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**Regional Meeting of Ministers of Industry  
of Asia and the Pacific**

**New Delhi, India, 19 - 20 October 1995**

**UNIDO Regional Programme for Asia  
and the Pacific: Achievements and Perspectives\***

**Prepared by  
the UNIDO Secretariat**

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## I. Introduction

Towards the close of the 20th century, the Asia and the Pacific region is looking back on a remarkable economic and industrial progress. Certain salient features of this success - such as private sector emphasis, export orientation, foreign investment promotion and strong industrial human resource development efforts - have become a common theme in the recent international economic and industrial policy debate. However, while there is much evidence of a further accelerating dynamism in Asia-Pacific in the years to come, thereby underlining the prospect of an "Asia-Pacific age", many problems remain unresolved or are newly emerging which require appropriate action by parties involved, i.e., *inter alia*, at the level of governments, private enterprises, and the academic/research community. Problems related to widening disparities, the persistence of poverty, environmental degradation, infrastructural bottlenecks, to name but a few, deserve mention at the outset.

Against this background, the present paper first recapitulates salient patterns and recent trends of industrial development in Asia and the Pacific as well as highlights remaining and newly emerging industrial challenges (section II.). Section III. reviews UNIDO's main activities in the region in recent years. While taking due account of the Organization's ongoing reform process the prospects for and most promising forms of future UNIDO support are discussed in some detail in the concluding section IV.

## II. Industrial progress in Asia and the Pacific region: past successes and future challenges

### *Industrial development and policies: salient trends*

The rapid economic and industrial advancement over time of the Asia and Pacific region at large has become a well established fact among international observers in recent years. Due to the very success being witnessed, the region has come to be referred to as a "role model" for development, and many countries in other developing regions are seeking to emulate what they perceive as Asian success stories.

Judged from an overall comparative perspective, economic and industrial progress in the Asia/Pacific region has clearly outperformed other regions, both in the developing and the industrialized world. In 1994 alone, the **gross domestic product (GDP)** of developing Asia grew an estimated 6.7 per cent, more than twice the world average (3.2 per cent), and well ahead the recovering Latin American (4.4 per cent) and still struggling African (1.7 per cent) regions.<sup>1</sup> A similar pattern holds over time: in the 1980-94 period, when many countries elsewhere could barely maintain their income levels, most Asian countries recorded real annual GDP growth rates in the two to ten per cent range (7 per cent for East Asia and Pacific, 5 per cent for South Asia). Per capita income grew at an average rate of 4.1 per cent per year, compared to an actual decline averaging -0.1 and -0.7 per cent in Latin America and Africa, respectively.

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<sup>1</sup> Source of GDP and MVA figures in this section: UNIDO Database.

Industry, and in here the manufacturing sector particularly, continues to be the major engine of growth. The region's total **manufacturing value added (MVA)** exhibited an annual average growth of 7.6 per cent between 1980 and 1994, more than three times the world total (2.4 per cent). MVA growth has stepped up of late in all sub-regions, reaching an estimated 15 per cent in the People's Republic of China in 1994, eight per cent in East and Southeast Asia and more than six per cent in South Asia, respectively. As a consequence, the Asia-Pacific region's share in worldwide MVA stood at an estimated 11.8 per cent last year (7 per cent excluding China), which compares to only five percent in 1980 and some 6.5 per cent in 1990.

This unparalleled economic dynamism in most countries of the region has gone hand in hand with significant **changes of industrial structures**. First, industrial activity has become increasingly diversified, both along horizontal and vertical lines. Notwithstanding distinct variations by countries, industrial activity has gradually been moving away from a limited range of unskilled labour-/low technology-intensive to a larger variety of higher skill- and technology-intensive goods. Second, industry in Asia-Pacific has been increasingly linked up with international markets, both in terms of foreign trade and foreign direct investment. The result is seen in steadily growing levels of world market integration and growing intra-regional economic interdependencies, a trend which has manifested itself most strongly in the Southeast Asian sub-region:

- The share of **manufactured goods** in total **exports** of developing Asia has risen dramatically over the last three decades. Likewise, exports from the region grew by an average 12 per cent per annum during the last decade compared to a worldwide expansion below 5 per cent. For 1993, the region's share in world exports is given with 17 per cent (by volume; in value terms: 27 per cent).<sup>1</sup> For some time, the newly industrializing economies (NIEs) of East Asia have been the leading exporters in the developing world overall. The group has of late been joined by China as it shifts its low-end manufacturing offshore. In addition, with the exception of the Philippines, the ASEAN-4 countries (Indonesia, Malaysia, Philippines and Thailand) have exhibited very impressive export growth rates, driven partly by the relocation of labour-intensive export activities from the established NIEs. Further structural shifts are underway with China and other transitional economies in Indochina absorbing increasing shares of - frequently export-oriented - investment, especially of a low-skill labour intensive nature while the more progressing economies are now proceeding into sectors of production characterized by the use of more advanced skills and technologies.
- This pattern of export growth has gone together with the **rapid development of intra-regional trade**, especially in Southeast Asia. In the 1968-93 period, trade within the region on the whole, i.e. including developed countries, rose from 37 to 50 per cent of its total trade.<sup>2</sup> By the beginning of the 1990s, the ASEAN-4 countries together

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<sup>1</sup> GATT, Focus Newsletter, no. 108, June 1994, pp. 2-4, 8; WTO, Focus Newsletter, no. 2, March-April 1995, pp. 4-10.

<sup>2</sup> WTO, Focus Newsletter, no. 3, May-June 1995, p. 11.

sourced some 60 per cent of their total imports from other Asian countries, with the East Asian NIEs supplying more than half of the total (thus outranking Japan).

- A similarly dynamic pattern can be observed with regard to **foreign direct investment (FDI)**. In 1994, developing Asia attracted an estimated US\$ 52 billion of FDI inflows, a quantum jump compared to some US\$ 30 billion recorded for 1992 when the region absorbed close to 60 per cent of FDI inflows of all developing countries, up from 55 per cent in the late 1980s. Consequently, the region's share in worldwide FDI inflows almost doubled in the 1988-1992 period, a trend that has continued since, given the advancement of China in recent years as the single most important developing country host overall of FDI inflows.<sup>1</sup>
- **Intra-regional FDI** is growing rapidly with the traditional pattern of a one-sided Japanese domination no longer holding true. In Indonesia, Malaysia and the Philippines, the East-Asian NIEs have become the major foreign investors. China and Vietnam are attracting investment from its more advanced neighbours in the region. These trends are based on a variety of factors, including growing cost differentials (both for labour and land), exchange rate variations (appreciation of NIE currencies) and attempts to capture rapidly growing consumer markets in the main ASEAN countries. On the side of the host countries, a conducive overall investment environment (such as relative political stability and administrative efficiency, generous incentives, liberal investment regulations) and the availability of efficient domestic supporting industries have been further stimulating factors.

Turning to the causes of the region's remarkable economic and industrial achievements at large in the past, while denying a simple, one-for-all explanation most analysts agree that it is largely attributable to most governments having made substantial progress in regaining and maintaining macroeconomic stability on the one hand, and in progressively introducing outward-looking, export-led industrialization policies on the other hand. The former, inter alia, is reflected in levels of foreign indebtedness which have largely remained within manageable limits; in relatively low levels of inflation; and in restrained levels of government deficits. As to the latter, import protection has generally been lowered and many restrictions on FDI have been lifted. This has been complemented by other reforms geared to remove market distortions and hence to release market forces, including a clear emphasis on private sector rather than public sector-led industrial development, and a deregulation of financial markets. In a nutshell, other than sometimes believed, it is not the very absence of government action and the exclusive reliance on market forces which have made the success of the advanced Asian countries possible, but the design and implementation of intelligible industrial policies which have combined the virtues of an exposure to markets and hence competition with the build-up of domestic manufacturing capabilities.

