in industrial development, while advice is given on the improvement and diversification of employment opportunities. For example, UNIDO assists the Women Entrepreneurship Association of Nepal in providing a comprehensive package of services to women entrepreneurs that covers production technology, quality control and marketing. Similarly, a special training programme for women entrepreneurs in food-processing industries has

been developed and is being implemented in a number of African and Central American countries.

- 118. Special efforts are being made by the relevant units of UNIDO to obtain and disseminate gender-disaggregated data. Indicators that highlight gender relationships will be developed for the collection of such data, particularly data on industrial employment by skill level and occupational group. The findings and recommendations of ongoing regional typology studies on the participation patterns of women in manufacturing will provide an important source for such data and will be used in the operational activities of UNIDO.
- 119. Strong emphasis is placed on the consideration of gender-related issues in the development of UNIDO programmes and projects from the screening stage through evaluation. Furthermore, based on an assessment of industrial subsectors of specific relevance to women, their role is addressed specifically in activities related to human resource development, agro-industries, small-scale industry promotion, energy and environment programmes.
- 120. UNIDO studies and research activities devote attention to the role of women within the developing countries' human resource base and monitor the impact on women of new technologies, industrial restructuring and resultant changes in skill requirements. For instance, human resource planning based on the studies carried out on emerging employment trends and technology development will facilitate the design of educational and training programmes and other types of technical cooperation activities.
- 121. Close coordination within the United Nations system and at the national and international levels on the issue of women in industry is maintained, particularly in connection with the Fourth World Conference on Women, to be held in Beijing in 1995, and the Platform for Action that is expected to emanate from that Conference.

## 2. Private sector development

## The issue

- 122. In recent years, there has been a powerful trend on the global scene for the private sector in general and private industry in particular to assume a growing and indeed leading role in economic and industrial development. Many Governments, disenchanted with the limited growth dynamics generated by public sector-led industrial development, have turned to stimulating private initiative through far-reaching deregulation programmes. In industrial restructuring efforts, increased reliance has been placed on market forces within an environment of stronger competition in final product markets, labour markets and financial markets. As part of that process, import protection has generally declined and many restrictions on FDI have been lifted.
- 123. Within that context, the privatization of public enterprises has received growing attention particularly since the mid-1980s. The need for such a reorientation stemmed from a pervasive dissatisfaction with the performance of public enterprises, which in the early 1980s were estimated to account for over

a quarter of gross fixed capital formation in all developing countries. Primarily driven by the need to lessen the fiscal burden that inefficient and loss-generating public enterprises had placed on national budgets, a great number of developing countries embarked upon privatization programmes and policies, albeit differing in scope, pace, methods and results.

124. However, those occasionally ambitious privatization programmes have materialized to a limited extent only. Furthermore, the transfer of ownership per se does not guarantee increased efficiency or competitiveness. To reach its objectives, privatization must go hand in hand with a strengthening of market forces through carefully designed deregulation and liberalization measures, a restructuring of enterprises and a renewal of investments.

#### The services of UNIDO

- 125. The lead role played by private industry in most developing countries and the transition to such structures in others bear manifold implications for international industrial cooperation. It is clear that UNIDO services must also be increasingly geared to private industry. UNIDO activities in support of private industry cut across most services rendered under the various development objectives, more so in some cases, such as investment promotion, and less so in others. The great majority of UNIDO services benefit the private sector by either directly or indirectly by improving the overall business environment, initiating industrial policy dialogues, strengthening support institutions, providing information and research inputs, and extending technical and managerial training. Also, in implementing projects, some 50 per cent of UNIDO experts are drawn from the private sector and the majority of contracts for the purchase of equipment are awarded to private sector companies, increasingly from developing countries.
- 126. UNIDO continues to provide analytical inputs and policy advisory services to Governments that have embarked upon strategies to promote private industry. Such services involve both general advice on conducive industrial policies and institutional frameworks and specific assistance to privatization programmes, including technical and managerial support with a view to ensuring the economic and social sustainability of privatization processes. In that context, UNIDO also draws on its strong sectoral expertise and elaborate private sector promotion strategies for specific industrial subsectors.
- 127. In general, it is expected that private industry will play an increasing role in the future as both project counterpart and beneficiary. With a view to inducing multiplier effects, that presupposes the existence of effective private industry organization and representation. Particularly in many least developed countries where such institutions are often lacking or malfunctioning, such industrial associations as chambers of commerce and industry will be strengthened by UNIDO through expert advice as well as through the promotion of relevant international partnerships. Efficient industry associations will be able, inter alia, to perform the following functions:

- (a) Deliver services to member companies;
- (b) Act as representatives of private industry in policy dialogues and negotiations with the Government;
- (c) Function as a counterpart for technical cooperation and other promotional programmes.

In a way, therefore, many countries face the challenge of having first to create the institutional conditions under which services can subsequently be delivered to private industry: that is a major focus for UNIDO support.

