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## MESSAGE FROM THE DIRECTOR-GENERAL

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*Annual reports are necessarily about the past. They respond to legal requirements and expectations of an organization's stakeholders. This one is no exception. It is unusual only in the sense that it represents a particular stage in UNIDO's 30-year history. The future will be different. So will future annual reports*

*The year 1997 saw the end of a period of unprecedented reform that in retrospect seems less concerned with the value and particular needs of industrial development than with budget and staff reduction. It is my already declared intention that 1998 will see the programmatic transformation of UNIDO into an organization with a new sense of purpose, renewed confidence of its stakeholders—Member States in particular—and a new context of industrial development and multilateral organization coordination and cooperation. The format and content of future annual reports will reflect this also.*

*Bringing about such transformation calls for the cooperation of many. Last year Member States positively re-endorsed the need for industrial development itself, and with it the need for a multilateral organization dedicated to its promotion and support. The broad debate among stakeholders in developed and developing countries now should focus on the nature of industrial development in the emerging globalization-regionalization-stabilization paradigm. The narrow debate, the shape and substance of UNIDO itself, has already started. Strong focus on a strictly limited number of products, i.e. integrated packages of services, and clear definition of the Organization's mandated global forum function will be two early results.*

*For many ministers of industry in developing countries, the need to reshape industrial development is obvious. The era of import substitution is long gone. The era of export orientation and open borders for trade is fraught with issues of quality standards, competitiveness and, in countries outside the few favoured by international investment, by under-investment. What many presidents, prime ministers and other government ministers in those countries also want to know is how industrial development, even when it is sustainable and successful, can help solve other burning issues. The income from industry that Governments invest in hospitals, schools and other infrastructure is only part of it. What kind of sustainable industrial development contributes directly, and most effectively, to poverty alleviation and job creation? What kind of industrial development is best, in this sense, in least developed countries, and how should it be different in middle-income developing countries? These are questions for UNIDO's global forum to focus on—alongside those of other multilateral organizations.*

*And in that context, what kind of leadership (as distinct from promotion and support) can UNIDO give? Would Member States entrust, indeed insist, on UNIDO's leadership of a multi-agency approach where the issues are predominantly concerned with industry? Would they insist on UNIDO's participation where other multilateral necessarily lead, as with the IMF in the case of Asia's current financial crisis? Should UNIDO technical cooperation be part of a multilateral response that answers UNICEF's recent complaint that new vaccines being developed are mostly for the rich—rather than the revolutionary new products that could save the lives of up to 8 million children a year? My own vision is of a UNIDO that makes a concrete difference in all types of countries, at all levels of development and in all kinds of situations—from post-emergency industrial rehabilitation and reconstruction to long-term industry strategies, and from effective technical cooperation partner to honest broker for Governments.*

*Certainly this will mean new ways of interacting with the private sector. Businesses are increasingly aware of their self-interest in being good international corporate citizens. More work is needed on how best to channel this thinking towards the best interests of the less favoured developing countries that come less readily to the attention of chief executive officers—especially the least developed countries. More work is needed to extend the investment perspective of private finance corporations so that fund managers can safely channel investments to good industrial companies with good projects in those same countries.*

*The questions concerning UNIDO's future programmes and products call for consultations among and with the Organization's Member States. I look forward to reporting positively on them in the 1998 Annual Report. The questions concerning UNIDO as a multilateral organization are wider. They involve the United Nations system reform, possible changes to the Bretton Woods institutions and above all what the stakeholders of all multilateral organizations require. Member States will get the multilateral organizations they shape themselves. I hope it is what the world as a whole deserves—a coherent system where multilateral organizations work together to address economic and social issues that seem increasingly beyond the nation state to control.*

*Carlos Magariños*

## CHAPTER I

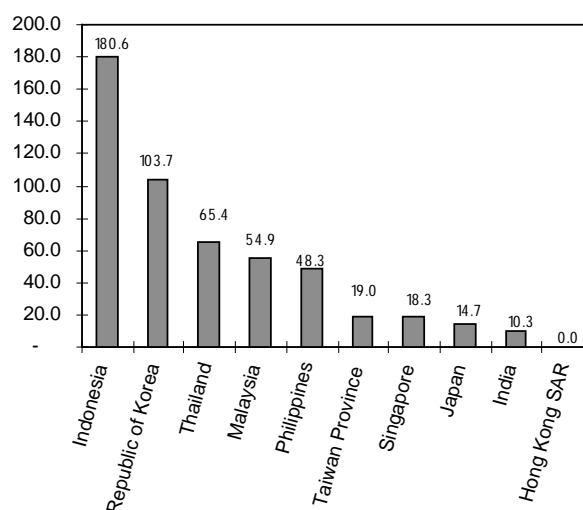
# GLOBAL AND REGIONAL INDUSTRIAL DEVELOPMENT TRENDS: ISSUES AND PROSPECTS FOR DEVELOPING COUNTRIES

1. The financial turmoil of East and South-East Asia, which started with the devaluation of the Thai Baht in July, took the centre stage of world economic and industrial development in 1997. The contagion effects of the Thai financial crisis quickly spread to other countries in the region, notably Indonesia, Malaysia, and the Philippines. Even the more industrialized economies in East Asia were not spared from its adverse effects, with the Republic of Korea, Singapore and the Hong Kong Special Administrative Region (SAR) all recording sharply lower stock market values. The currencies of Indonesia, Malaysia, the Republic of Korea, Philippines, Singapore and Thailand depreciated sharply against the United States dollar, with Indonesia, the Republic of Korea and Thailand most severely affected (figure 1). In contrast, the Hong Kong SAR currency was well defended.

2. Given the unsettled economic situation due to the crisis at the end of the year, the full impact of the turmoil is likely to be felt only in 1998, when a sharp fall in the economic and industrial performance of East and South-East Asia is expected to induce significant deflationary pressures and dampen aggregate world economic and industrial performance. As for 1997, world economic growth performance remained relatively strong, mainly due to the resilience shown by most western industrialized and developing countries to the crisis as well as higher world trade. Growth in world trade is estimated to have expanded further from about 6.4 per cent in 1996 to around 8 per cent during 1997. As a result, the growth rate of world gross domestic product (GDP) dropped slightly to 2.8 per cent, compared with 2.9 per cent in 1996, while world manufacturing value added (MVA) growth increased to 3 per cent from 2.5 per cent in 1996 (figure 2).

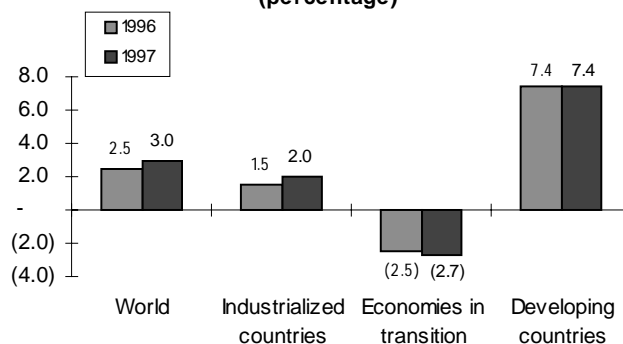
3. In industrialized countries, MVA grew at a stronger rate of 2 per cent compared with 1.5 per cent in 1996, led by higher growth in western industrialized countries.

**Figure 1. Degree of currency depreciation against US dollar of selected countries in Asia, 21 July 1997 - 5 January 1998 (percentage)**



Source: Far Eastern Economic Review, 31 July 1997 and 15 January 1998

**Figure 2. Estimated growth rates of world manufacturing value added, 1996 and 1997 (percentage)**



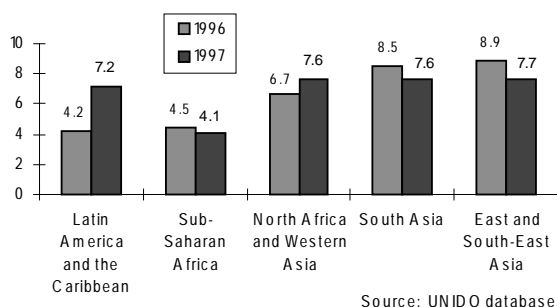
Source: UNIDO database

North America recorded the strongest growth with 3.7 per cent, compared to 2.6 per cent in 1996. Growth was strong in the United States of America, with MVA expanding at 4.3 per cent compared to 2.7 per cent in the previous year. Consumption and investment demand were fueled by favourable economic conditions such as low inflation rates, low interest rates, a rising stock market, higher employment rates and the appreciation of the United States dollar. Higher productivity and a stronger currency helped to keep inflationary pressures under control despite strong growth. Exports were also boosted by higher trade within the North American Free Trade Association (NAFTA) region as major member countries recovered strongly.

4. Performance in Western Europe improved markedly, with MVA growing at 2.3 per cent compared to 0.1 per cent in 1996. The expansion was led by higher export performance while domestic demand continued to be dragged down by high unemployment rates and fiscal restraints. Japan, on the other hand, posted a negative MVA growth rate (-2 per cent compared to 2.7 per cent in the previous year). Recovery since 1996 was quickly reversed by subdued consumer spending due to the consumption tax hike introduced on 1 April. The export sector was also affected by the financial crisis in the neighbouring East and South-East Asian countries, which accounted for about 40 per cent of the country's exports. Problems in the domestic financial sector also continued to plague the economy during the year.

5. In developing countries, aggregate MVA growth remained relatively stable at 7.4 per cent despite the financial crisis in East and South-East Asia. Growth was higher in Latin America and the Caribbean, North Africa and Western Asia, and lower in sub-Saharan Africa, South Asia and East and South-East Asia (figure 3).

**Figure 3. Estimated growth rates of manufacturing value added, by region, 1996 and 1997 (percentage)**



## Regional trends

### *Latin America and the Caribbean*

6. In Latin America and the Caribbean MVA growth increased to 7.2 per cent, compared to 4.2 per cent in

1996. Growth was supported by continued recovery in all major countries in the region. In Argentina, a surge in both investment and manufacturing exports lifted MVA growth to 11.5 per cent, up from 5.1 per cent in 1996. Both Brazil and Chile also recorded improvement in growth rates, increasing from 1.6 and 3.5 per cent respectively in 1996 to 5.9 and 4.9 per cent in 1997. In recent years, as a result of higher domestic and external demand, the automobile industries in Argentina and Brazil recorded a sharp rise in foreign direct investment (FDI) inflows. The higher growth of the sector, in turn, spilled over into other related industries such as steel-making and metal-working industries. Similarly, construction-related industries in these countries gained from buoyant growth in the construction sector. In Mexico, MVA continued to grow strongly at 9.5 per cent, albeit at a slightly lower rate than in 1996 (10.9 per cent). Growth was supported by buoyant construction activity, higher consumer and business confidence, and higher exports, notably within NAFTA countries.

7. After recovering strongly from recession in 1995, the region faces the challenge of sustaining growth momentum in the years ahead. Growth prospects in 1998 will, however, be affected by the expected slowdown in the world economy arising from the anticipated slowdown in Asian growth. The Asia crisis will particularly affect countries such as Chile, which have a higher proportion of trade with Asia than other Latin American countries. As a result of financial market turmoil, Brazil may also be vulnerable to events in Asia. Export performance may also face much higher competition from East and South-East Asia, mainly due to the tremendous price advantage these countries would have gained as a result of the sharp depreciation of their currencies. On the domestic front, rising social problems characterized by a high unemployment rate, rising poverty levels and growing income inequality remain major challenges to the sustainability of economic growth.

8. One of the most important measures for stimulating and maintaining economic growth is the continued promotion of investment notably domestic investment with higher private sector participation. In this regard, the savings rates of the region, which are still relatively low averaging around 22 per cent over the past few years need to be increased to adequately finance the requisite investment. Since domestic savings generally account for more than 90 per cent of total resources for financing investment, it is important to ensure that such resources are effectively mobilized for investment purposes. Thus, a healthy banking sector the major financial intermediary in many developing countries is vital to ensure higher mobilization and efficient allocation of savings for productive use. The successful implementation of the financial sector reform currently underway in most major economies in the region will contribute to macroeconomic stability and hence long-term economic growth.

9. Another avenue for promoting economic growth is improving productivity through technological upgrading. Studies have shown that more than 50 per cent of the long-term economic growth of industrialized countries stems from technological changes that improve productivity or lead to new industries, products or services. The region faces the challenge of diversifying its manufacturing and export bases, which have so far been dominated by medium-technology and resource-based industries. In the face of rapid technological change and growing competition, notably from other developing countries, it is imperative that the region moves into higher value added manufacturing. New investment needs to be channeled to enhance human capital and technological capabilities.