However, as needs to be recalled, while the above upward trends can be observed for large parts of the Asia-Pacific region, the pace and extent of economic progress and reform

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<sup>1</sup> UNCTAD, World Investment Report 1994, New York/Geneva, UN, 1994, pp. 57ff.; UN/ESCAP, Economic and Social Survey of Asia and the Pacific 1995, New York, UN, 1995, p. 31

have differed, with the NIEs and ASEAN countries taking the lead, South Asia following at some distance, the economies in transition being in early phases of this process and the LDCs still looking for a sense of direction.

*Unresolved problems and new challenges*

Emphasizing the considerable edge with which the Asia-Pacific region has been advancing industrially when compared to other developing regions should not mask the manifold unresolved problems as well as newly emerging challenges in this part of the world.

- The single most striking phenomenon is that economic and industrial progress has gone hand in hand with **growing imbalances and increasing disparities in the distribution of income and wealth**. Disparities have not only grown **between** individual countries and sub-regions in Asia-Pacific. Disparities are also rising **within** individual countries, including the faster developing ones, manifesting themselves in growing regional, rural-urban as well as inner-urban gaps.
- More than half of the **absolute poverty** worldwide still is to be found in the Asia and Pacific region, numbering an estimated 800 million people, in addition, population growth remains high in many of its parts.
- **Unemployment** and underemployment are pervasive, thereby greatly reducing chances of a humane and fulfilling life in manifold ways.
- **Urbanization**, spurred by ongoing out-migration from the rural areas was the fastest among all developing regions throughout the 1980s and has already reached critical and possibly non-sustainable levels in many cases.
- **Environmental degradation** with respect to, inter alia, industrial pollution (water, air, solid wastes), energy production and consumption, soil erosion and deforestation is on the rise, thereby undermining the very foundations of future generations' life prospects.
- Where it has taken place, the rapid pace of industrialization is putting severe **strains on the physical infrastructure**, as a look at the region's growth centres amply illustrates. The envisaged further massive extension of infrastructure facilities does not only constitute an enormous financial challenge; possible adverse repercussions on the expanse available for agricultural production may also need to be addressed in the case of an ever accelerating spread of industrial and infrastructure areas.
- Significant changes of late in the international trade and investment regime offer further challenges to Asia-Pacific countries. The transition into practice of the **Uruguay Round agreements** which went along with the transition of the GATT into the new World Trade Organization (WTO) early this year is expected to result in a major boost for world trade, investment and production and, hence, world income in the years to come. However, whatever their origin, projections made of expected income gains from the forthcoming trade liberalization see the by far largest share (up to 75 per cent) to accrue in developed countries. The likely benefits to be derived by

the developing world will only fully materialize after the end of a ten-year transitional period (such as the one agreed for the phase-out of the Multifibre Arrangement). In addition, again the benefits will most likely be concentrated on a smaller number of countries in Latin America and Asia. While this observation does not invalidate the generally correct economic reasoning that the pressure a liberalized trade regime exerts on the upgrading and efficiency increase of any domestic economy, additional research is merited on what the notion of "globalization" means in the case of the backward countries in the world, including those of Asia and the Pacific.

While further industrialization efforts, if sustainable, will have to be more strongly geared towards and take account of the above constraints, the manifold and ever more rapid technological, organizational and managerial changes with which industry is progressing worldwide, together with the pervasive trend of opening-up, liberalization and deregulation of many economies has rendered the **need to strive for and/or maintain domestic and international competitiveness** the key industrial challenge of the day. Going far beyond the traditional emphasis on low cost and price only, competitiveness has become a multidimensional concept which needs to be increasingly addressed at various levels and in an integrated manner:

- At company level, the ongoing overall shift from the age of mass production to one of a more customized, flexible specialization - often referred to as the new paradigm of industrial development - in the first place requires the continuous acquisition, adaptation and upgrading of technical and managerial knowhow. This involves a much higher stress on quality than in the past which in turn depends critically on both the availability and proper use of high quality inputs, such as a better educated and trained workforce and modern capital equipment. The effective introduction of new management techniques and of changes in the way production is organized so as to increase flexibility and efficiency further add to a company's chances of meeting with the competitiveness challenge.
- At national level, the strive for competitiveness cannot any longer be associated merely with the traditional concept of comparative advantage which called for a concentration on the use of those factors of production a country is abundantly endowed with. Rather, at a time of increasing globalization, improving a country's competitiveness is essentially equivalent with aiming for the constant improvement of productivity, i.e. the value of the output produced by a unit of labour or capital. Sustained productivity growth is indeed the prime determinant of a nation's long-term standard of living. There is both ample scope and need for the supportive role industrial policies continue to play in this regard in the Asia and Pacific as they do in other developing regions. Hence, apart from providing an enabling environment at macro level, governments can render catalytic support, largely in the field of capability building, in helping industry to take up and eventually cope with the competitiveness challenges underway. Pertinent support measures may include, but are in no way limited to
- the facilitation of industrial restructuring and upgrading by means of a gradual, controlled and transparent opening of markets.



- the removal of existing biases against the growth of small- and medium-scale enterprises (SMEs) and the promotion of further industrial deepening, such as in the form of increased subcontracting or networking between enterprises;
- vigorous efforts to improve the human resource base for further industrial development spanning the whole spectrum of education, vocational training and specific technical training;
- an improved access to and effective absorption of up-front technology by industry including its continuous upgrading and adaptation to specific local needs;
- assistance in the more widespread introduction of new concepts and tools associated with the issue of an ever more strongly needed quality management (not only) at enterprise level; the ability to meet and successfully apply an increasing number of internationally agreed quality standards is a case in point here;
- the promotion of research and development as well as of science and technology (R&D/S&T) activities which are relevant to and effectively linked-up with the industrial sector.

### *Conclusion*

Summing up, while industrial progress has indeed been remarkable in Asia and the Pacific when compared to other parts of the world, a number of old problems persist and new challenges have emerged which require the continued attention of those who believe in the long-term need of a more equitable and sustainable global development and therefore in the still tremendous task ahead to allow all human beings to lead a life in dignity. Since industry will remain as one of the major, if not the major engine of growth in the years to come, spurring sustainable industrial development will be instrumental for achieving socio-economic progress, *inter alia*, - through employment creation and poverty alleviation. The ever more complex nature of industrialization and the fact of the ensuing structural changes taking place at an ever more accelerating speed place rising demands for a successful industrial management, be that at policy, institutional or enterprise level. Capabilities and capacities to meet these new demands vary from country to country and within any one country for manifold reasons.

Hence there is room for assistance taking the form of specialized support services from outside, such as from UNIDO, in the further promotion of industry in Asia and the Pacific, provided it is relevant, up to the point, of a high quality nature and rendered in an efficient and effective manner. After all, contributing to an alleviation of remaining or newly emerging industrial development constraints has been and continues to be the very *raison d'être* of UNIDO.

### III. UNIDO activities in Asia and the Pacific region: main avenues and achievements

UNIDO is looking back to almost three decades of work as the United Nations system's specialized agency for industry. Set up by the international community in 1967, the Organization has been mandated since to promote and accelerate industrial development in the developing countries. In this endeavour, the Asia and Pacific region has always had a prominent place. In highlighting the assistance rendered so far, a number of questions emerge: What have been the main quantitative and qualitative dimensions of UNIDO's work in Asia-Pacific? What has been the impact of UNIDO's activities, and in particular, has the major thrust of UNIDO's interventions been responsive to the respective needs of the countries in the region?