#### IV. OUTLOOK: ROLE OF THE UNITED NATIONS SYSTEM

- 128. The global community is challenged to maintain and strengthen international industrial cooperation in a time of great uncertainty and drastic change. The 1990s have been marked by a rapid succession of historic political events, including, inter alia, the political upheavals in central and eastern Europe, the Middle East Peace Accord, the abolition of apartheid in South Africa, widespread regional conflicts and consequent refugee and peace-keeping problems. Likewise, the global economic landscape has undergone far-reaching changes, in particular the transformation of the socialist economies, the emergence of regional trading blocs, the conclusion of the GATT Uruguay Round and establishment of the World Trade Organization, and the accelerated globalization of industrial investment, production and trade driven by the private sector.
- 129. It is imperative that the effects of those far-reaching economic changes on the industrial development prospects of the developing countries be carefully monitored, analysed and managed, which calls for international cooperation more than ever before. As the world changes faster, the need for international cooperation in industrial development and beyond becomes all the more critical.
- 130. There is no doubt that within the overall system of international industrial cooperation, the organizations and bodies of the United Nations system will continue to play an especially important function as providers of objective advice and untied financial and technical cooperation to their member States. That function will also increasingly involve linking peacemaking and peace-keeping activities with development support, such as in immediate post-conflict reconstruction and rehabilitation assistance. Even more importantly, it must address the role of socio-economic progress in conflict prevention. There is ample evidence that just and equitable patterns of economic development are the single most important factor in preventing social unrest and violent conflicts, which ever more frequently originate from the perception of disadvantaged population groups that they are being marginalized and forgotten. Also, the increasing number of genuinely global issues as crystallized above all in environmental threats affecting the entire planet require global approaches that can be best developed within the United Nations system.
- 131. The response of the United Nations system to those challenges requires a unified framework for action. Too often in the past there has been a tendency

to accept an implicit division of labour, with some agencies dealing with economic and financial imperatives and others responsible for adding the "social touch". The current situation makes it patently clear, however, that more is needed than an <u>ex post facto</u> coordination of preconceived programmes of various United Nations entities. There has to be a shared vision, a common approach and agreed objectives binding together the Bretton Woods institutions and the organizations and bodies of the United Nations system.

132. UNIDO is ready to make its contribution; it has redefined its objectives, priorities and programmes as elaborated in the present report. UNIDO has also fundamentally revised its organizational and staff structure and become a leaner, less hierarchical and more focused organization. In the years to come, UNIDO will render full support to implementing the new development paradigm of UNDP, sustainable human development, for which industrial development must constitute a vital cornerstone and an essential programme focus. In that context, a clear division of labour must be ensured between UNDP as a central funding agency and UNIDO (as well as other specialized agencies) as a substantive implementing agency.

#### <u>Notes</u>

- <u>1</u>/ Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, vol. I, Resolutions Adopted by the Conference (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex I.
  - 2/ Ibid., annex II.
- 3/ International Legal Materials, vol. 26, No. 6 (November 1987), p. 1550.

#### APPENDIX I

## The Yaoundé Declaration

### The General Conference

Adopts the following Declaration:

We, the member States of the United Nations Industrial Development Organization,

<u>Having met</u> at Yaoundé from 6 to 9 December 1993 for the fifth session of the General Conference of the United Nations Industrial Development Organization (UNIDO),

<u>Having considered</u> the challenges and opportunities arising from the recent changes in the world situation, particularly the strong trends towards deregulation and restructuring, which require appropriate responses in the field of industrial development,

<u>Having concluded</u> that UNIDO urgently needs to improve its capacity to make optimal use of available resources,

- 1. <u>Unanimously approve</u> a far-reaching reform programme to enable UNIDO to better realize its objectives and strengthen its role as the central coordinating agency in the United Nations system for the promotion of the industrialization of developing countries;
- 2. Affirm that a reformed UNIDO should enhance the impact of its activities, ensure greater economy and efficiency, improve the quality of its programmes and performance and respond more effectively to specific demands of member States;
- 3. <u>Appreciate</u>, in that regard, the determination of the Director-General to bring about major changes in the management and structure of UNIDO, including the introduction of improved measures for management and evaluation, on the basis of the principles of balance and efficiency, and encourage him further in that task;
- 4. Reiterate that the major means of achieving the UNIDO objectives of environmentally sustainable and equitable industrial development remain investment promotion; technology transfer; the development of human resources; and the creation of an enabling environment, both nationally and internationally, for industrial growth and competitiveness;
  - 5. <u>Emphasize</u> that UNIDO should:
- (a) Give special attention to the industrialization of the least developed countries, which face particular constraints in their resources and infrastructure;

- (b) Accord a high priority to the industrialization of Africa and to the realization of the objectives of the Second Industrial Development Decade for Africa;
- (c) Strengthen its capabilities to promote the restructuring, rehabilitation and privatization of industries, including those of economies in transition, without prejudice to the needs of developing countries;
- (d) Also strengthen its efforts to promote economic and technical cooperation among developing countries, the increased participation of women in industrialization, and the development of small and medium enterprises;
- (e) Continue to improve cooperation and coordination with other international organizations and financial institutions, particularly with a view to mobilizing additional resources for industrial development;
- 6. <u>Hereby firmly commit ourselves</u>, in the light of the above, to renewing our political and financial support to the revitalized UNIDO and call upon member States that are in a position to do so and the international community to provide additional resources to support the reformed UNIDO, thereby contributing to an increased impact of UNIDO activities in recipient countries.

8th plenary meeting 9 December 1993

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