#### *Sub-Saharan Africa*

10. The performance of manufacturing industries in sub-Saharan Africa continued to be encouraging, although MVA growth fell marginally from 4.5 per cent in 1996 to 4.1 per cent. Weather conditions in the form of droughts in some parts of the region and floods in others affected agricultural output and indirectly the manufacturing sector. Moreover, political and economic uncertainties continued to dampen growth. As in past years, the major economies in the region such as Cameroon, Nigeria and Zimbabwe all recorded higher MVA growth: 8.4, 2.5 and 5.6 per cent respectively from 7.8, 1.0 and 3.7 per cent in 1996. In the CFA franc zone, growth continued to be boosted by rising foreign capital inflows. Performance in the least developed countries (LDCs), on the other hand, continued to be discouraging. During the year, more than half of the 31 LDCs in the region registered lower MVA growth compared with the previous year.

11. Over the past three years, the aggregate growth of the region has been maintained above the average annual rate of population growth of about 3 per cent. As a result, there has been a corresponding increase in per capita income. However, the main constraints to sustaining long-term growth continued to be macroeconomic and political instability, pervasive poverty, low savings and investment rates, low human capital endowment and poor infrastructure. Gross investment averaged only 16.3 per cent during the first half of the 1990s, representing a net investment of only 3.3 per cent (of GDP) above the investment required for maintaining the existing capital stock of the region (13 per cent). With a savings rate below 20 per cent, the region suffers from a vicious circle of low income, low investment, low savings and low growth. Foreign capital and aid from the international community are therefore paramount to jump-start investment and hence growth. To attract foreign investment, the region needs to reduce political and economic uncertainties as well as to improve infrastructure and human capital development.

#### *North Africa and Western Asia*

12. Aggregate MVA in North Africa and Western Asia grew at a higher rate in 1997 (7.6 per cent) compared to

1996 (6.7 per cent). Affected by severe drought, MVA growth in Algeria, Morocco and Tunisia fell compared to the previous year. In Egypt, favourable economic conditions contributed to a slightly higher MVA growth of 3.4 per cent, compared to 3.2 per cent in 1996. Despite lower oil prices, manufacturing activity in Western Asia benefited from continued economic and structural reform in the region. The non-oil exports of the region continued to grow during the year. Growth in the Islamic Republic of Iran and Saudi Arabia dipped slightly at 7.1 and 6.1 per cent respectively, compared with 8.9 and 6.4 per cent in 1996.

13. Investment, which has been concentrated mainly in oil and oil-related industries, has fallen significantly since the early 1980s. This coincides with a period of declining GDP and MVA growth. Reform programmes that are currently underway have shown modest results in stimulating investment and growth. Also, the region has not benefitted significantly from the rapid globalization process. Foreign capital inflows continued to be small and domestic investment was dominated by the public sector, but not to the same extent as in previous years. In the face of the declining trend in oil prices and dwindling oil reserves, the region needs to continue to diversify its manufacturing base into the non-oil sector.

#### *South Asia*

14. In line with slower economic growth, MVA growth in South Asia slowed down in 1997: 7.6 per cent compared with 8.5 per cent in 1996. Growth was restrained by slower performance in India, which accounted for more than three-quarters of total manufacturing in the region. The country registered MVA growth of 8 per cent compared with 9.6 per cent in 1996. On the other hand, manufacturing growth was higher in Pakistan and Sri Lanka. Despite slower GDP growth, Pakistan staged a mild recovery in manufacturing, growing at 3.6 per cent compared to 1996, when manufacturing growth stagnated. Industry in the country benefitted from the recent introduction of supply-side incentives such as tariff reductions. MVA growth in Sri Lanka, on the other hand, accelerated to 8.5 per cent from 6.5 per cent in 1996.

15. The reform process that has been underway in the region since the early 1990s has clearly produced significant results, with rising economic performance and increasing integration with the global economy. The investment rate has surged since the beginning of the reform process, supported by large inflows of foreign capital. However, rapid growth in the past years, notably in India, has been accompanied by large fiscal deficits that pose risks to growth prospects. Cuts in government spending to reduce fiscal deficits will further dampen the already sluggish economy in the coming year.

#### *East and South-East Asia*

16. Financial crisis loomed over East and South-East Asia during the second half of the year, causing



significant short-term uncertainties in the region, particularly in affected countries such as Indonesia, Malaysia, the Republic of Korea and Thailand. Rapid growth and high investment rates over the past years have built up chronic external deficits in these countries, exacerbated by declining export performance during the last two years. Increasing liberalization and dependence on foreign capital inflows, especially on short-term capital, have further increased the vulnerability of these countries to the negative impact of swift movement in capital flows. These developments combined to cumulate in a crisis, the extent and depth of which was unforeseen by economists and policy-makers alike. As a result, massive rescue packages had to be sought from the International Monetary Fund (IMF) to stabilize the economies of Indonesia, the Republic of Korea and Thailand. The crisis lingered into early 1998 and economic growth of the region is expected to be severely hit in 1998, with adverse implications on world economic performance.

17. Despite the crisis, the region continued to lead the world in MVA growth, recording a rate of 7.7 per cent compared with 8.9 per cent in 1996. The stable performance in China partly buffered the moderate fall in other Asian countries. During the year, MVA growth in China remained at around 10 per cent compared with 10.4 per cent in 1996, in line with a relatively robust GDP growth of about 9.3 per cent. Growth was supported by stronger external demand and increases in both local private and foreign investment.

18. In contrast, growth in the Republic of Korea fell from 9 per cent in 1996 to 6.6 per cent and was supported by stronger exports. Domestic demand was sluggish, given the uncertainties arising from the crisis and sharp currency depreciation. In Singapore, the electronics sector, which accounted for almost three-quarter of the country's non-oil exports, recovered strongly due to increased demand from the United States. Aggregate MVA edged up marginally to 3.5 per cent from 3.4 per cent in the previous year. Taiwan Province also held up well in the face of the crisis, primarily because of more sound economic fundamentals, with MVA growing at 3.6 per cent compared to 4 per cent in 1996. Economic growth was robust, supported by stronger exports, recovery of private investment and sustained government spending on infrastructure projects.

19. Among the Association of Southeast Asian Nations (ASEAN) countries, Thailand was the worst hit with its MVA growth plunging to 1.9 per cent from 8 per cent in 1996. Growth in both Indonesia and Malaysia moderated from 13.8 and 11 per cent respectively in 1996 to 11.8 and 8.3 per cent in 1997. Meanwhile, growth in the Philippines dropped to 4.4 per cent from 6.2 per cent in 1996.

20. The region faces an immediate challenge of restoring confidence and ensuring sustainable growth

prospects. Domestic demand, which has been supporting recent growth, will undoubtedly fall sharply as Governments attempt to cut spending to reduce external deficits and consumer confidence plummets. On the other hand, manufacturing exports are expected to continue to provide the main impetus for future growth, given the sharp gain in competitiveness that the region would secure by virtue of its sharply depreciated currencies and its accumulated technological capabilities. Over time, however, the temporary boost from lower currency values will not be sustained as Asian exports depend heavily on relatively inelastic capital goods imports. Rising import prices and higher wages may lead to higher export prices and the partial erosion of temporary gains in competitiveness from the currency depreciations. For many countries in the region which do not possess the advantages of depreciated currencies and high technology capabilities, the challenge is to maintain growth in the face of faltering economic growth and trade both in the region and to a lesser extent in the world at large.

21. In the case of China, whose currency was not affected by the crisis, it may be argued that the country competes in a market segment which is more labour-intensive compared to other Asian countries at an advanced stage of industrialization. Yet there are many similarities between its production structure and that of the ASEAN countries. The country also faces the challenge of closing the widening performance gap between its high-growth coastal area and low-growth interior. In this respect, new investment in the interior may help to support domestic demand and hence maintain growth. Continuing liberalization and privatization programmes as well as enhancement of efficiency and productivity in state-owned enterprises are also required to sustain growth.

#### ***Europe and the Newly Independent States of the Former Soviet Union***

22. With the continued economic recession experienced by the region as a whole, manufacturing performance in European and Central Asian economies in transition dropped in 1997. The decline of MVA growth in the region continued, from -2.2 per cent in 1996 to -2.6 per cent in 1997. As in past years, performance in the region was unevenly spread. Countries in Central and Eastern Europe continued to register growth in manufacturing activity, albeit moderating, while most of the Member States of the Commonwealth of Independent States (CIS) continued to record negative growth.

23. In Central and Eastern Europe, restrictive measures aimed at checking domestic demand and a growing trade gap did little to dampen GDP growth, which was still buoyant in Hungary, Poland, Slovakia and Slovenia. In these countries, MVA growth also remained relatively strong. In contrast, the Czech Republic recorded a sharp deceleration in both GDP and MVA growth due to the restrictive measures introduced to cool the overheating

economy. The Czech Koruna depreciated sharply during the year, reflecting foreign investors' concerns about widening external deficits. The financial crisis in South-East Asia further exacerbated the depreciation.

24. Meanwhile, there were signs of recovery in the Russian Federation, the largest CIS economy. The Russian Federation recorded a positive, albeit still fragile, MVA growth of 0.2 per cent compared to -8.2

per cent in 1996. A new wave of privatization programmes helped to boost FDI inflows into the country, which in turn helped to stimulate GDP and MVA growth. On the other hand, MVA in Ukraine continued to contract in line with the further contraction in GDP. Low government revenue collection has led to cuts in government spending, which, in turn, dampened business and consumer expectations.



## CHAPTER II

### UNIDO REFORM AND REVITALIZATION

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1. At the end of 1996, the announcement of withdrawal by Australia and conditional withdrawal by the United Kingdom, together with expressions of doubt at high levels in Germany, created deep concern over UNIDO's long-term future. This was paradoxical, inasmuch as UNIDO seemed to have completed its reform process, and new approvals for projects had registered an impressive growth for the first time in several years. Clear indications were given by the largest contributors that the budget of the Organization would have to be substantially reduced, posing a strong challenge to the existence of UNIDO as an independent viable entity.

2. Early 1997 saw Member States entering into a series of intense consultations, together with the Secretariat, addressing in a comprehensive manner issues related to UNIDO's future role and relevance and its priorities. This dialogue benefited from important ideas and contributions from individual Member States, as well as regional groups. On a broader plane, within the context of reform of the United Nations system as a whole, the Group of 77 in New York expressed strong support for UNIDO as an independent entity.

#### **Danish assessment of UNIDO**

3. Several Member States undertook their own assessments of UNIDO during this critical period. The Government of Denmark, in particular, commissioned an independent expert report which assumed considerable importance, given the Danish experience in assessing the work of a range of United Nations organizations. The report, prepared by a high-level team of management and development experts, concluded that there was a definite need for an independent industrial development organization in the United Nations system and acknowledged the effective implementation of UNIDO reform since 1993. The report stated "There are clearly identifiable needs, and even increasingly so, for the kinds of services provided by the Organization and UNIDO has proved capable since 1995 of adjusting its portfolio

of services and modes of operating... so as to become more responsive to those needs and at the same time more effective and efficient".

4. The report addressed concerns and questions raised earlier by some donor Member States, and reached positive conclusions after a comprehensive examination of UNIDO operations over a three-month period. "Our findings led us to believe that at least some of the criticism leveled against UNIDO by some Member States must be based on either selective perception or knowledge about the Organization which has not been successfully updated, or both" stressed the report. The report concluded that UNIDO had set new objectives, revised its priorities and developed new, highly relevant programmes in support of industrial development. This had led to a sharpening of UNIDO's focus on the poorest developing countries, on priority industrial subsectors and on essential development issues. "No other international organization has the same comprehensive experience, technical knowledge and multidisciplinary expertise for combining and linking industrial technical cooperation services targeted at both the policy and strategy level, the institutional framework level and the enterprise level" according to the experts, who also credited UNIDO with having "the lowest administrative and operational support costs-to-delivery ratio among the United Nations agencies using the same measurement methodology."

5. The Danish expert team recommended the continuation of UNIDO as a specialized United Nations agency and stressed that any "further drastic reduction of the regular budget, let alone abolishing UNIDO as a free-standing organization, would be a peculiar signal to send to the United Nations system as a whole at a juncture when the system is engaged in an overall reform effort aimed at increasing effectiveness, efficiency and impact." In a statement delivered to the Industrial Development Board, the European Union considered that the reform of UNIDO had "gone far beyond what has been done in other United Nations agencies, funds or programmes."