#### *The quantitative dimension*

Concerning the quantitative dimension, in the ten year period from 1984 to 1994, UNIDO's expenditure on technical cooperation activities in Asia and the Pacific reached a total of US\$ 410.6 million, corresponding to an average 32 per cent share of the overall expenditure during that period of US\$ 1,295 million. This share has been second only to the African region for which some US\$ 447.6 million or 35 per cent of the total have been made available, and is far ahead of the assistance rendered to the Latin American and the Caribbean region with US\$ 121.9 million, equalling little under ten per cent. Some seven per cent of total Asia-Pacific expenditures have been allocated to regional projects, i.e. activities which by being geared towards a group of countries simultaneously aim to mobilize synergies in delivery and/or to foster (sub)regional exchange and collaboration.<sup>1</sup>

The steady decline in recent years of technical cooperation expenditure which after an all-time high of US\$ 160 million in 1990 has resulted in a total US\$ 101 million only in 1994 is a matter of concern not only to the UNIDO management, but naturally, as has been repeatedly expressed, in the first place to the member countries of the region. However, the reasons for this decline have largely been beyond UNIDO's control, and are primarily rooted in the drastic reduction in, and non-availability of, UNDP/IPF resources. Amounting to nearly US\$ 37 million in 1991, with a share of 83 per cent at that time accounting for the by far biggest chunk of UNIDO's technical cooperation activities in Asia and the Pacific, UNDP/IPF resources dwindled to a mere US\$ 7.8 million in 1994, yielding a share of 34 per cent of all activities undertaken in the region. In other words, the 1991-1994 period saw a decline of UNDP/IPF resources of some 78 per cent in absolute terms. To put these basic figures in perspective, the global decline of UNDP/IPF monies can be attributed to three main reasons, i.e. (i) the cuts imposed by member states on UNDP funds for the Fifth Programme Cycle (against the anticipated US\$ 4.6 billion, UNDP only received US\$ 3.1 billion); (ii) a stress in UNDP-priorities on social issues and other non-social development issues such as public sector and civil service reform, with an ensuing reduced emphasis on resources for industry; and (iii) a dramatic increase of national execution which jumped to 43 per cent during the Fifth Programme Cycle compared to some 14 per cent in the previous cycle.

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<sup>1</sup> For a detailed breakdown of technical cooperation expenditure by regions over time see annex table I.

Against this background, UNIDO has stepped up efforts to mobilize alternative funding (UNIDO and non-UNIDO). While this could not compensate to date for the losses incurred under UNDP/IPF funds, the trend is clearly upward. In 1991, these other sources accounted for only US\$ 7.4 million, corresponding to some 17 per cent of the total activities undertaken. By 1994, this amount had more than doubled to US\$ 15.1 million, equalling roughly two thirds of total expenditures. Preliminary figures for 1995 show a further recovery of UNIDO's activities in Asia and the Pacific. As of end-August, project allotment documents issued amounted to some US\$ 33.5 million and were the highest among all the other regions.

### *The qualitative dimension*

While the amount of funding UNIDO can mobilize for its activities clearly determines the outreach and number of services it can provide, quite independently from the quantitative dimension, the Organization has always been conscious about the critical need to produce and deliver quality outputs. This requires special care over the whole service cycle from the early design and appraisal stages through further preparation and during the actual implementation of every single activity. UNIDO has stepped up pertinent efforts with the introduction of a new quality assurance system under the ongoing reform process.<sup>1</sup> Upon completion of a service, the extent to which an aimed-at quality output is actually achieved is evaluated alongside a whole set of criteria. For instance, under the criterion of **relevance** the question is asked whether the service in question has in fact been addressing real needs. The **effectiveness** criterion is applied to verify whether the service has produced its intended outputs and attained its immediate objectives. Finding out about the **impact** of a service is equivalent to learning whether the achievement of service outputs and immediate objectives has actually contributed positively to the related development objective.<sup>2</sup> Finally, **sustainability** is the criterion which has gained overriding importance in recent years. The key question here is whether the impact of the service will be lasting until after the service comes to an end, for instance by ensuring that entities and/or capabilities established locally under a service will be able to continue their operations.

Together with independent external expertise, UNIDO continuously carries out service-specific as well as thematic in-depth evaluations and regularly compiles project performance evaluation reports on major activities. A review of the 1993 results of these investigations worldwide found that average performance ratings of projects improved in comparison with 1992.<sup>3</sup> Outputs were produced and immediate objectives were achieved or likely to be

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<sup>1</sup> For a summary presentation of recent reform measures, see section IV, below.

<sup>2</sup> Projects/services may well be effective in terms of providing the envisaged outputs and of fulfilling the stated immediate objectives, and at the same time not have any impact. For instance, a well conducted feasibility study reaching a positive conclusion on the set-up of an infrastructure project or an institutional framework may not be followed-up on by the responsible decisiontakers either at government or in the private sector.

<sup>3</sup> The review of the corresponding results for 1994 is currently underway.

achieved as planned in 63 per cent of cases; however, achievements were less than planned in 28 per cent of cases.

### *Major UNIDO activities in Asia and the Pacific*

As in other regions, UNIDO's activities in support of industrialization in developing Asia and the Pacific have been spanning a wide spectrum, in essence ranging from policy advice to institution building and to specific technical assistance geared to a large number of industrial subsectors. Consequently, assistance has been and is being provided at three interrelated levels, i.e. at policy level, at institutional level and at enterprise level. However, the contents of as well as the way in which these services are being rendered have changed in recent years, given the very changes in the nature of industrial support services developing Asia requires in the 1990s. Increasing emphasis on the private sector, a growing consciousness of the need for and the beneficial effects of an environmentally sound industrialization, a stronger market orientation in virtually the whole region as well as rapid changes in the global economic environment caused by technical innovations and growing globalization have been reflected in UNIDO's work in Asia-Pacific. To give but one example, unlike in the earlier days of a less market-oriented environment when support was frequently rendered to help individual, often large-scale and usually public sector-owned industrial enterprises overcome operating problems, most services to enterprises are now channelled through institutions and organized industrial groups such as chambers of commerce and industry, and manufacturers' and business associations. Exceptions are cases of enterprise restructuring or privatization of state-owned industrial enterprises, and where promotional linkages are sought between enterprises in different countries for investment, technology or other forms of cooperation and participation.

In dealing with industrial development problems, UNIDO's role is by definition catalytic. While its clients, i.e. the major industrial agents in the developing countries of necessity remain the masters of their own development, UNIDO sees its involvement as one of an honest broker, offering crucial advice and critical inputs with a view to generating spread or multiplier effects to ensure that knowhow, experience and lessons learnt elsewhere be made available to relevant users in the industrial community of its target countries. In so doing and reflecting the structure of demand received, UNIDO provides 12 major groups of services, as depicted in box 1.<sup>1</sup> These services relate to one or more of the five development objectives approved at the Fifth General Conference of UNIDO in December 1993 and in line with which the Organization's work is being directed. These five objectives which are of necessity interlinked and the rationale behind them can be mapped out as follows:

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<sup>1</sup> A detailed description of these 12 groups of services covering, inter alia, prospects and constraints, national strategies as well as UNIDO's respective approaches and instruments is contained in UNIDO, *UNIDO Services Handbook*, Vienna, June 1995.

■ **Industrial and technological growth and competitiveness**

Accelerated industrialization, combined with competitive technological applications and quality standards, and production efficiency is considered as a *sine qua non* for competitiveness in a global economy characterized by liberalized trade, globalized industry and rapidly changing technologies.

**Box 1: UNIDO services**

- Industrial policies and private sector development
- Operational support for sectoral development
- Investment promotion
- Technology for competitiveness
- Environment and energy
- Human resource development
- Women in industrial development
- Enterprise restructuring and privatization
- Small- and medium-scale industry and rural industrial development
- Quality, standardization and metrology
- Industrial information
- Industrial statistics

■ **Equitable development through industrial development**

This objective reflects the perception of industrial growth as a major instrument for bringing about socio-economic development and social progress - through employment creation, regional development and poverty alleviation.

■ **International cooperation in investment and technology**

This objective acknowledges the key importance of promoting foreign direct investment and the creation of joint ventures, strategic partnerships, technology licensing agreements, and other contractual linkages and arrangements between enterprises in different countries, to increase efficiency, capability and competitiveness.

■ **Development of human resources for industry**

This objective aims at the enhancement of human capacity to meet industrial goals in the form of upgraded knowledge, specialized skills and experience in entrepreneurship, management, technology acquisition, absorption and adaptation, research and design, and the capability for competitive production or services.

## ■ Environmentally sustainable industrial development

Under this objective UNIDO strives, *inter alia*, for the harmonization of industrial strategies and programmes with the environmental need to reduce industrial pollution and degradation; the use of sector-specific clean production concepts including the selection and transfer of environmentally suitable technologies; the phasing-out of ozone-depleting substances; and improved energy efficiency in production processes.

Turning to the operationalization of the aforementioned objectives, a breakdown of the total 230 ongoing UNIDO projects in Asia and the Pacific by themes reveals a considerable concentration on activities associated with three of the five objectives, i.e. international cooperation, human resource development and environment. This holds both in terms of project numbers and of the allocated budgets. With regard to project numbers, an estimated 45 per cent addresses issues related to international cooperation in investment and technology, followed by those aiming at an environmentally more sustainable industrial development with a share of 35 per cent. Another 24 per cent of all activities focus on the development of human resources for industry.<sup>1</sup> Looking into the budget allocations, a similar pattern is to be observed, with close to 30 per cent of the total accounted for by investment- and technology-related support measures, ahead of environment/energy (23 per cent) and human resource development (16 per cent). While the above figures should be interpreted as rough indications only, it appears safe to conclude that UNIDO's ongoing activities in the region are well in line with the clusters of needs recalled under section II. above.

While a detailed presentation of all past and present UNIDO projects and/or programmes in the Asia-Pacific region would exceed the scope of the present paper, in the following a number of examples from major substantive areas should suffice as an illustration of activities which have turned out as or are expected to become projects and/or programmes with impact.<sup>2</sup> The illustration will comprise examples at both country and regional/subregional levels. In this, particular emphasis will be placed on UNIDO's Special Programme for the Industrial Development of Asia and the Pacific (SPIDAP). A brief outline of UNIDO's interagency cooperation in the region, in particular with ESCAP, will also be included.

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<sup>1</sup> The total exceeds 100 due to multiple purpose activities.

<sup>2</sup> A folder with very detailed information on a number of such projects/programmes with impact in the region has been prepared by the UNIDO Secretariat for this Ministerial Meeting and is available to participants.

**Table 1: Ongoing UNIDO projects in Asia and the Pacific: breakdown by major development objectives/themes in per cent (estimates)**

Development objective theme	No. of projects (per cent share) <sup>1)</sup>	Allocated budget (per cent share)
Industrial and technological growth and competitiveness, e.g. institutional infrastructure, private sector development, industrial strategies policies, industrial management, standardization and quality control	21.5	11.7
Equitable development through industrial development, e.g. small- and medium-scale industries, rural industrialization	17.8	7.6
International cooperation in investment and technology, development and transfer of technology, economic and technical cooperation between developing countries, investment promotion	45.2	29.4
Development of human resources for industry	23.5	15.9
Environmentally sustainable industrial development, e.g. environmental protection and pollution, energy	34.8	22.8
Other	12.5	12.6

1) Total exceeds 100 due to multiple purpose activities

Note: The classification of activities by themes in the available statistics is largely based on the one used in UNIDO's hitherto medium-term plan. Subsuming these groupings under the new development objectives contains an element of arbitrariness. Therefore, the figures given should be interpreted as rough indications only.

### *Some illustrative examples*

Upstream type of activities, i.e. support rendered, *inter alia*, at the industrial policy formulation stages, logically begin with the solid assessment of what any present situation is like. **Stocktaking, diagnostic surveys, hence the compilation, updating of and granting access to relevant industrial information** pave the ground for subsequent well-focused action by industrial agents in the private and public sectors including technical assistance bodies alike. In this connection, the preparation by UNIDO and publication with a commercial publisher (the Economist Intelligence Unit) of the UNIDO Industrial Development Review Series is but one element of the Organization's work. Of the five sales publications since 1993 three have dealt with Asian countries (Indonesia, India, Iran). Two of the forthcoming three will also be devoted to Asia (Central Asian Republics, People's Republic of China). In addition, reviews were recently issued as non-sales publications on Mongolia and Lao PDR.

Continuous efforts to strengthen the developing countries' access to and management of existing and newly emerging information resources is in the centre of UNIDO's **industrial information programmes** and services which contribute to meeting basic prerequisites for decisionmaking at both enterprise and policy level. A recent activity concerning the Asia-Pacific region is the development of a referral information system (IRS) on sources of industrial and technological information to provide an efficient, decentralized inquiry service to small and medium enterprises. In the 1992-1995 period, 33 members joined the system. During the May 1995 Advisory Group meeting of the computer-based UNIDO Industrial and Technological Information Bank (INTIB) agreement was reached with the Asian and Pacific Centre for the Transfer of Technology (APCTT) to coordinate the development of the system network in that region. APCTT will continue to act as the regional focal point of INTIB and will provide relevant information to INTIB at Vienna Headquarters. INTIB in exchange will provide full worldwide validated data of the IRS for use by APCTT. Another project example is the installation of the Industrial Technology and Market Information Network (ITMIN) in Sri Lanka which is being jointly operated by the public and private sector.

The Asia-Pacific region's strife for technology and investment has been responded to by a variety of support measures from UNIDO over the years. In the area of **technology** UNIDO advises, *inter alia*, on policies and strategies, assesses national innovation systems supports technology acquisition and transfer, and monitors developments in new and generic technologies. At the **level of key manufacturing subsectors**, the successful link-up of technological innovation and environmental protection has centre-staged in the recent continuation of UNIDO's well established leather and leather products programme. For instance, a chromium recovery unit set up under the Southeast Asian component achieved a significant reduction in the amount of pollutants generated in the process of leather manufacture. A concept for an International Leather Eco-labelling Scheme elaborated under the programme was in principle endorsed by the August 1995 Meeting of the Leather and Leather Products Panel in Teheran which recommended a continuation of UNIDO's leather sector assistance and invited supplementary activities in gender development, occupational health and safety at work. Making use of a technology developed under an earlier UNIDO project, natural rubber-based bearings for earthquake protection were tested in Indonesia with the participation of 15 natural rubber-producing countries. The requirements for the modernization of the Chinese salt and related packaging industry are under investigation as part of a priority programme on salt iodization to be financed by a US\$ 28 million loan from the World Bank. In India, the UNIDO-assisted Ceramic Technological Institute at Bangalore developed, in cooperation with the National Chemical Laboratories and the Automotive Research Association of India, an indigenous exhaust converter which is capable of slashing vehicular pollution in the country by 90 per cent. Transfer of technology in industrial computer applications have been delivered to the Technical University of Sri Lanka to enhance its provision of technical services to local industry in developing new metalworking products. A study on strategy formulation for the software industry in Bangladesh resulted in the adoption of an action plan at the recent end-of-project workshop in Dhaka.