## Developments in the United Nations system

6. Developments related to reform of the United Nations system in New York had implications for the future of UNIDO. The United Nations Secretary-General recognized in his report on *Renewing the United Nations: A Programme of Reform* that "some impressive reforms and cost reductions" had been undertaken by UNIDO. The report underlined: "no organization has principal responsibility for dealing comprehensively with the energy sector, for example, or with technology, or in respect of the major transition taking place in many countries from state to private enterprises. These gaps could be included in the mandate of a restructured and revitalized UNIDO. The Secretary-General believes that the question of UNIDO's future should be reviewed in this broader context and is prepared to use his good offices in this respect." However, Member States have yet to enter into detailed considerations of reform issues related to the work of specialized agencies envisaged under the aegis of a high-level ministerial commission.

### Business Plan for UNIDO

7. Member States of UNIDO carried out a detailed examination of the range of activities of the Organization, keeping in view the strong expressions from some major donor countries in favour of limiting the level of the regular budget for 1998-1999. Agreement was reached on some activities that could be eliminated or reduced, as well as on activities generally considered as deserving high priority. The discussions were marked by a constructive and cooperative atmosphere, drawing heavily on technical presentations by the Secretariat, with the realization that painful choices had to be made in order to reach consensus and acceptance by major contributors. This process resulted in the successful adoption of a Business Plan on the Future Role and Functions of UNIDO by the Industrial Development Board. The Business Plan reflects the desire of Member States to focus the work and to streamline the Organization to enable it to carry out high-priority activities within the available resources.

8. The Business Plan seeks to concentrate efforts on meeting the needs of Africa and the least developed countries, and on services in support of agro-industry and small and medium industries. It refocuses UNIDO's activities along two lines: strengthening of industrial capacities, and cleaner and sustainable industrial development. Consequently, a number of activities are de-emphasized or discontinued.

### Budgetary and organizational developments

9. In line with the activities and functions envisaged, the Business Plan was translated into a budget for the

Organization on a programmatic basis for the first time. Member States ultimately approved, at the General Conference in December 1997, a programme budget based on a real reduction of 20 per cent.

10. The Business Plan also spelled out the new organizational structure, based on three major organizational components with a flat structure, and called for strengthening the field presence of UNIDO, with increased delegation of authority as well as greater programmatic coordination with other United Nations bodies at the field level. These directives, together with a major staff reduction implied by the real budget reduction of 20 per cent, called for major changes in the Organization's structure and managerial mechanisms in order to carry out its tasks under its new mandate. In short, the basis was established for a complete transformation of UNIDO.

### Increased confidence of Member States in UNIDO

11. In July, the Government of the United Kingdom decided to remain a member of UNIDO, thus reversing its earlier notice of withdrawal. Ms. Clare Short, Secretary of State for International Development, stated: "During the last four years UNIDO has undertaken a comprehensive and impressive reform program. Fundamental change has been made, substantial staff reductions have been achieved and new management arrangements introduced. I greatly welcome these changes... A continuing effort is underway to narrow and re-focus UNIDO's activities into high-priority areas which match the changing needs of developing countries, especially in Africa..."

12. Further positive trends were visible: Germany would not leave UNIDO as had been suggested one year earlier; countries such as Denmark and Switzerland pledged significant funds in voluntary contributions to UNIDO projects; some of the world's poorest countries announced payment of their assessed contributions to UNIDO; and South Africa declared that it was giving serious consideration to joining UNIDO in the near future. In a spirit of renewed confidence in UNIDO, Member States expressed their intention, in a resolution adopted by the General Conference, to "lend their complete support to the revitalized Organization".

### Appointment of a new Director-General

13. An important change took place in the leadership of UNIDO when the new Director-General, Mr. Carlos Magariños, assumed office on 8 December 1997. Mr. Magariños committed himself to a genuine transformation of the Organization. This transformation would include a new structure, new working procedures and new products with greater impact on industrial development in recipient countries. Africa would remain the highest priority and UNIDO would have greater

interaction with the United Nations system as a whole at the global and field level as well as with the private sector.

## Major programmatic developments

### *Alliance for Africa's Industrialization*

14. The thirteenth Conference of African Ministers of Industry (CAMI) held in May in Accra, Ghana, agreed that the private sector would be an important driving force for Africa's industrial development into the twenty-first century. The Conference signaled a new era of public and private partnership launched on the back of a concrete Plan of Action for the Alliance for Africa's Industrialization. CAMI participants agreed to pursue the industrial transformation of natural resources, particularly through the development of agro-industries, by introducing development strategies for medium and small enterprises, institutional capacity-building, strengthening of human resources and reinforcement of national, regional and subregional coordination. The Organization of African Unity (OAU) Summit in Harare endorsed the conclusions of CAMI and called on UNIDO, in cooperation with the Economic Commission for Africa (ECA) and OAU to organize in 1998 a meeting of donors under the leadership of the African Development Bank, in cooperation with other donors, in order to decide on the measures to be taken for financing programmes elaborated in the framework of the Plan of Action. Considerable work has been initiated to prepare packages of programmes that could be attractive to donors.

15. The United Nations General Assembly adopted a resolution on industrial development cooperation calling

on all Member States to implement the Industrial Development Decade for Africa and the Plan of Action for the Alliance for Africa's Industrialization. UNIDO and ECA were called upon to strengthen their coordination with UNDP and other United Nations agencies and donors to accelerate the implementation and goals of the Second Industrial Development Decade for Africa. The resolution emphasized the importance of industrialization as a key element in promoting sustained economic growth and sustainable development in Africa, as well as facilitating efforts towards the eradication of poverty, the integration of women in the development process and the creation of productive employment.

### *High-impact programmes*

16. The further development of five high-impact programmes launched in 1995-1996 continued to achieve significant success in attracting donor support. A sixth programme was added: UNIDO's seal for accreditation schemes - Establishment of an international scheme of mutual recognition agreements among developing countries. Donors extended significant support for programmes in agro-industry, mercury pollution abatement, and small and medium industry. Details are contained elsewhere in this report.

### *International Business Advisory Council*

17. As part of its effort to strengthen cooperation with the private sector, UNIDO organized a meeting of its International Business Advisory Council (IBAC) at Casablanca, Morocco, bringing together industrialists from the private sector from 15 countries. The meeting underlined the strong interest of the private sector to work closely with UNIDO in building business partnerships in the industrial sector, and to help promote UNIDO activities in support of industrial development.



## CHAPTER III

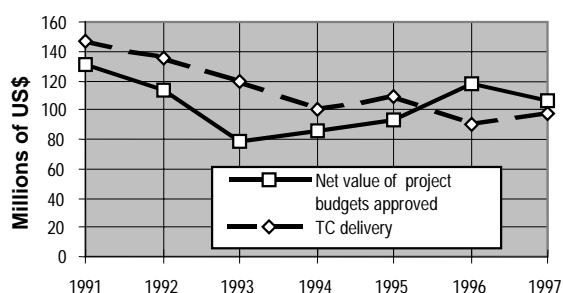
### TECHNICAL COOPERATION PROGRAMMES OF UNIDO: 1997 ACHIEVEMENTS

1. The present chapter provides a review of UNIDO technical cooperation activities during 1997. In section A, an aggregate statistical analysis provides a broad overview of the direction taken of UNIDO activities, while section B gives a more detailed description of specific activities undertaken by the Organization to address the seven thematic priorities. Through the second section, readers can develop a greater understanding of the actual projects and services provided. A complete list of all newly approved, ongoing and completed projects in 1997 is contained in addendum 2 to the present report. Sections C to E of this chapter provide a summary account of UNIDO activities in areas that cut across all thematic priorities: economic and technical cooperation among developing countries, human resources development, and integration of women in industrial development.

#### A. Aggregate statistical analysis

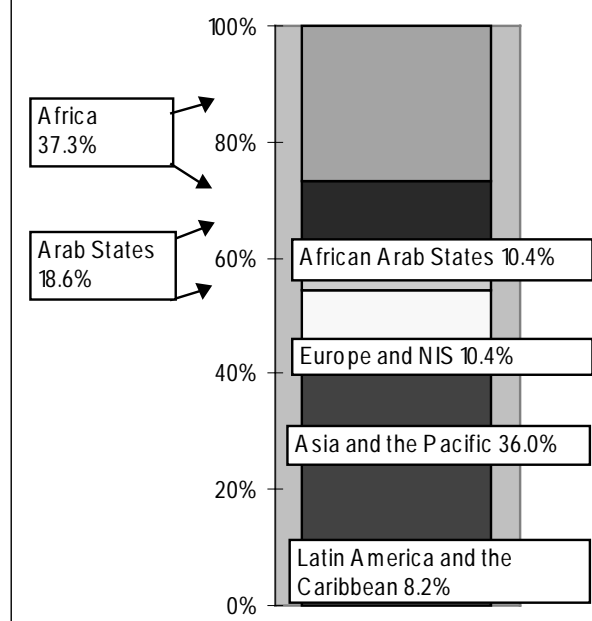
2. Technical cooperation delivery in 1997 reached \$97.3 million, showing a recovery from \$90.9 million in 1996 (figure 4). While the approval level decreased to \$106.4 million from \$117.9 million, it continued to surpass delivery, giving a positive outlook for 1998.

**Figure 4. Technical cooperation delivery and approval, 1991 - 1997**



**Figure 5. Technical cooperation expenditure by region, 1997**

(excluding global / interregional projects)

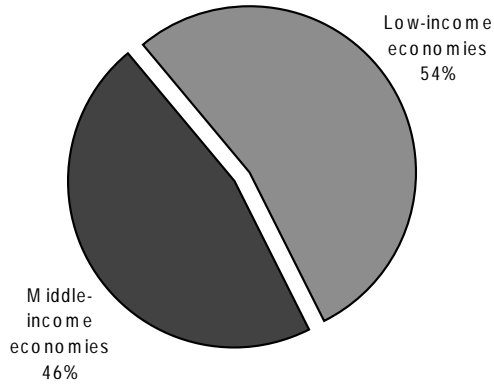


3. Geographically, the Africa region continues to be the largest beneficiary of UNIDO technical cooperation, with a share of 37 per cent. Sub-Saharan Africa accounted for 27 per cent (figure 5). Increased engagement in sub-Saharan Africa was also reflected in the increase of technical cooperation delivery from \$19 million in 1996 to \$22 million in 1997. The Asia and Pacific region continued to be the second largest recipient of UNIDO services with a share of 36 per cent.

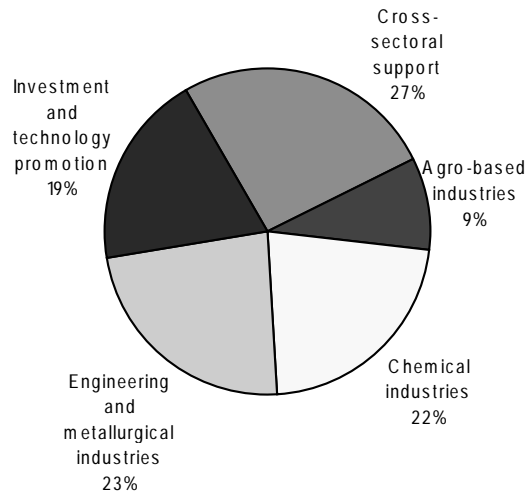
4. An examination of 1997 UNIDO technical cooperation delivery in accordance with the World Bank classification system reveals that 54 per cent was



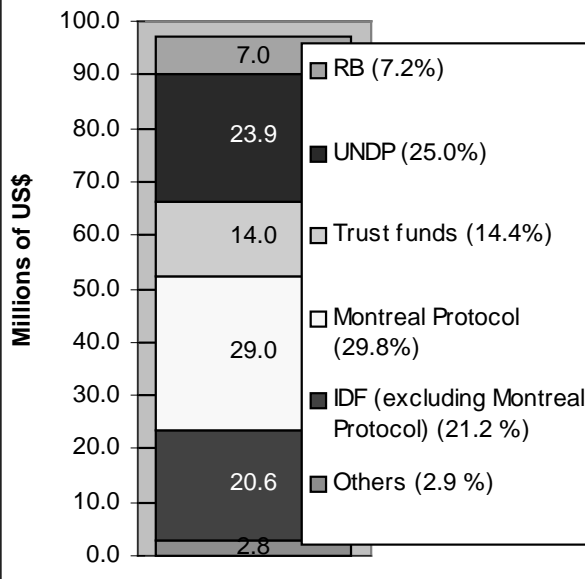
**Figure 6. UNIDO technical cooperation delivery, 1997, by World Bank classification**



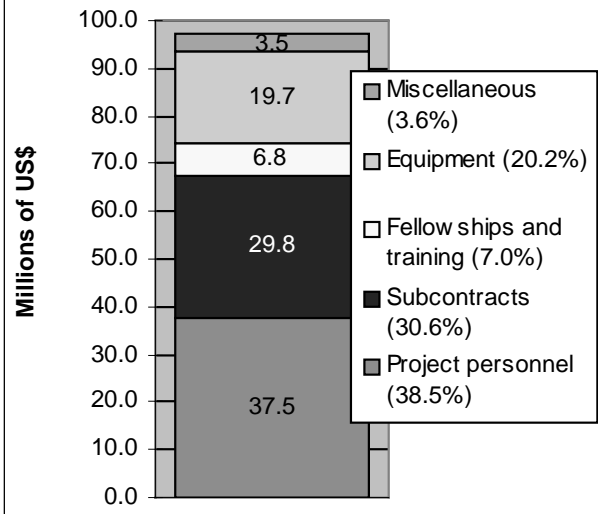
**Figure 8. Technical cooperation expenditure by sector, 1997**



**Figure 7. Technical cooperation expenditure by source of funds, 1997**



**Figure 9. Technical cooperation expenditure by project component, 1997**



directed towards low-income economies (figure 6), and 46 per cent to middle-income economies.