Issues of **quality management and standardization** have been gaining increasing importance in UNIDO's activities overall including in Asia-Pacific. Support has been directed, *inter alia*, at the establishment and strengthening of standardization bodies, such as in Bangladesh. Calls for assistance in metrology resulted in the installation of laboratories at subsectoral level and operational measurement standards in the Islamic Republic of Iran.



Pakistan and Thailand. The ASEAN countries benefitted from the creation of one reference voltage standard, intercalibrated among the countries and being brought in line with European standards. Increasing attention has of late also been paid to enabling member countries' adherence to ISO 9000 standards and an ensuing certification as an effective means and even prerequisite to increase competitiveness. Recent examples include a regional workshop on quality management and ISO 9000 in software development (New Delhi, India, 1994) as well as a seminar on the promotion and adequate application of quality systems and ISO 9000, held in Manila, Philippines.

UNIDO activities in the field of **investment promotion** while closely linked with the Organization's technology services through UNIDO's Investment and Technological Partnership Initiative are designed to assist governments to formulate and assess relevant policies and strategies. The build-up of capacities to formulate and promote investment projects at institutional level is encouraged. Investment services for enterprises include an identification of opportunities, preparation of feasibility studies, negotiation of investment projects and identification or mobilization of financial resources. UNIDO's tools include databanks, training programmes, manuals, software packages and studies. High-level promotional events are fora like INVESMARTS and TECHMARTS. INVESMARTS which enable direct contacts between companies in the host developing country and potential foreign partners have resulted in hundreds of joint ventures and other joint activities in the region over the years. In 1994/95 INVESMARTS have been held so far in New Delhi, India, Kunming and Yanji, both People's Republic of China, and another one is to be held in Colombo, Sri Lanka, in November this year. TECHMARTS facilitate the conclusion of practical business arrangements which bring together managers especially from small- and medium-scale enterprises to find, offer, negotiate and eventually buy and sell technology suitable for their operations. A TECHMART held in Hanoi, Viet Nam, in 1994 saw the participation of 250 foreign guests from 25 countries. An INTECHMART held in New Delhi, India, earlier this year, effectively integrated investment and technology promotion.

The critical need for a decisive expansion of the physical **infrastructure** in the Asia-Pacific region in the years to come on the one hand and the scarcity of public finance to nurture this expansion on the other hand have resulted in the BOT (Build-Operate-Transfer) approach gaining in importance in the implementation of infrastructure and large industrial projects such as power plants, toll roads, or water supply and treatment facilities. UNIDO has stepped up its pertinent expertise and is currently assisting the Chinese authorities in the formulation of basic BOT regulations and standard contracts to enable the country's road network and energy grid.<sup>1</sup>

A rising number of UNIDO activities in Asia-Pacific is to be observed in the area of **environment and energy**, clearly a reflection of both the aggravating problems and a readiness of partners in the developing countries to tackle them. The general approach pursued by UNIDO is to make ecologically sustainable industrial development (ESID) an integrated part of all its activities. The latest annual review on the incorporation of environmental

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<sup>1</sup> A comprehensive handbook entitled "UNIDO Guidelines for the Development, Negotiation and Contracting of Build-Operate-Transfer (BOT) Projects" is nearing completion at the Secretariat.

considerations in the design of UNIDO projects revealed a clear upward trend of the combined share of environment-related projects and of projects with an environmental component from 34 to 44 per cent between 1992 and 1993. UNIDO's ESID services comprise advice on integrating environmental needs into industrial development strategies and policies with emphasis on capacity building, environmental management, and a conducive regulatory and incentive framework. For instance, under a country project in Nepal on industrial pollution control management, *inter alia*, UNIDO experts successfully drew up a control order based policy of pollution abatement, proposed discharge standards for five major industries, and produced manuals and guidelines for pollution control. A major focus is on the introduction of cleaner production or waste minimization policies and facilities. In this regard, support is being rendered to China which has drawn up a comprehensive national Agenda 21 as one of a few developing countries so far. Further UNIDO activities relate to the phasing-out of ozone-depleting substances (ODS) where the Organization became one of the implementing agencies under the Multilateral Fund for the Implementation of the Montreal Protocol. Asia-Pacific countries with projects at various stages of implementation and/or preparation include China, India, Islamic Republic of Iran, Pakistan and Viet Nam. UNIDO co-supports some 20 cleaner production centres which, *inter alia*, serve demonstration, coordination and training purposes in the target countries. Two of these are located in Asia (India, China). Measures to alleviate chemical risks and enhance chemical safety, the conservation of freshwater resources and the mitigation of the effect of greenhouse gases on climate change are further areas of UNIDO activity.

In the field of promoting **regional or subregional collaboration**, UNIDO has become fully involved in the UNDP-sponsored Tumen River Area Development Programme (TRADP) in Northeast Asia. UNIDO's participation in this programme members of which are the Governments of the People's Republic of China, DPRK, the Russian Federation, Mongolia and the Republic of Korea, started with a detailed study in 1993/94 on industrial capacities, constraints and prospects in the Tumen River Area. Recommendations were made towards the promotion of priority sectors of industry, cross-border trade and international investments. Several of the follow-up proposals then identified have already been put in practice. One such follow-up is the preparation of detailed business opportunity studies currently underway in the fields of shipbuilding, ship repair (military conversion) and fish and seafood processing as well as the conduct of feasibility including financial studies on pertinent port projects. Another one is investment promotion, with a UNIDO INVESMART taking place only a week ago (10-13 Oct) in the Yanbian Korean Autonomous Prefecture of China and a similar one under preparation for the Rajin-Sonbong Tumen river area of DPRK, to be held May/June 1996. Preparation of a TRENDA investment guide covering the entire border area is at an advanced stage and will be published well before year-end. Other already completed activities comprise the provision of group training to high-ranking officials of DPRK in the management of free economic and trade zones in Ireland as well as the organization of a study tour for DPRK officials to the special economic zones in China.

### *Special Programme for the Industrial Development of Asia and the Pacific (SPIDAP)*

The region's least developed countries (LDCs) have been in the centre of UNIDO's ongoing Special Programme for Industrial Development in Asia and the Pacific (SPIDAP). Launched by the General Conference of UNIDO in 1989, activities have mainly been geared towards supporting the vital agricultural sector of these countries through a strengthening of linkages between agriculture and industry. Farmers in rural areas as well as small and medium-scale entrepreneurs were identified as key target beneficiaries. The limited resources available led to a clear programme focus on two industrial subsectors: **agro-related metalworking industries** and **food processing industries**.

With regard to the former, eight of thirteen Asia-Pacific LDCs participated in a regional project phase I of which was successfully implemented in the years 1991 to 1994. The project comprised a detailed constraint analysis and served to increase the awareness and access of agro-related metalworking enterprises to technical information and advice. To this end, national focal points were established in all participating countries and brought within the services of the Regional Network of Agricultural Machinery (RNAM), operating under ESCAP and supported by UNIDO. Technical advisory services were provided directly to R&D institutions and private manufacturers and a number of prototypes of agricultural tools, implements and machinery were identified for exchange between RNAM members and participating countries. Early 1995 saw the start of phase II of the activity which aims to further support the agricultural production and processing by improving local capabilities for the manufacture of agricultural tools and implements including post-harvest and food-processing equipment. While implementation commenced with funding from the UNIDO Regular Budget (US\$ 362,000) for two out of six project components, the recent allocation of IDF funding from a major donor (US\$ 526,000) will speed up further progress. For instance, work is underway on the introduction, testing and demonstration of prototypes for potential commercialization. Other activities still foreseen for 1995 include the establishment of computerized information databases for raw materials demand and supply, and the participation of selected LDC representatives and products at the Agricultural Machinery Exhibition and Symposium (Agrimach '95), to be organized by RNAM in Nakhon Rachasima, Thailand, 4-9 November 1995. The upgrading of skills of blacksmith trainers, the promotion of the production of small-scale machinery for agro-based food processing light industries and the participation of women in the promotion and development of commercial machinery/food processing equipment prototypes suitable for the use by women will be addressed in the further course of implementation.

One of the most important contributions of the programme so far has been the gradual intensification of contacts between the public sector agricultural engineering institutions and private sector entrepreneurs in these countries. The programme has also been instrumental in the birth of manufacturers' associations in agricultural machinery in Bangladesh and Myanmar, thereby facilitating, inter alia, the dissemination of project benefits.

With regard to the second key target sector addressed under SPIDAP, based on fact-finding missions and a regional workshop in 1992, UNIDO completed a series of country briefs on **agro-processing industries** for all the 13 LDCs in the Asia-Pacific region. The analyses which revealed a number of common constraints, inter alia, established an urgent need for a more diversified economic activity in food processing. Several priority areas were

identified for elaboration with the participating governments. Most activities are planned at the country level, but some regional initiatives have been taken recently addressing specific technical issues of relevance to a number of LDCs. Three areas deserve specific mentioning:

- Application of mushroom biotechnology and bioconversion technologies for sustainable small industries development. The project has a particular emphasis on the LDCs of the region (Bangladesh, Bhutan, Nepal) to promote and develop food processing industries and create a global bio-informatics network of resource centres in support of mushroom and related biotechnology industries, self-sustaining quality control, and training centres in bioconversion technologies.
- Under a programme launched to increase awareness and opportunities for the integration of new biotechnologies with indigenous knowledge through a partnership initiative with a non-governmental organization network a workshop is being convened in Manila in November 1995.
- Consumer protection in domestic markets, the aimed-at improvement of export competitiveness and the resulting increasing importance of an adherence to ISO 9000 standards fundamentally affect the developing prospects for food processing industries in the participating countries. Pertinent issues were addressed under SPIDAP in a training programme in food quality management organized jointly with the Asian Institute of Technology (AIT) in Bangkok in from 14 August to 2 September 1995 and attended by 20 LDC participants. Preparations are underway for a joint UNIDO ESCAP ad hoc Expert Group Meeting on Food Safety and Quality Management in Asian and African LDCs, aiming at identifying the roles of the respective agencies and recommending priority activities for the immediate future.

At the individual country level, food processing is also addressed in various ways under SPIDAP. For instance, quality issues are tackled in a large-scale project for the establishment of a food safety system in Cambodia which is currently under review for funding by potential donors. The UNIDO training programme for women entrepreneurs in related technologies has already been applied successfully in Myanmar, and efforts are being made for similar activities in Cambodia, Lao PDR and Nepal.

#### *UNIDO ESCAP collaboration*

The preceding brief review of UNIDO's work in the Asia-Pacific region would be incomplete if the role played by collaboration between UNIDO and ESCAP in the two Organizations' activities was not recalled. Based on complementarities, UNIDO-ESCAP cooperation draws its support and sustenance from a number of high-level policy statements of our member states, such as the Teheran declaration on Strengthening Regional Cooperation for Technology-led Industrialization in Asia and the Pacific, the Regional Strategy and action Plan for Industrial and Technological Development as well as the Seoul Plan of Action and the decisions of UNIDO's Fifth General Conference (1993) on new areas of focus, the Special Programme for the Industrial Development of Asia and the Pacific and the Action Programme for the Industrial Development of the Least Developed Countries.

As a consequence, several activities of cooperation relevant to the region are in operation as new ones are being explored, especially those identified in August 1994 at a UNIDO-ESCAP meeting in Vienna. In general, UNIDO-ESCAP joint action has taken the form of mutual substantive contributions to workshops/seminars/expert group meetings or studies in fields of common interest, the outposting and funding of UNIDO Associate Experts for specific, normally joint project-related assignments at the ESCAP Secretariat; or the coordinated installation and joint use of information/networking facilities. The cooperation with the Regional Network of Agricultural Machinery (RNAM) under UNIDO's Special Programme for Industrial Development in the Asia and Pacific region mentioned above is a case in point.

Another example is the ESCAP/UNIDO/FAO-sponsored Fertilizer Advisory, Development and Information network for Asia and the Pacific (FADINAP). The network assists the currently 24 member countries in problems concerning the supply, marketing and use of fertilizers. Operational since 1978, FADINAP has made substantial progress (i) in the facilitation, increase and spread of the use of fertilizers and an ensuing rise of agricultural productivity in the region; (ii) in increasing efficiency of production, trade, marketing, distribution and use of fertilizers; and (iii) in the delivery of pertinent advisory services.

At another level, UNIDO's participation in the Pesticide Safety and Information and the Biotechnology and Biodiversity components of the Farmer-centred Agricultural Resource Management (FARM) programme provides, inter alia, a clear and mutually supportive nexus between the regional, sub-regional and national activities of the member states of ESCAP. Since 1982 when it was first established, the Regional network on Pesticides for Asia and the Pacific (RENAP) - now incorporated as Pesticide Safety and Information sub-programme in FARM - has grown from 9 to 15 members covering a third of the world's surface and more than half of the world's population which depends on agriculture for its livelihood. The outreach of this programme is visible in the fact that it acted as a catalyst for the establishment of an ecotoxicology centre in Pakistan, assisted China in starting a pesticide centre for developing low risk pesticide formulation and persuaded India and the Philippines to phase or restrict the use of harmful pesticides.

Through the Asia Biotechnology and Biodiversity of FARM, eight national focal points were established to link computerized databases on biotechnology and biodiversity to regional and interregional databases.

UNIDO/ESCAP collaboration has also encompassed gender issues and included the preparation of a UNIDO EGM on Women Entrepreneurs in Sustainable Economic Development in Japan in October 1994 and the contribution of a paper by UNIDO on the involvement of women in selected manufacturing subsectors to an ESCAP EGM earlier this year.

#### **IV. Industrial development in Asia and the Pacific: UNIDO's future role**

The persisting and newly emerging industrial development problems in Asia and the Pacific described above on the one hand and UNIDO's proven record in helping overcome past industry-related constraints on the other hand in themselves point at the useful role this specialized agency for industry is poised to also play in the years ahead. UNIDO is aware that similar to the ever increasing speed of change in the industrialization process in domestic and international markets the basic prerequisite for success more than ever before will be the Organization's readiness and capability to make constant adjustments in line with newly emerging needs and challenges so as to provide services which are relevant, of the desired high quality and delivered efficiently to its clients. To this end, and at the request of its Member States, UNIDO is currently pursuing with an unprecedented vigour the reform of its structure and substance.<sup>1</sup>

The revised approach taken with regard to programming UNIDO services has become visible with the gradual but steady introduction of a number of new tools, including at UNIDO's Asia and the Pacific Programme. For instance, the new concept of preparing *Country Support Strategies (CSS)* is seen as UNIDO's most specific contribution to the UN system's overall country programming in the context of Country Strategy Notes (CSNs). Work on a CSS for Indonesia was completed by UNIDO staff and will serve as a reference framework for future industry-related assistance in that country. Internal *Country Programming Briefs (CPBs)* which highlight major industrial development challenges and constraints, summarize past and present UNIDO activities as well as outline appropriate directions of future work in the target country have been completed for virtually all Asia-Pacific countries. High-level *Industrial Sector Review Programming Missions (ISRPMs)* have been fielded to several countries, albeit so far with a focus on Africa in order to review pressing industrial development needs with a view to identifying short-, medium- and longer-term support activities. Preparations for such missions, to be undertaken between now and the middle of next year, to the Asia-Pacific region are underway for Indonesia, China, Papua New Guinea and Fiji.