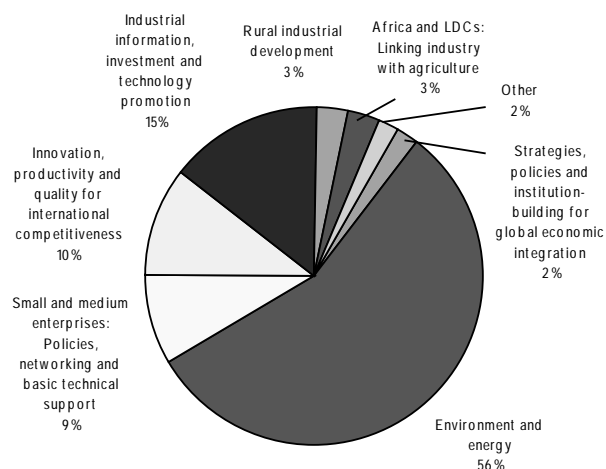
5. In terms of sources of funds, the weight of technical cooperation delivery under the Montreal Protocol continued to rise, from 27.5 per cent in 1996 to 29.8 per cent in 1997 (figure 7). The share of the regular budget also increased, from 3.6 per cent in 1996 to 7.2 per cent in 1997. Accordingly, slight share decreases were registered in delivery under UNDP and the Industrial Development Fund (IDF). On the other hand, while approvals increased to \$22 million under UNDP from \$18 million in 1996, approvals from donor-dependent sources declined: IDF from \$25 million in 1996 to \$17

million, and trust funds from \$22 million in 1996 to \$16 million.

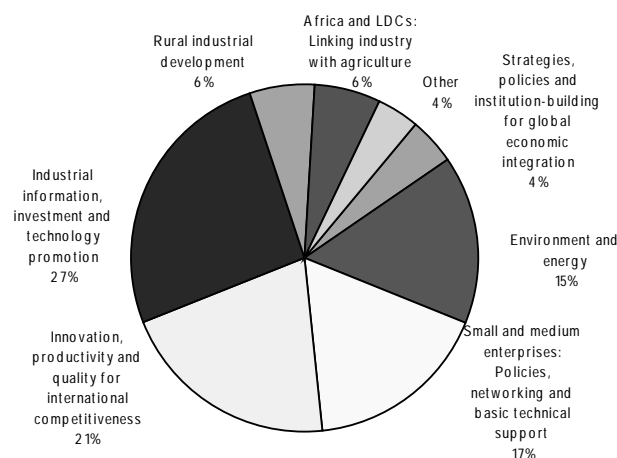
6. The share of investment and technology promotion increased from 14 per cent in 1996 to 19 per cent 1997 (figure 8). While the relative weight of other sectors decreased as a consequence, the dollar value of technical cooperation delivery in these sectors remained fairly constant.

7. A review of project component patterns (figure 9) shows an increased share of subcontracts (from 24 per cent in 1996 to 31 per cent in 1997, largely linked to Montreal Protocol activities. Accordingly, other components accounted for reduced relative shares.

**Figure 10. Technical cooperation approvals by thematic priority, 1997**  
(percentage shares, including Montreal Protocol)



**Figure 11. Technical cooperation approvals by thematic priority, 1997**  
(percentage shares, not including Montreal Protocol)



**Table 1. Technical cooperation activities: project expenditure in 1997, by geographical area**  
(In thousands of US dollars)

	Africa (excluding African Arab States)		African Arab States		Asia and the Pacific (excluding Western Asian Arab States)		Western Asian Arab States		Arab regional		Europe and NIS		Latin America and Caribbean		Global and Interregional		Total
	%		%		%		%		%		%		%		%		
<b>A. By source of funds</b>																	
UNIDO regular budget																	
RP	22	0.1	0	0.0	371	1.3	316	4.9	27	15.3	277	3.3	402	6.0	1,234	7.9	2,649
IDDA	3,986	18.1	280	3.3	0	0.0	0	0.0	11	6.2	0	0.0	0	0.0	57	0.4	4,334
UNDP/IPF, cash counterpart, special measures, TRAC	3,845	17.4	563	6.6	2,584	8.8	1,360	21.0	12	6.8	2,555	30.2	387	5.8	56	0.4	11,362
UNDP/SIS	(31)	(0.1)	0	0.0	(51)	(0.2)	(7)	(0.1)	0	0.0	(2)	(0.0)	(3)	(0.0)	0	0.0	(94)
UNDP-administered trust funds	1,349	6.1	(34)	(0.4)	9	0.0	(1)	(0.0)	0	0.0	(5)	(0.1)	20	0.3	0	0.0	1,338
Self-financed trust funds	489	2.2	1,794	21.1	53	0.2	113	1.7	0	0.0	150	1.8	2,965	44.6	0	0.0	5,564
Third party-financed trust funds	1,083	4.9	0	0.0	795	2.7	100	1.5	0	0.0	737	8.7	175	2.6	4,353	27.9	7,243
Other trust funds	220	1.0	0	0.0	198	0.7	0	0.0	0	0.0	69	0.8	0	0.0	729	4.7	1,216
IDF a/	3,829	17.4	175	2.1	5,641	19.2	107	1.7	80	45.2	687	8.1	1,418	21.3	8,640	55.4	20,577
Montreal Protocol	2,979	13.5	5,657	66.5	12,496	42.5	4,373	67.7	0	0.0	2,535	30.0	855	12.9	129	0.8	29,024
UNDCP	315	1.4	5	0.0	333	1.1	54	0.8	2	1.1	1,217	14.4	371	5.6	326	2.1	2,623
Non-UNIDO funds	3,956	18.0	68	0.8	6,956	23.7	47	0.7	45	25.4	233	2.8	63	0.9	58	0.4	11,426
<b>TOTAL</b>	<b>22,042</b>		<b>8,508</b>		<b>29,385</b>		<b>6,462</b>		<b>177</b>		<b>8,453</b>		<b>6,653</b>		<b>15,582</b>		<b>97,262</b>
Total Africa	30,550																
Total Arab States	15,147																
<b>B. By project component</b>																	
Project personnel	10,657	48.3	2,093	24.6	7,139	24.3	1,329	20.6	166	93.8	2,849	33.7	3,128	47.0	10,118	64.9	37,479
Subcontracts	3,608	16.4	4,887	57.4	12,768	43.5	3,572	55.3	0	0.0	1,879	22.2	1,066	16.0	1,976	12.7	29,756
Fellowships and training	2,218	10.1	200	2.4	2,089	7.1	224	3.5	(2)	(1.1)	406	4.8	373	5.6	1,272	8.2	6,780
Equipment	4,501	20.4	1,159	13.6	6,659	22.6	1,231	19.0	0	0.0	3,001	35.5	1,847	27.8	1,345	8.6	19,743
Miscellaneous	1,058	4.8	169	2.0	730	2.5	106	1.6	13	7.3	318	3.8	239	3.6	871	5.6	3,504
<b>TOTAL</b>	<b>22,042</b>		<b>8,508</b>		<b>29,385</b>		<b>6,462</b>		<b>177</b>		<b>8,453</b>		<b>6,653</b>		<b>15,582</b>		<b>97,262</b>

a/ Excludes Montreal Protocol.

8. Although the increased approvals under the Montreal Protocol could not fully compensate for the drop in donor-oriented sources of funds, the opening

balance for 1998 improved as compared to a year earlier, giving UNIDO sufficient stability to focus on the implementation of the Business Plan in 1998.

9. For the second consecutive year, environment and energy projects represented half of UNIDO approvals when sorted by thematic priority (figure 10). If Montreal Protocol activities are excluded, a distribution similar to that for 1996 emerges. Under this analysis, thematic priorities 4 (industrial information, investment and technology promotion) and 5 (innovation, productivity and quality for international competitiveness) account for 27 and 21 per cent respectively of 1997 approvals (figure 11). The share of approvals under thematic priority 3 (small and medium enterprises) increased from 11 per cent in 1996 to 17 per cent in 1997.

## **B. The thematic priorities of UNIDO: Selected programmes and projects**

10. In accordance with General Conference resolution GC.6/Res.2, the present chapter provides a description of selected UNIDO technical cooperation programmes and projects grouped under the thematic priorities. Included are summary narratives on the objectives of newly approved projects, the progress achieved in projects under implementation in 1997, and the results obtained for projects completed during the year. For each project, the title, country coverage and source of funds are stated. The presentation is not intended to be comprehensive but provides samples that give a balanced and representative picture of the range and type of UNIDO technical cooperation. A complete list of new, ongoing and completed projects for 1997 is contained in addendum 2 to the present report.

### **1. Strategies, policies and institution-building for global economic integration**

11. Some twenty years ago, industrial planning and policy-making in developing countries was to a great extent the concern of the public sector. Decisions and plans were based largely on existing technology and production facilities and imbalances between production and demand were addressed through subsidies and protectionist measures. Economic reality in combination with increased awareness of the effectiveness of new analytical tools and policy approaches have resulted in an evolution in industrial policy from authoritative policies to policies more supportive of or responsive to market signals. Increased interaction and an improved and more intense dialogue between the public and the private sector have been key characteristics of most UNIDO industrial strategy and policy development projects during the 1990s. A more recent tendency is the increased importance of regional and local development initiatives. This is in part a consequence of the gradual redefinition of the role of Governments from one of regulator to facilitator and of increasing exposure of local economies to global market forces. While Governments continue to be stimulators and national coordinators, the initiative has been shifting towards

coalitions of regional forces such as provincial administrations, business associations and local universities. The selected projects presented below reflect to a large extent this shift in focus.

### **New projects**

#### *Development of high-impact programmes in the context of the Alliance for Africa's Industrialization*

Budget: \$233,200

Funded by: UNIDO regular budget

12. By applying a systematic and comprehensive approach, and through close collaboration with UNIDO Country Directors, UNIDO attempts through this project to identify and implement programmes of high impact within the framework of the Alliance for Africa's Industrialization. Replicating the approach for the development of high-impact programmes in 1995 and 1996, UNIDO staff at Headquarters and in the field were invited to submit proposals for programmes that address the specific objectives of the Alliance and that adhere to the central themes of the Plan of Action for its implementation. Of 60 proposals received, 10 were selected for further development. The main theme will be the removal of barriers to the entrance of African industrial products on the world market. To this end, the selected programmes will address issues of quality and standards as well as the sustainability of new investment and privatized enterprises through building domestic capacities. A special effort will be made to draw on the experience of successful Asian countries for application in Africa.

#### *Alliance for Africa's Industrialization - Establishment of Industrial Partnership Councils*

Budget: \$310,000

Funded by: The Industrial Development Decade for Africa

13. The premise underlying present government policy is that economic growth is efficiently achieved if it is led by the private sector. Government must rethink its role and focus on creating an environment in which the private sector takes the lead. An essential aspect is the identification of stakeholders—an area in which little success has been achieved in African countries. While some Governments have tried to put into place consultative fora as a mechanism to facilitate consultations among the stakeholders, major problems have been encountered in sustaining these fora. In the few consultative fora with multiple representation—with government represented as one of several stakeholders—considerable progress has been made.

14. Through this programme to establish Industrial Partnership Councils, UNIDO is promoting interactive policy formulation involving consensus-building, with the full involvement of the public and private sector, as the basis for industrial strategies and policies. The

process has started in 28 African countries. To date, national consultants have prepared 17 interim reports, which will be validated in national workshops which will bring together the various stakeholders. Once established, the Industrial Partnership Council will be the primary tool for identifying country-level priorities and for formulating a national plan of action for the Alliance for Africa's Industrialization.

***Preparatory assistance in the formulation and implementation of industrial policy - Ecuador***

Budget: \$17,500

Funded by: Industrial Development Fund

15. The Government of Ecuador has made considerable progress in strengthening its working relations with private sector industry. It is now seeking to formalize this relationship through the presentation to Parliament of an industrialization law, embodying new industrial strategies and policies. UNIDO will work directly with the Ministry of External Trade, Industrialization and Fisheries in formulating a policy paper on industrialization which will serve as the basis for the new law. Furthermore, there is considerable scope for UNIDO assistance in implementing the new policy.

***Regional industrial development***

16. In the new global environment and the increasing pressure of global market forces with the new role of government, regions and communities must mobilize their own potential. In developing countries and transitional economies, local initiative is comparatively new, and regions are facing a difficult learning process in responding to the pressures of liberalized markets while simultaneously building up their capacity to do so. This requires the intensive involvement of local governments and the regional business community as well as other local civil society actors, such as universities. By countering local unemployment and migration to the cities, successful local and regional development initiatives help to achieve social stability and sustainability. Local involvement is also an important precondition for progress towards environmental sustainability. In this context, UNIDO published a document entitled *Regional industrial development agencies: Types, tasks and UNIDO assistance*. While UNIDO projects addressing this issue are undertaken also in other regions, countries of Eastern Europe and the Commonwealth of Independent States (CIS) have demonstrated particular interest, as illustrated in the following example.

***Preparatory assistance to support sustainable regional development in Eastern Europe and CIS countries***

Budget: \$97,000

Funded by: Industrial Development Fund

17. The project aims at promoting the transition to competitive market economies in Central and Eastern

European and CIS countries through the accelerated growth of regions. Based on competitive advantage, the project has assessed the basic conditions for accelerated growth and identified measures at the policy, legislative and institutional levels, as well as in terms of human resources development, to realize the comparative advantages and opportunities in seven regions in Bulgaria, the Republic of Moldova, Romania, the Russian Federation and Ukraine. Project concepts for the respective regions have been discussed and formulated with local authorities, enterprise managers, private sector actors as well as representatives of donor institutions.

18. Considering the importance of exchange of experience and information between the regions, the project has developed an interregional advisory programme. Three regions have expressed their interest in financing the regional projects through trust fund agreements with UNIDO. A UNIDO meeting in 1998 with representatives of regional authorities, UNDP and donor institutions will discuss the specific regional projects and the programme as a whole, including financing modalities.

**Ongoing projects**

***Updating the industrial master plan - Côte d'Ivoire***

Budget: \$2,270,000

Funded by: UNDP, African Development Fund, the Industrial Development Decade for Africa

19. In the late 1980s, UNIDO assisted the Government of Côte d'Ivoire to produce the country's first industrial master plan. Based on a consultative partnership between industry and government, the plan identified manufacturing industries with sound growth potential. Following the deep economic recession of the early 1990s and the recovery underway since 1994, the Government has called on UNIDO to update the recommendations of the early sectoral studies, promote industrial investment and elaborate a strategic framework for accelerated industrialization. During 1997, UNIDO experts reviewed the prospects of non-agro-based industries and produced a portfolio of investment opportunities, which were promoted during the November investment forum. Negotiations were pursued with local authorities and the African Development Fund to grant \$1.8 million under the Fund's technical assistance facility to support similar studies for agro-based industries.

***Medium-term industry strategy (Phase II) - Viet Nam***

Budget: \$575,000

Funded by: The Governments of the Netherlands and Sweden, UNDP, UNIDO

20. During the course of 1995, UNIDO and the Government of Viet Nam elaborated a technical assistance programme for the formulation of a medium-

term industry and trade strategy. The programme was of a capacity-building nature aimed at endowing policy-makers with the statistical data and analytical techniques required to monitor manufacturing growth in an increasingly open, competitive, market-oriented economy. Project implementation started in early 1996 and accelerated in the middle of that year. While the delivery of the specified outputs was completed satisfactorily, as scheduled, by August 1997, the counterpart ministry requested an extension of the project: (a) to facilitate, through ad hoc briefing notes, official appraisal of the strategy by the country's highest authorities; (b) to pursue detailed studies of industrial competitiveness at the level of selected industries; and (c) to provide additional training to Ministry staff.

#### ***Special economic zones and science parks***

21. The 1996 Annual Report provided extensive information on the growing interest of developing countries in special economic zones and science and technology (S&T) parks and on the ways in which the Organization is addressing this interest. UNIDO promotes activities in support of special economic zones and S&T parks within the framework of its global forum function, as also described in chapter IV.A of the present report. In addition to specific technical cooperation activities—as illustrated in the following examples of ongoing projects—a new publication was released entitled *Industrial Estates: Principles and Practice*, which complements *Export Processing Zones: Principles and Practice*, published in 1996.

#### ***The effects of export processing zones on industrial development and international competitiveness***

Budget: \$48,500  
Funded by: UNIDO

22. The concept of export processing zones has evolved considerably since it was first launched in the 1970s, mainly as a way of generating foreign exchange and jobs in countries practicing import substitution, high tariff protection and non-convertibility of currencies. Globalization and trade liberalization have resulted in an erosion of the classical tariff-free benefits in these zones. At the same time however, these developments have highlighted the value of zones—provided adequate linkage is made to the domestic economy—as instruments of industrial development with potential for technology and skills transfer and for the provision of modern infrastructure and services to client companies. This project involves research into industrial zones in 15 countries throughout the world and is being carried out in collaboration with the International Labour Organization's special action programme on export processing zones. The case studies will form the basis to revamp UNIDO technical cooperation services offered to countries wishing to develop new zones or re-design existing ones. They also serve as a platform for

designing state-of-the-art training courses in zone conception, development and management.

#### ***More appropriate use of science parks as an industrial development tool in developing countries and countries in transition***

Budget: \$104,400  
Funded by: UNIDO regular budget

23. In the international arena, S&T parks have become stimuli for innovation through linking scientific know-how to manufacturing. While the direct employment and output effects of S&T parks are limited, it is primarily the promotion of business links between research and industry and the attraction of high-tech investment that can activate a regional development process. This project promotes the appropriate use of S&T parks through initial analysis of local conditions, formulation of a development strategy and advisory services for a supportive policy and infrastructure environment. The underlying conceptual framework was developed through a series of panel meetings of experts that resulted in the development of analytical tools, training packages and competence development programmes, and a certification system. The next phase will finalize the UNIDO "tool-box" on S&T parks in the form of printed materials and test its applicability in a number of pilot project cases and seminars, which will help to facilitate wider promotion of the service package to potential clients. A partnership arrangement with the International Science Park Association (IASPA) is intended to facilitate the implementation of the S&T park certification system. Successive phases of the project are expected to be financed through trust fund arrangements.

#### ***Support programme for industrial development of the Sumgait region of Azerbaijan (Phase II)***

Budget: \$601,601  
Funded by: UNDP

24. At the end of 1995, a UNIDO team of international and national experts made a careful analysis of the industrial potential of the region and recommended that Sumgait be designated a special economic zone (SEZ). In the course of 1996, the law on free economic zones, under which Sumgait will be designated a SEZ, was drafted, the structure for the Sumgait SEZ administration was proposed, and the offices of the Regional Development Authority for the Sumgait SEZ were inaugurated by the President of the country. A team of 15 international and 10 national specialists presented the draft law to the Cabinet of Ministers and held an initial training course on the evaluation and preparation of industrial investment projects (COMFAR). They also conducted a seminar on the status of the Sumgait SEZ for 200 members of the local business and diplomatic community, evaluated the information needs of the special economic zone and proposed a design for an information system.

25. Promotion materials completed in early 1997 include an investment and business guide to Sumgait and Azerbaijan, a directory of Sumgait businesses, a brochure on the project, and profiles of several of the major industrial facilities located in Sumgait. In April 1997, an international conference on development and business opportunities in Azerbaijan and Sumgait was convened in cooperation with Euro Forum. The conference was attended by 150 representatives of the international business community and promoted new investment projects in Sumgait.

26. The Business Council established in Sumgait as part of the project is viewed as an important framework for promoting private sector development.

27. Phase III will start in 1998 and will mainly focus on supporting the newly established Sumgait Development Agency through implementation of pilot projects in restructuring, investment promotion, SME development and business services. It is intended that the experience gained in rehabilitating the Sumgait region will serve as a model and catalyst for the whole economy of Azerbaijan, thereby expediting the transition to a market economy. Strong interest in the project has also been shown by other countries in the Caucasus region. Furthermore, this activity has clearly demonstrated the results that can be achieved through close partnership between the Government, UNIDO and UNDP.

### Completed projects

#### *Assessment of the impact of the Uruguay Round agreements on manufacturing industries in selected African countries*

Budget: \$122,000

Funded by: The Industrial Development Decade for Africa

28. Designed to analyze the impact of the Uruguay Round agreements on manufacturing industries, this project identified the policy and strategy adjustments required in order to meet the challenges as well as exploit the identified trading opportunities created by the agreements. Five comprehensive reports (Mozambique, Nigeria, Uganda, the United Republic of Tanzania, Zambia)—including a programme proposal for restructuring of manufacturing industries and developing export capabilities and competitiveness—were issued. National seminars for sensitization were organized in cooperation with the Ministries of Industry in the countries covered.

#### *Diagnosis of the industrial sector of Panama (Phase I of an integrated programme for the modernization of the industrial sector of Panama)*

Budget: \$58,235

Funded by: Self-financed

29. Jointly with the Ministry of Trade and Industry of Panama and in close collaboration with representatives of Panamanian industry, UNIDO carried out a diagnosis of the industrial sector. Valuable inputs were obtained through two workshops; one in April focusing on strategies for a successful transformation of Panamanian industry, and one in November on specific subsectors and based on CompStrat®, a software-based analytical tool developed by UNIDO. The diagnosis has resulted in an action plan for the modernization of the industrial sector of Panama. Based on a so-called SWOT-analysis (strengths, weaknesses, opportunities and threats) of the industrial sector and selected subsectors, the plan proposes specific measures to increase international competitiveness. Discussions with public and private sector representatives at the beginning of 1998 will address the possible transformation of this programme in a second phase.

#### *Restructuring and revitalizing industries in the Kaliningrad region of the Russian Federation (Phase IB)*

Budget: \$591,596

Funded by: The Governments of Denmark, Finland, Norway and Sweden

30. This phase of the project focused on the development of a regional strategy for the industrial sector and the implementation of a training programme aimed at restructuring and reinforcing selected industrial enterprises. Activities included exposure of policy-makers and industrialists in Kaliningrad to regions in Poland that have experienced positive and dynamic industrial development during the last five years.

#### *Programme for industrial restructuring - Cuba*

Budget: \$98,000

Funded by: UNDP (SPPD)

31. UNIDO continued technical support services to the Government of Cuba for the restructuring of the industrial sector which had started in 1996. Besides a detailed analysis of the export potential of the country a proposal was elaborated for an integrated export development policy geared towards non-traditional exports. Particular emphasis was placed on potential in relation to high-technology goods. A synthesis report was prepared for the consideration of the Government on all advisory services provided by UNIDO, including seven project concepts for continued technical cooperation.

## 2. Environment and energy

32. Industrialization, if it is to be sustainable, must go hand in hand with environmental protection and energy conservation. Thus, UNIDO has made special efforts to help developing countries and countries with economies

in transition to meet the challenge of sustainable industrial development. During 1997, UNIDO continued to address environmental concerns in pursuit of sustainable industrial development and cleaner production as a response to Agenda 21. UNIDO actively participated in the 'Rio Plus Five' summit, held in New York in June. Technical cooperation projects centered around the introduction of environmentally sustainable industrial development (ESID) strategies, establishment of National Cleaner Production Centres (NCPCs) and support to help developing countries comply with international agreements. As one of the four United Nations implementing agencies of the Montreal Protocol, UNIDO is strongly involved in assisting Article 5 (developing) countries to eliminate the use of ozone-depleting substances (ODSs). In 1997, 322 projects with a total value of \$135.9 million financed by the Multilateral Fund for the Implementation of the Montreal Protocol were under implementation by UNIDO in 50 countries. Technical cooperation delivery financed by the Montreal Protocol totaled \$29 million during the year. Another area with special emphasis is the assessment, promotion and transfer of environmentally sound technologies to ensure cleaner and safer production. In this respect, the eight centres established under phase I of the NCPC programme became fully operational, while activities for new centres started in Croatia, Hungary, Uzbekistan and Central America and continued in Tunisia for a Centre already established by USAID.