The seven newly identified programmatic themes to guide UNIDO's future work will be formally introduced only with the start of the 1996/97 biennium. In practice, however, UNIDO has already gone some way in redirecting its programming activities towards those priorities which are:

- Strategic policies and institution-building for global economic integration.
- Environment and energy.
- Small and medium enterprises: policies, networking and basic technical support.
- Innovation, productivity and quality for international competitiveness.
- Industrial information, investment and technology promotion.

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<sup>1</sup> For a recent summary account of the reform process see IDB 14/CRP.4, 21 June 1995.

- Rural industrial development; and
- Africa and the least developed countries: linking industry with agriculture.

A number of horizontal priority programmes, such as human resource development, private sector development, ECDC/TCDC and the integration of women permeate all seven themes and will be oriented in their activities towards specifically supporting each of these themes.

As for other developing regions, work has been progressing in devising a workable UNIDO strategy for the Asia-Pacific region. In so doing, three key determinants require particular attention: actual demand, fundable priorities, and UNIDO expertise and experience. A review of requests for assistance received by UNIDO from Asia-Pacific in the recent past has shown a certain trend - although not exclusively so - towards the following substantive areas:

- There is a continuing strong interest in the whole range of UNIDO's investment promotion and technology transfer-related services (identification, screening, appraisal of investment projects, pre- and full feasibility studies, INVESMARTs, etc.).
- In the follow-up to UNCED 1992 and subsequent related conferences, the subject of ecologically sustainable industrial development is playing an increasing role, both in terms of conceptual/policy advice and in the context of cleaner production at plant/micro level. Special emphasis is placed on CFC reduction support activities in the context of the Montreal Protocol.
- Assistance is also being sought to overcome problems associated with the transition from previously centrally planned to more market-oriented economies (Indochina, Central Asia).
- Building up more efficient research and development (R&D) and scientific and technological capacities which are effectively linked with the industrial production systems is of concern to some countries.
- In the context of the rapid changes in the international industrial environment referred to above a rising interest is to be observed in addressing varied dimensions of achieving and/or maintaining industrial competitiveness.
- Support is also requested for the promotion of rural industrialization as an important means of employment creation and poverty alleviation.

While many of the more than 100 project proposals which have entered the UNIDO pipeline for Asia-Pacific since the beginning of 1994 are related to one or several of the above demand areas, it is the scarcity or even lack of funding prospects which have become a major bottleneck in UNIDO's work. Falling short of a certain critical financial minimum puts at risk the very foundations of a meaningful delivery of industrial development elements. The importance of the Member States' support in mobilizing additional funding, such as in the form of enhanced trust fund agreements, cannot be overestimated. This notwithstanding

and confident of the continued relevance as well as the good quality of services the Organization is in a position to provide. UNIDO's Asia and the Pacific Programme will continue to ensure that services rendered to the region will effectively meet the expectations of both its clients and funding agents. The provision of integrated service packages which take due account of the differentiated needs of individual country groupings in the region will feature prominently in UNIDO's future work. Activities over a wide range of issues will be enhanced in the *least developed and other disadvantaged countries* in the region, as has also been reemphasized in the April 1995 Kathmandu Statement adopted at the Expert Group Meeting for the Preparation of the Third LDCs Ministerial Symposium on sustainable private sector development and accelerated growth of the industrial enterprises in LDCs. This clearly calls for the continuation and extension of UNIDO's Special Programme for the Industrial Development of Asia and Pacific outlined above. The region's *transitional economies* require continued services tailor-made to overcome constraints at policy management and technical levels. In turn, the *middle-income and more highly advanced countries* in the region which have already built-up or are at an advanced stage of building-up considerable research and consultancy capabilities will have to be increasingly served with highly specific services, frequently of a specific technological character. In this connection, UNIDO also foresees to further step up efforts in the area of ECDC/TCDC with a view to making the advanced countries' experience available to their less advanced neighbours through appropriate mechanisms.



Expenditure on technical cooperation activities, by geographical area, 1984 to 1994  
(In thousands of US dollars)

Area	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<b>Africa</b>											
Country projects <sup>a/</sup>	25,300	31,431	31,674	29,102	34,042	40,402	47,849	46,252	39,734	33,921	24,674
Regional projects	<u>4,713</u>	<u>5,791</u>	<u>4,069</u>	<u>3,468</u>	<u>4,389</u>	<u>8,323</u>	<u>7,832</u>	<u>6,171</u>	<u>6,792</u>	<u>6,742</u>	<u>4,493</u>
Sub-total	30,013	37,222	35,743	32,570	38,431	49,125	55,681	52,423	46,526	40,663	29,167
<b>Arab States</b>											
Country projects	11,807	11,448	11,153	11,934	17,714	19,107	21,071	18,869	15,119	14,768	12,278
Regional projects	1,104	532	731	616	299	172	527	137	579	640	466
Country projects (African Arab States) <sup>b/</sup>	<u>(8,806)</u>	<u>9,123</u>	<u>(8,505)</u>	<u>(9,560)</u>	<u>(12,753)</u>	<u>(13,725)</u>	<u>(14,824)</u>	<u>(15,347)</u>	<u>(12,581)</u>	<u>(12,063)</u>	<u>(8,900)</u>
Sub-total	4,105	2,857	3,379	2,990	5,260	5,554	6,774	3,959	3,117	3,346	3,844
<b>Asia and the Pacific</b>											
Country projects	29,795	29,313	35,419	36,620	41,974	41,506	46,621	40,540	35,516	28,142	18,800
Regional projects	<u>1,437</u>	<u>1,088</u>	<u>1,654</u>	<u>1,311</u>	<u>1,953</u>	<u>2,099</u>	<u>2,763</u>	<u>3,717</u>	<u>3,179</u>	<u>3,043</u>	<u>4,098</u>
Sub-total	31,232	30,401	37,073	37,931	43,927	43,605	49,384	44,257	38,695	31,185	22,898
<b>Europe</b>											
Country projects	3,609	3,047	3,022	2,307	3,845	3,776	4,837	4,321	5,172	3,758	4,363
Regional projects	<u>39</u>	<u>39</u>	<u>208</u>	<u>318</u>	<u>432</u>	<u>515</u>	<u>399</u>	<u>592</u>	<u>152</u>	<u>169</u>	<u>404</u>
Sub-total	3,658	3,086	3,230	2,625	4,277	4,291	5,236	4,912	5,324	3,927	4,767
<b>Latin America and the Caribbean</b>											
Country projects	7,987	11,082	9,403	8,463	9,653	11,029	9,356	7,212	8,997	8,300	13,037
Regional projects	<u>1,013</u>	<u>936</u>	<u>1,148</u>	<u>839</u>	<u>1,137</u>	<u>1,046</u>	<u>1,847</u>	<u>2,619</u>	<u>2,460</u>	<u>2,616</u>	<u>1,754</u>
Sub-total	9,000	12,018	10,550	9,302	10,790	12,075	11,203	9,831	11,457	10,917	14,791
Global and interregional projects	<u>9,183</u>	<u>8,884</u>	<u>9,625</u>	<u>12,308</u>	<u>17,095</u>	<u>19,132</u>	<u>31,280</u>	<u>32,103</u>	<u>30,513</u>	<u>28,788</u>	<u>25,539</u>
TOTAL:	87,191	94,468	99,600	97,726	119,780	133,782	159,558	147,485	135,632	118,825	101,006

<sup>a/</sup> Includes African Arab States.