33. A major objective of UNIDO's environment programme is to integrate environmental considerations into its technical cooperation activities. This is accomplished by formulating projects to address environmental concerns of a global, regional or local nature, or by ensuring that other projects incorporate an environment component when appropriate. For the sixth consecutive year, projects initiated were reviewed to determine the extent to which concern for the environment was considered in UNIDO project design. For 1997, the share of projects classified as environmental, or adequately addressing environmental issues, was 54 per cent, up from 49 per cent in 1996.

### **New projects**

#### ***Sustainable development of artisanal gold mining - Suriname***

Budget: \$43,500

Funded by: Industrial Development Fund

34. The release of mercury into the environment from artisanal and small-scale mineral processing—mainly gold mining—causes deaths among men, women and children as well as a permanently ruined habitat in wide areas of many countries. UNIDO programmes address the elimination of these effects through training and the

application of new technologies, as well as through the introduction of appropriate policies and support institutions. This preparatory assistance activity will formulate a technical cooperation project aimed at establishing sustainable development of artisanal gold mining in Suriname. Among the areas to be addressed are the awareness of the dangers of mercury pollution, environmental protection, entrepreneurial organization and training.

#### ***Treatment of tannery effluent in the state of Tamil Nadu (Phase II) - India***

Budget: \$367,000

Funded by: The Government of Switzerland

35. Phase I of this project produced impressive results in terms of containing environmental degradation emanating from tanneries while concurrently boosting employment. The chrome recovery and re-use system installed in a small-scale tannery under that phase has been in continuous and smooth operation for three years. The system has served as a model demonstration unit for tanners in India and other countries and has been replicated by more than 40 tanneries in India, Nepal and Sri Lanka. The main objective of phase II is to support the introduction of low-waste leather finishing operations in selected small- and medium-scale tanneries. A tertiary system for a common effluent treatment system will be set up for a cluster of tannery units, with related staff training. Recommendations will be prepared to rehabilitate land degraded by discharge of untreated tannery effluents. A pilot sludge digestion unit will be established to reduce the volume of sludge for disposal. The project will also study alternatives for safe disposal or utilization of tannery sludge.

#### ***Environmental technology assessment system, preparatory study - Philippines***

Budget: \$173,913

Funded by: UNDP

36. In the Philippines, experience has shown that technologies acquired by industrial enterprises are often not cost-effective in terms of environmental performance. The Government has therefore proposed to establish an environmental technology assessment system (ETAS) to support the industrial sector—particularly SMIs—in the identification, evaluation, and acquisition of cost-effective technologies for pollution prevention and control. The objective of this SPPD project is to develop a basic design and pilot programme for ETAS, based on the specific needs and situation in the Philippines, and to evaluate its potential benefits and financial sustainability. An ETAS needs assessment will be carried out through case studies of selected SMIs in two industrial subsectors. Major outputs from the project include project documents for the establishment of ETAS and implementation of pilot phase activities.

***Phasing out ozone-depleting substances - Venezuela***

Budget: \$532,756 (four separate projects)  
 Funded by: Multilateral Fund for the Implementation of the Montreal Protocol

37. The implementation of these projects will contribute to the efforts of Venezuela to meet the 1999 freeze target of the country in ODS consumption. The projects are designed to phase out 100 per cent of CFC-11 in the production of moulded rigid foam chair components, and panels for the refrigeration industry. The chosen alternative auxiliary blowing agent is HCFC-141b. The projects will be implemented through the installation of high-pressure polyurethane dispensing machines and the reorganization of existing production facilities.

**Ongoing projects*****Establishment of model and demonstration tannery effluent treatment facilities in Nepal***

Budget: \$617,000  
 Funded by: Industrial Development Fund, the Government of Austria

38. A low-cost chrome recovery plant to serve several tanneries in Birgunj has been successfully run for nearly a year, thus reducing the pollution load and improving the economy of tannery operations. The design of a tannery effluent treatment plant—the very first in the country—has been prepared. Civil works are in progress, equipment has been requisitioned and the plant is expected to be fully operational by mid-1998.

***Kasur tannery pollution control project - Pakistan***

Budget: \$1,218,800  
 Funded by: UNDP

39. Activities in 1997 included the new design of a central tannery effluent pre-treatment plant prepared under a UNIDO subcontract. A survey was conducted on possible evacuation of stagnant pools in Kasur. Detailed advice was given to local counterparts on preparing documentation on 'built objects' (collection channels, final outfall) and restructuring of the Kasur Tannery Wastewater Management Authority to meet the requirements of operating the entire sewage and treatment system.

***Demonstration plant for oxygen pulping and bleaching of non-woody fibrous raw material - China***

Budget: \$1,994,500  
 Funded by: The Government of Germany

40. The development objective of this project is to assist in upgrading technology and modernizing small pulp and paper industries based on non-woody fibrous raw material in developing countries so as to reduce adverse effects on the environment. Laboratory studies in new pulping and bleaching methods have been carried out in

Germany and the United States. Based on the results, a demonstration plant using a totally chlorine-free bleaching sequence is under construction in the existing straw pulp mill in China and will start up by May 1998. An international workshop at the end of 1998 will disseminate the results to paper mills in China and other developing countries using non-wood raw material.

***Programme for ESID - Morocco***

Budget: \$454,500  
 Funded by: The Government of Belgium

41. The implementation of the second stage of this project is well advanced. Audits conducted in two textile companies and two leather finishing factories will result in total annual savings of \$300,000. On a cost-sharing basis with UNIDO, the Federation of Textiles embarked on an audit programme. Based on the findings, a simplified guideline for auditing textile enterprises will be produced. As part of an industry/environment-related action plan approved by the Government and UNIDO, an NCPC project was agreed upon. Also within the context of this action plan, funding has been approved by UNDP to study the establishment of a controlled landfill for the industrial zone of Casablanca-Mohammadia. The Federation of Chemical and Parachemical Industries of Morocco has agreed to co-finance the project.

***Industrial policy and the environment - Philippines***

Budget: \$80,800  
 Funded by: UNDP

42. The objective of this study is to assess the trade-offs between industrial and environmental policies in the Philippines as pursued over the past 20 years (1976-1996). One important issue being examined is how much the chosen industrial policies have increased the potential for industrial pollution. An equally important issue being examined is the extent to which environmental policies and management have been effective in mitigating the pollution potential generated by the industrial growth. The primary focus of the study is an empirical investigation of the interaction between industrial growth and environmental management in two provincial areas, Cavite and Cebu, that have experienced rapid industrial growth, particularly in the past ten years. The study will be concluded with recommendations on improving environmental policy and management to mitigate more effectively the pollution potential of accelerated industrial growth.

***Activities related to energy***

43. Within the framework of UNIDO's activities to support developing and transitional economies in the implementation of international protocols, agreements and conventions, a two-phase project has developed a UNIDO Industrial Development Energy Technology Investment Framework (IDENTIFY). This software-based toolkit assesses and identifies cost-benefit



scenarios for improving energy efficiency and mitigating industrial greenhouse gas emissions through the transfer of cleaner technologies and processes. The technology inventory contains a wide range of efficiency and fuel-switching measures covering technologies as well as processes. The database focuses on iron and steel, pulp and paper, cement, fertilizers and refining. In the context of the United Nations Framework Convention on Climate Change, IDENTIFY—with its Economic Analysis Tool and Industrial Technology Inventory—was recognized by the signatories as an important tool for assessing technologies for reducing industrial greenhouse gas emissions. More than 30 Governments and energy planning institutions are currently examining IDENTIFY software for potential use.

#### *Clean coal technologies*

44. The objective of this programme is to assist developing and transitional economies in efficient development and utilization of their coal resources to produce cleaner energy at lowest cost. This is to be achieved by rendering assistance to client countries in the identification and removal of barriers to the introduction, large-scale application and implementation of low-cost, commercially proven clean coal technologies.

45. UNIDO projects focus on the introduction and utilization of technologies known as clean coal technologies, which include a wide variety of systems/processes conceived during the past 35 years to enhance the use of coal. Today, these technologies are at various stages of development, ranging from technologies that are commercially available to those in the design and demonstration stages.

46. Activities under implementation, or in the pipeline in 1997, included a coal-fired circulating fluidized bed demonstration project in China, and the formulation of clean coal technology project proposals for the demonstration of an integrated gasification combined cycle technology in India; for establishing an international training centre for fluidized bed combustion and flue gas cleanup technologies in Slovakia; and for coal beneficiation projects in China, India and Viet Nam.

#### *Biomass energy*

47. UNIDO assists developing countries and countries with economies in transition to convert environmental and economic problems associated with increased energy usage into opportunities to develop and utilize their biomass energy resources. This objective is achieved by rendering assistance in identification, development and managed utilization of biomass energy resources. UNIDO has undertaken projects in charcoal production from agricultural wastes and biomass gasification in all regions in the past 10 years. More recently, activities have been focused on development of an umbrella-type biomass energy programme. As a first step towards

formulation of such a programme, UNIDO hosted a 1995 symposium on development and utilization of biomass energy resources in developing countries to promote and identify biomass energy technical assistance and investment projects. The proceedings of this symposium were published in 1997. As a result, a number of projects have been identified and two specific Global Environment Facility (GEF) proposals were formulated: (a) industrial biomass energy development in the Romanian wood products industry; and (b) energy conservation in the Indian rural unrefined sugar manufacturing industry.

48. Two climate-related GEF projects started in 1997. In China, UNIDO is introducing new energy-efficient technologies in four industries in the town and village enterprise sector. In Sri Lanka, private sector investment is being promoted in a mini and small hydropower, wind and biomass project.

#### *The Montreal Protocol programme*

49. In 1997, the Multilateral Fund of the Montreal Protocol approved for implementation by UNIDO 123 new projects in 39 countries valued at \$45 million to eliminate 7,294.46 potential tonnes each year of ozone-depleting substances. The sectors covered by these projects were aerosols, foam-blowing, refrigerants and solvents as well as a new field in which UNIDO has acquired an international leading role: elimination of the use of methyl bromide in a number of applications. In addition, a new project to assist the Government of Ukraine in the phase-out of ozone-depleting substances in refrigeration servicing was approved for negotiation under IDF financing.

50. During the course of 1997, 260 projects in 57 countries with a total value of \$112.7 million financed by the Multilateral Fund were under implementation. In addition, UNIDO cooperated with the Government of Austria using funds provided under the bilateral programme of the Montreal Protocol to implement a project in Romania.

51. In 1997, UNIDO completed 28 investment projects (excluding preparatory assistance and institutional strengthening projects) and partially completed two projects funded by the Multilateral Fund of the Montreal Protocol valued at nearly \$25 million which eliminated 2,415.45 ozone-depleting potential tonnes.

52. All three implementing agencies for investment projects (World Bank, UNDP, UNIDO) were evaluated by the Executive Committee of the Montreal Protocol on their 1996 performance. UNIDO had the best results in this evaluation based on cost-effectiveness of projects, speed of implementation, percentage rate of disbursement and percentage rate of phase-out of ozone-depleting substances.

53. Under the Montreal Protocol, UNIDO coordinated its activities very closely with the other three

implementing agencies: World Bank, UNDP and UNEP. UNIDO was particularly active in contributing to and participating in the regional workshops organized worldwide for Ozone Officers of Article 5 (developing) countries. In the bilateral programme, UNIDO worked closely with the Governments of Canada on methyl bromide, Germany primarily in the refrigeration sector and the United States on methyl bromide.

#### ***National Cleaner Production Centres programme***

54. The objective of the programme in 1997 was to continue operation of the existing centres under phases I and II and to prepare the platform for programme expansion in new countries. Throughout the year, work continued for the centres under phase I in Brazil, China, the Czech Republic, India, Mexico, Slovakia, the United Republic of Tanzania and Zimbabwe. Donors supporting the programme are the Governments of Austria, Brazil, the Netherlands, UNEP and UNIDO. Under phase II, assistance to Tunisia is financed by the Government of Norway. The centre for Hungary, financed by the Government of Austria, was inaugurated in May 1997.

55. New cleaner production activities started in Uzbekistan financed by Japan, and in Croatia financed by the Czech Republic. Preparatory work was undertaken to pave the way for cleaner production centres in Morocco and the Russian Federation. In Central America, a centre for Nicaragua is financed by the Government of Austria, while centres in Costa Rica, El Salvador, and Guatemala are under consideration for financing by the Government of Switzerland. In addition, approval in principle was received from the Swiss Development Corporation to establish a centre in Viet Nam.

56. Programme activities to integrate cleaner production and environmental management systems were initiated in the Czech Republic and Slovakia. The Annual Meeting of the NCPC programme took place in Bangkok in November in connection with the Asian roundtable on cleaner production and the cleaner production meeting of the Asian Productivity Organization.

#### **Completed projects**

##### ***Programme for ESID - Madagascar***

Budget: \$705,828

Funded by: The Government of Madagascar and the Industrial Development Decade for Africa

57. A complete monitoring system, comprising an environmental laboratory and a database, was established. Field operations for industrial pollution control and discharge monitoring are now running on a regular basis. A series of environmental audits were performed in several industrial sectors, including textile, pulp and paper, as well as industrial gas production and a petroleum refinery. Parliament adopted an umbrella law

for environmental protection that will pave the way for establishing and applying environmental norms and standards. To ensure sustainability of the programme, consultations for a follow-up project proposal are underway.

##### ***Regional Networking on Pesticides for Asia and the Pacific (RENAP)***

Budget: \$2,065,000

Funded by: UNDP

58. RENAP has expanded into a large programme and has technical coordinator units throughout the Asia and Pacific region. The main activities of RENAP are being implemented in a decentralized manner through these units, hosted by eight member countries. These units are the focal points of specialized operations of the network and play an important role in organizing training workshops/seminars/meetings in the following areas:

- User and environment-friendly pesticide formulation technology (India);
- Bio-pesticides and botanical pesticide development (China, Thailand);
- Pesticide application technology (Malaysia);
- Eco-toxicology (Pakistan);
- Industrial hygiene and occupational health safety (Philippines);
- Monitoring of pesticide residue in air, water and soil (Republic of Korea);
- Industrial safety, environment protection and effluent treatment and disposal (Indonesia);
- Development and use of computer software for pesticide market data input, storage, retrieval and dissemination (India, Thailand).

59. A pesticide database was developed under the RENAP programme supported by the Government of France under a project for development and use of computer software for pesticides market inputs, storage retrieval and dissemination.

60. The Tripartite Review and Project Management Committee meeting in November 1997 agreed that UNDP would continue its present system of support to the programme until December 1999, and approved the 1998-1999 work plan.

##### ***Expert group meeting on introducing new technologies for abatement of global mercury pollution from artisanal gold mining***

Budget: \$67,400

Funded by: The Government of Austria

61. This expert group meeting provided a forum for exchange of experiences among institutions, aid organizations and resource persons from developing countries on the environmental, social, technical, financial, legal and institutional aspects of artisanal gold

mining. While this subsector on the one hand causes severe environmental degradation and poses a threat to public health, at the same time it provides employment to several million people in rural and remote areas in developing countries. The fact that social, economic and technical issues affecting small-scale gold mining are inextricably linked makes it important that these aspects be considered together when assistance projects in small-scale mining are undertaken. Development agencies and other organizations should, therefore, ensure that their small-scale mining programmes are coordinated and complementary as far as possible. The following recommendations for organizations will be taken into account in future UNIDO activities:

- Coordinate efforts and programmes in small-scale mining;
- Endeavour to create synergies in activities with a view to establishing formal collaborative relationships;
- Establish mechanisms to exchange information and consult on small-scale mining activities of common interest;
- Identify programmes or projects that can be used as a testing ground for collaboration.

***Waste management and minimization for the city of Volzhsky - Russian Federation***

Budget: \$84,704

Funded by: UNDP

62. This project developed a technically and economically feasible strategy for the management and minimization of municipal and industrial solid wastes generated in Volzhsky, which is a typical industrial city with a population of approximately 600,000. Within one year of project completion, four of the companies reviewed had implemented most low-cost measures, with an average amortization period of three to five months. In the meantime, the municipal administration has requested that a cleaner production centre be established by UNIDO.

**3. Small and medium enterprises: Policies, networking and basic technical support**

63. The overall objective of UNIDO activities under this thematic priority is to contribute to creating a policy and institutional environment conducive to the development of competitive SMEs. In 1997, activities focused on developing policy instruments and support services for improving the access of SMEs to financial, human, information and technological resources to start new businesses and upgrade skills. Particular emphasis was placed on the development of innovative and competitive SMI clusters and effective networks of support services and institutions.

**New projects**

***Strategies to promote competitive and innovative SMI clusters/networks in Africa***

Budget: \$289,000

Funded by: The Industrial Development Decade for Africa

64. Within the framework of the high-impact programme on strategies to promote SMI-based clusters, this project aims at assisting a number of African countries to design and implement national SMI-based cluster programmes, with emphasis on public and private sector partnership. Participating countries include Benin, Cameroon, Côte d'Ivoire, Ghana, Guinea, Madagascar, Morocco, Senegal and Tunisia, with the selection based on the existence of SMI clusters with strong growth potential. In each country, a strategic framework and a national programme to promote and support SMI clusters and networks will be elaborated and a focal point and national team assigned. Based on an evaluation of the impact and lessons learned during the initial phase, support will be extended to other African countries. In 1997, strategic diagnoses of the SMI sector using the cluster approach were carried out in Côte d'Ivoire, Ghana, Morocco and Senegal. Workshops took place in Côte d'Ivoire and Morocco, and focal points were organized in Côte d'Ivoire and Ghana.

***Regional umbrella programme to support small and medium enterprise development***

Budget: \$2,263,900

Funded by: UNDP

65. Designed to support the development of small and medium-sized enterprises in Europe and CIS countries, this project provides services to other United Nations projects operating in the region, in six areas: national SMI project design; establishment of business development centres; advice on policy issues; microfinance programmes; support to women entrepreneurs; and training of local consultants for SMI restructuring. The project complements a number of national projects in Albania, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, the Republic of Moldova and Romania with the objective of developing business development centres and providing policy advice as well as exchanging experience and learning from respective national initiatives. About 12 countries are expected to join the regional programme. The national project providing support to SMI development in Kyrgyzstan was also initiated in 1997 with a dual objective: (a) to contribute to the creation of an enabling policy and regulatory environment to promote SMIs, and (b) to enhance the local consulting capacity to provide technical support services to SMIs.

***Enhancing competitiveness of agro-industrial SMEs in Mercosur***

Budget: \$69,000

Funded by: Industrial Development Fund

66. Under this project, a technical assistance cooperation programme designed to enhance the competitiveness of agro-industrial SMEs will be developed and presented to the Inter-American Development Bank for financing. The programme will be based on a study comprising a diagnosis of the current situation and a description of existing initiatives and programmes supporting SMEs.

***Establishment of an industrial subcontracting and partnership exchange in Mauritius***

Budget: \$200,000

Funded by: World Bank

67. Following a feasibility study carried out under IDDA/STAS, the World Bank agreed to finance this UNIDO project from its Institutional Development Fund. A bill for the creation of a subcontracting and partnership exchange (SPX) as a legally autonomous association (SUBEX-M) was presented to and approved by Parliament. On the occasion of the SUBEX fair—the first industrial subcontracting and partnership fair in Mauritius—SUBEX-M was officially launched. Under the guidance of an international team of experts, company audits and their registration in the SPX database are in progress, which will significantly promote industrial “matchmaking”.

**Ongoing projects*****UNIDO/Italy programme for small and medium enterprise development***

Budget: \$2,674,000

Funded by: The Government of Italy

68. Now in its second year of implementation, this global programme was further consolidated to support participating countries in formulating strategies and policies to promote SMI clusters and networks. Programme interventions are based on adapting Italian know-how and experience to the needs of recipient countries. In 1997, the programme was fully operational in India, where a UNIDO focal point has been promoting SMI development projects in four clusters (textile and food processing) in cooperation with Italian institutions. The focal point is increasingly recognized as the centre of excellence on cluster development issues, and is currently promoting a national cluster development programme, jointly with Indian public and private sector partners.

69. In Tunisia, cluster development projects are being implemented in textiles, leather and agro-industries. A national steering committee has been established to

monitor programme implementation and to discuss regulatory matters, such as legislation on export and credit consortia, based on the Italian experience.

***International business incubation systems***

Budget: \$619,000

Funded by: The Government of Italy

70. The objective of this project is to overcome lack of access to markets, know-how, information and finance by establishing international business incubation systems in selected developing countries. Within national business incubation systems, potential entrepreneurs are linked to information, expertise, partners and know-how from industrialized countries for creating innovative ventures. Project activities started in India and Tunisia, where several industrial sectors and institutions were identified. International experts from an Italian business incubation network will provide advice to the participating business incubation systems to strengthen the incubation support network and link Italian SMIs to potential entrepreneurs.

***Small and medium enterprise development and informal sector promotion - Lesotho***

Budget: \$2,007,575

Funded by: UNDP

71. The project aims at the creation of employment and income opportunities for Basotho people throughout the country. During 1997, the project facilitated consultations among the Ministry of Trade and Industry (MTI), public sector SMI promotion agencies and non-governmental organizations (NGOs) on measures to improve business environment through organizing workshops. MTI was assisted in the preparation of an SMI “white paper”. Training was conducted for officials of MTI, government development agencies and NGOs, and for MTI business advisers in rural highland districts. An NGO credit centre was established in cooperation with MTI, Women in Business, Lesotho Chambers of Commerce and Industry and Lesotho Council of NGOs as well as with the United Nations Capital Development Fund and the Irish Aid. The centre disbursed micro credit to 106 borrowers (60 women). NGO operators were trained in credit centre management and banking procedures. Training was conducted for 686 women entrepreneurs in entrepreneurship and business planning and 150 rural women in handicrafts. The project also supported the organization of an annual national micro- and small-scale industry products fair under private sector sponsorship.

72. The Government of Lesotho and UNDP decided to extend the project until the end of 1999 in line with the First Country Cooperation Framework 1997-2000 which aims at strengthening and consolidating development activities to promote sustainable human development for poverty elimination.

### Completed projects

#### *Assistance to the formulation of a programme of action for women entrepreneurs in the small-scale enterprise sector - Bolivia*

Budget: \$93,000

Funded by: The Government of the Netherlands

73. Under this project a detailed analysis of the prevailing situation of women entrepreneurs in Bolivia was carried out, the results of which are reflected in a publication. This report was supplemented by the publication of the results of a survey carried out in four cities (Santa Cruz, Cochabamba, El Alto-La Paz, Oruro). The analysis constituted the basis for the formulation of the Programme of Action for Women in small and micro productive enterprises, elaborated by a team of national and international experts. The Programme of Action was validated in a series of workshops that brought together representatives of the small enterprise sector and of private and public providers of services to the sector. The programme was published by the Subsecretaría de Asuntos de Género in September and is being presented to interested donors for consideration.

#### *Advisory support to the development of the small and medium enterprise sector in Swaziland*

Budget: \$78,000

Funded by: The Government of the Netherlands

74. Under this project a detailed diagnosis was carried out of the situation of the SMI sector, support infrastructure and policies. The diagnostic paper was circulated among stakeholders, including government authorities, public and private institutions, and representative associations, and discussed in two workshops and a number of smaller working groups. The resulting policies, programmes and action plans comprise the strategy, which became incorporated as an integral component of the National Development Strategy 1997-2022 and the shorter-term Economic and Social Reform Agenda coordinated by the Office of the Prime Minister. In the process of strategy formulation, the stakeholders formed themselves into a National Forum on SMI development to implement and monitor the strategy. The principle of ensuring national ownership of the strategy and of priority setting has been successfully adopted throughout this project.

#### *Organization of an international subcontracting and partnership fair for the Indian Ocean region - SUBEX-FAIR*

Budget: \$300,000

Funded by: UNDP, under a TSS-1 arrangement

75. The first session of the International Subcontracting and Partnership (SUBEX) Fair for the Indian Ocean

region was held in Mauritius, Rivière Noire, from 19 to 22 August. The first industrial fair ever organized in Mauritius, it counted 112 exhibitors from Comoros, France, India, Madagascar, Mauritius, Réunion, Seychelles, South Africa and Taiwan, with more than 2,000 business visitors.

### 4. Innovation, productivity and quality for international competitiveness

76. The globalization of industrial production and trade places new heightened competitive pressures on developing country institutions and enterprises. Increasingly, the determinants of competitiveness include the ability to source, distribute and network internationally, the flexibility and speed of the entire design, production and commercialization process, the ability to attain high levels of product quality and to produce with an efficient use of inputs. Systems of support to industrial competitiveness adopted in most, if not all, developed countries need also to be considered seriously by developing countries. Such support covers services by institutions specialized in technology management, including technology transfer and R and D, human resources development, information and data systems, venture capital financing, as well as metrology, standardization and testing, management and engineering consulting.

77. The concepts of productivity and quality are key components of many UNIDO projects, especially those dealing with human resources development where training in the appropriate selection of technical processes and equipment, as well as the formation of attitudes leading to competitive, quality-oriented production, are stressed.