<sup>b/</sup> Figures deducted since already included under "Africa".

## Annex 2

## Services for major thrust areas

Programmatic theme	Components	UNIDO services
<ul style="list-style-type: none"> <li>Strategies, policies and institution-building for global economic integration</li> </ul>	<ul style="list-style-type: none"> <li>Industrial strategy and policy advice</li> <li>Advisory and institutional support services addressing implications of global and regional agreements</li> </ul>	<ul style="list-style-type: none"> <li>Industrial policies and private sector development</li> <li>Enterprise restructuring and privatization</li> <li>Investment promotion</li> <li>Technology for competitiveness</li> <li>Industrial information</li> </ul>
<ul style="list-style-type: none"> <li>Environment and energy</li> </ul>	<ul style="list-style-type: none"> <li>ESID strategies</li> <li>Clean and safe production               <ul style="list-style-type: none"> <li>National cleaner production centres</li> <li>Hazardous waste management</li> <li>Water management</li> <li>Leather and tanning industry</li> <li>Environmentally sound management of toxic chemicals</li> </ul> </li> <li>Implementation of international conventions</li> <li>Environmentally sound use of energy</li> </ul>	<ul style="list-style-type: none"> <li>Environment and energy</li> <li>Operational support for sectoral industrial development</li> <li>Technology for competitiveness</li> <li>Industrial policies and private sector development</li> <li>Human resource development</li> <li>Investment promotion</li> <li>Industrial information</li> <li>Industrial statistics</li> </ul>
<ul style="list-style-type: none"> <li>Small and medium enterprises: policies, networking and basic technical support</li> </ul>	<ul style="list-style-type: none"> <li>Policy analysis and advice</li> <li>SME support systems and institutions</li> <li>Networking of SMEs</li> <li>Basic technical support for enterprise upgrading</li> </ul>	<ul style="list-style-type: none"> <li>Small- and medium-scale industry and rural industry development</li> <li>Industrial policies and private sector development</li> <li>Human resource development</li> <li>Women in industrial development</li> <li>Technology for competitiveness</li> <li>Industrial information</li> <li>Investment promotion</li> <li>Operational support for sectoral industrial development</li> <li>Quality, standardization and metrology</li> </ul>
<ul style="list-style-type: none"> <li>Innovation, productivity and quality for international competitiveness</li> </ul>	<ul style="list-style-type: none"> <li>Quality management</li> <li>Enterprise restructuring and rehabilitation</li> <li>Research and development for industrial innovation</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise restructuring and privatization</li> <li>Quality, standardization and metrology</li> <li>Operational support for sectoral industrial development</li> <li>Industrial statistics</li> <li>Industrial information</li> <li>Human resource development</li> <li>Technology for competitiveness</li> <li>Investment promotion</li> </ul>

Programmatic theme	Components	UNIDO services
<ul style="list-style-type: none"> <li>Industrial information, investment and technology promotion</li> </ul>	<ul style="list-style-type: none"> <li>Technological and investment information</li> <li>investment promotion</li> <li>Technology promotion</li> </ul>	<ul style="list-style-type: none"> <li>Industrial statistics</li> <li>Industrial information</li> <li>Technology for competitiveness</li> <li>Investment promotion</li> <li>Environment and energy</li> </ul>
<ul style="list-style-type: none"> <li>Rural industrial development</li> </ul>	<ul style="list-style-type: none"> <li>Regional development</li> <li>Agro-processing</li> <li>Building materials and low-cost housing</li> </ul>	<ul style="list-style-type: none"> <li>Small- and medium-scale industry and rural industrial development</li> <li>Industrial policies and private sector development</li> <li>Investment promotion</li> <li>Human resource development</li> <li>Women in industrial development</li> <li>Environment and energy</li> <li>Operational support for sectoral industrial development</li> <li>Technology for competitiveness</li> </ul>
<ul style="list-style-type: none"> <li>Africa and LDCs: linking industry with agriculture</li> </ul>	<ul style="list-style-type: none"> <li>Analytical activities and industrial policy advice</li> <li>Agro-processing</li> <li>Agricultural equipment</li> <li>Fertilizers and pesticides</li> </ul>	<ul style="list-style-type: none"> <li>Industrial information</li> <li>Human resource development</li> <li>Small- and medium-scale industry and rural industrial development</li> <li>Industrial policies and private sector development</li> <li>Operational support for sectoral industrial development</li> <li>Technology for competitiveness</li> <li>Investment promotion</li> </ul>

## Annex 3

## Sub-sector priorities 1996-1997

Sub-sectors	Highest priority	Also covered
<b>Agro-industries</b>		
• <b>Food products</b>	Meat processing Dairy products including baby food Fruits and vegetables Fish and seafood Vegetables and fats Grain production Sugar refining Other food products (starch, glucose, tea, spices and extracts)	Baked products Cocoa and confectionery Animal feed
• <b>Leather and leather products</b>	Tanneries and leather finishing (including effluents and waste treatment) Leather and leather products Footwear	
• <b>Textile and garment industry</b>	Spinning, weaving and textile finishing Wearing apparel Finished textile products Rugs and carpets manufacture	Knitting, cordage, rope and twine Other textiles (embroidery, nets and sanitary items)
• <b>Wood processing and wood products</b>	Sawmills, planing and other wood mills (including structural wooden products) Wood, furniture and fixtures	Other wood and cork products Wooden and cane containers
<b>Chemical industries</b>		
• <b>Petrochemicals</b>	Basic industrial chemicals Synthetic resins, plastic materials and man-made fibres	Miscellaneous petroleum and coal products, paints, varnishes and lacquers Tyres and tubes Rubber products Plastic products Printing, publishing and allied industries
• <b>Pharmaceuticals</b>	Manufacture of drugs and medicines	
• <b>Agro-chemicals</b>	Fertilizers and pesticides	
• <b>Pulp and paper</b>	Pulp, paper and paperboard Containers and boxes of paper and paperboard Other pulp and paper articles	

Sub-sectors	Highest priority	Also covered
<ul style="list-style-type: none"> <li>• Building materials and mineral-based industries</li> </ul>	Cement, lime and plaster Glass and glass products	Manufacture of structural clay products Pottery, china and earthenware
<b>Engineering industries</b>		
<ul style="list-style-type: none"> <li>• Agricultural machinery</li> </ul>	Agricultural machinery and equipment	
<ul style="list-style-type: none"> <li>• Electrical and mechanical equipment</li> </ul>	Metal and woodworking machinery Railroad equipment Motor vehicles (including parts and accessories) Motorcycles and bicycles Fabricated metal products (excluding heavy industry)	Special industrial machinery and equipment * Office, computing and accounting machinery (excluding software support) Electrical industry machinery and apparatus * Radio, television and communication equipment and apparatus * Electrical appliances and housewares * Shipbuilding and repair * Transport equipment Professional and scientific, and measuring and controlling, equipment Cutlery, hand tools and general hardware, structural metal products Engines and turbines * Metal furniture and fittings
<ul style="list-style-type: none"> <li>• Metallurgical industries</li> </ul>	Iron and steel basic industries Non-ferrous metal basic industries	

\* Excluding spare parts, accessories and maintenance systems.