#### New projects

#### *Promoting growth and employment through enhanced industrial competitiveness - Sri Lanka*

Budget: \$606,000

Funded by: UNDP

78. Improving enterprise competitiveness through restructuring is vital to government efforts to enhance industrial development, particularly with the capacity to promote new industrial ventures. This project will provide assistance in three key areas: (a) acquiring UNIDO methodology on industrial project preparation, evaluation and the application of COMFAR; (b) developing the national management consulting capability and specifically the methodology for enterprise restructuring; (c) improving the utilization of computer software for improved operations and management.

***Preparatory assistance to upgrade local capacity in quality, standardization, testing and metrology in selected LDCs in Africa and Asia***

Budget: \$262,000

Funded by: The Industrial Development Decade for Africa, Industrial Development Fund

79. The purpose of the project is to assess the existing physical, institutional and human capacities in quality, standardization, testing and metrology (QSTM) in Burkina Faso, Bangladesh, Cambodia, Cape Verde, Ethiopia, Gambia, Lao People's Democratic Republic, Lesotho, Malawi, Mali, Mauritania, Myanmar, Nepal, Niger and the United Republic of Tanzania. By identifying the priority needs of these LDCs and formulating country/subregional projects, the project will strengthen local capacity in QSTM. Enhancing awareness of quality and competitiveness is a further objective, as is sensitizing international actors to the specific problems of LDCs in QSTM. Progress in 1997 included the elaboration and approval of three project documents at workshops held for English- and French-speaking African LDCs and for Asian LDCs. In addition, national and international experts elaborated 15 country reports and three subregional reports.

***Quality assurance assistance - ISO 9000 - Syrian Arab Republic***

Budget: \$230,000

Funded by: UNDP

80. With the objective of building national capacity in quality management systems (ISO 9000), this project will assist the Government in developing an appropriate productivity policy and institutional structure for promoting quality in the industrial sector towards facilitating the development of an accreditation/certification system for the ISO 9000 standards. The project will also train assessors as well as trainers in quality-related subjects. Additionally, as a pilot study, the project will provide assistance in quality improvement to selected enterprises.

***Establishment of a hospital bio-medical engineering centre for repair and maintenance of medical equipment - Bosnia and Herzegovina***

Budget: \$881,000

Funded by: The Government of Japan through UNDP

81. The project aims at establishing at the Kosovo Hospital in Sarajevo a bio-medical engineering centre to develop various medical equipment repair services, calibration, maintenance, certification and technical support capabilities. Immediate and long-term technical assistance and development at other hospitals throughout the country will also be included. The centre is also expected to create technical expertise and a capability to assist the health care sector in developing efficient and

effective use of its resources, policies and long-term goals.

***Assistance to strengthen the Uganda National Bureau of Standards***

Budget: \$2,932,660

Funded by: UNDP

82. The Government is committed to improving the quality of Ugandan products and has identified the Uganda National Bureau of Standards (UNBS) as the main institution to achieve this. Hence, the project intends to strengthen the capacities and technical capabilities of UNBS to enable it to operate integrated activities on standardization, quality, assurance, testing, metrology and a modern documentation and information system for the benefit of all sectors of the economy. In particular, the project will promote the development of efficient and competitive industries geared towards the production of quality goods.

**Ongoing projects**

***Industrial restructuring and support for the creation of SMI 'spin-offs' - Algeria***

Budget: \$68,000

Funded by: UNDP

***Promising niches for industrial development - Tunisia***

Budget: \$56,000

Funded by: UNDP

83. The process of industrial restructuring is complex, and mastery of its economic and social aspects will condition the success of the restructuring process in developing countries. For Algeria, UNIDO provided technical support to the creation of spin-offs of small and medium-scale industries in the private sector. UNIDO was requested by Tunisia to assess the impact of an employment programme and to formulate a programme for human resources development, redeployment and social safety nets.

***Assistance to the Textile Research Centre - Argentina***

Budget: \$554,065

Funded by: Self-financed

84. UNIDO assistance was sought to improve the textile industry in Argentina by strengthening the consultancy capacity of the Textile Research Centre in San Martin. Particular assistance was required for the procurement of laboratory and auxiliary equipment, instruments and training. The initial trust fund agreement was increased in 1996 by an additional \$348,000 to further improve quality and increase the quantity of fabrics and garments produced by up-to-date, highly efficient methods. The Centre's dyeing and finishing unit will be strengthened to provide high-level training and technical assistance to the

Argentine textile and apparel industry in textile dyeing, printing and finishing and garment manufacture. By the year 2000, the Centre will be equipped with up-to-date dyeing, printing and finishing equipment, a computerized colour matching system and a CAD system.

***Application of modern technologies and management systems for the Brazilian textile and apparel industry (Phase II)***

Budget: \$1,829,188

Funded by: Self-financed

85. This self-financed trust fund project will, over a period of three years, improve the quality and increase the quantity of textile fabrics and garments produced in Brazil by up-to-date, highly efficient methods and equipment. As an institution-building project, it will strengthen SENAI/CETIQT (National Industrial Training Service/Technology Centre for Chemical and Textile Industries) in the following areas: (a) teaching advanced textile and garment technologies; (b) recognition of laboratories by the national and international accrediting organization; (c) product development of yarns, woven and knitted fabrics and prints; (d) educational informatics and production of high-level visual aids; (e) advanced sectoral information services; (f) promotion of improved industrial practices; and (g) promotion of the concept, techniques and implementation of electronic data exchange.

***Textile and Clothing Development Centre for the Syrian Arab Republic***

Budget: \$425,000

Funded by: UNDP

86. The project will assist in establishing a national centre for technology development for the textile and clothing industry. The centre will, in turn, provide training and services to Syrian producers in textile and clothing design, pattern design, grading, colour optimization, work study, cost analysis, marketing and information. Project sites have been established in Damascus and Aleppo. National staff have been recruited for both will receive extensive training in other countries beginning in 1998, after which highly sophisticated CAD/CAM equipment will be delivered.

***Privatization support programme - Yemen***

Budget: \$977,100

Funded by: UNDP

87. Broad-based privatization is considered an essential element of private sector development in Yemen, coupled with the creation of spin-off enterprises and entrepreneurship development. UNIDO continues to work in complementarity with the World Bank, with UNIDO activities focusing on institutional capacity-building. The project gained momentum in 1997 following elections and constitution of the new

parliament. Major events in 1997 included an awareness creation seminar for line ministries, selected consulting firms and other privatization practitioners. A second seminar, on valuation, was held in separate parts for government officials and national consulting firms. A post-privatization survey and assessment study of social implications of the process was completed to support decision-making on mitigation of social impact and other flanking measures. Future activities were coordinated in a joint meeting with UNDP and the World Bank.

***Support to the African Privatization Network***

Budget: \$135,700

Funded by: The Industrial Development Decade for Africa

88. Within the framework of assistance to privatization and enterprise restructuring, this project supports the African Privatization Network through a technical workshop on privatization through broad-based ownership schemes and a publication on the proceedings. The project is undertaken in cooperation with the World Bank and the Economic Commission for Africa. By enhancing the regular and widespread exchange of relevant experiences, know-how and information, and delivering key information services to practitioners, the Network enhances the dialogue among all stakeholders in the reform process—including government, private sector and labour.

**Completed projects**

***Strengthening the training capability of the Central Institute of Plastic Engineering and Technology (CIPET) - India***

Budget: \$716,766

Funded by: World Bank

89. Implemented as an integral part of a large-scale project, this segment aimed at the establishment of six specialized sub-centres located in various states of India. The overall project dealt with strengthening the technical and commercial capabilities of plastic-processing industries, represented mainly by small- and medium-sized enterprises. Under the UNIDO project, more than 50 specialists of CIPET were trained in leading specialized institutions and companies in Austria, Canada, Germany, Japan, the United Kingdom and the United States in the following fields: products and moulds computer-aided design, testing, quality control and quality certification of plastics products, plastics-processing technologies and machinery, polymer waste management and recycling, marketing of final products and technical services of CIPET. The project has greatly contributed to upgrading and expanding CIPET's technical capability to respond to manpower needs of small- and medium-sized private plastics processors, as well as to increased competitiveness of this industrial subsector in both local and foreign markets.

### *Company-wide quality control for industry development in Hungary*

Budget: \$261,059

Funded by: The Government of the United Kingdom

90. In 1990, the Hungarian Government adopted a resolution on the elaboration of a national quality policy. The establishment and continuous operation of a non-profit-oriented Hungarian Quality Development Centre for Industry and Trade was a major strategic objective of the policy. The Government of the United Kingdom established with UNIDO a special trust fund in 1990 for the transfer of British knowledge, experience and know-how to Hungary to facilitate the transfer from a centrally-planned to a market economy. The British approach to quality became the worldwide model for other Governments by 1990. Thus, the Hungarian demand met with British willingness to supply know-how in planning and implementing quality policies. The project has responded to a real demand. The Hungarian Quality Development Centre for Industry and Trade was established in 1994 and began to exercise a good impact on Hungarian industry and trade.

### *Pilot enterprise restructuring in Poland*

Budget: \$2,400,000

Funded by: United Kingdom Know-How Fund

91. Initiated in 1991, this project provided restructuring assistance to 20 medium-sized enterprises. Poland, which was one of the first economies in the region to undertake reform, faced the problem of transforming a large number of industrial enterprises from a command-driven to a market-oriented system. There was little prior know-how or experience in dealing with a transition problem of this magnitude. Seen as a pilot project, this activity targeted restructuring assistance to selected enterprises covering:

- Enterprise diagnosis and development of a restructuring plan;
- Management training programmes;
- National consulting capability development;
- Quality assurance

92. The project also monitored enterprise performance over the six-year period for changes in the employment structure, asset base and sales structure. A UNIDO publication on the project experience, as well as individual enterprise restructuring case studies, were prepared as lessons for other economies in transition.

### *Strategic business alliances*

93. Given the current competitive patterns in world markets, technological innovation, including technology transfer and new product development, has become a critical multi-organizational endeavour. Strategic business alliances (SBAs), based on joint innovative activity, two-way technology exchange or pooling of

knowledge-based resources, is one such form which has emerged as a powerful instrument for coping with escalating technology and R and D costs, for expanding into new markets and building world-class capabilities. Considering those needs, a guide for the planning, negotiation and management of strategic business alliances—particularly by high-tech enterprises in developing countries—was developed. The guide draws on the experience of selected developing countries and will provide managers of developing country enterprises with a road map for decision-making in the planning, formation, negotiation and management of SBAs. A preliminary draft was presented to a panel of experts and potential users in September during an expert group meeting convened at Hanoi, Viet Nam. The 29 participants from 13 countries reviewed and assessed the draft guide, which will be made available in the first half of 1998, with eight national presentations and subsequent benchmarking exercises in Brazil, Hungary, Indonesia, Malaysia, Mexico, Poland, the Russian Federation and Thailand, prior to the implementation of national programmes for the promotion of specific SBAs, jointly organized with national counterpart institutions.

### *Demonstration project on technology management*

94. Following the successful implementation in 1995 and 1996 of the "100 Innovative Businesses in Latin America and the Caribbean" programme, UNIDO launched in 1997 a similar programme, in six African countries (Egypt, Ethiopia, Ghana, Kenya, Mauritius, Zimbabwe), financed under IDDA funds. The main objectives were: (a) to find out how successful African industrial enterprises have been managing technological innovation; (b) to identify technologies they are able to offer on demand, to detect opportunities for partnerships and joint ventures through UNIDO Techmarts; (c) to promote the culture for innovation in enterprises; and (d) to build a private sector constituency for UNIDO. The data thus collected will serve as an input to the design of regional capacity-building programmes in technology management for sustained competitiveness, as well as for the preparation and dissemination of related publications and case studies. As an incentive for enterprises to participate and to provide access to their innovation management strategies, three prizes were awarded to the most innovative companies in the large, medium and small categories in each country. The first three national prize winners participated in a regional contest that took place in Mauritius in November, along with Techmart Africa '97, a workshop on technology management and an African Business Alliances Roundtable. Trophies and certificates were presented to the winners by the President of Mauritius. The programme has helped to create a culture for technological innovation for sustained competitiveness among the participating enterprises. In their statements at the national prize award ceremonies, the Ministers of Industry of the six countries expressed appreciation for this initiative of UNIDO and indicated their intention to continue the



programme as an annual event, with UNIDO assistance. A video covering the event is available.

### **Restructuring R and D centres**

95. Background work related to the restructuring of industrial technology R and D institutions was carried out and a programme concept submitted to a number of countries interested in the revitalization of their R and D establishment.

96. The first demonstration project was implemented in the Russian Federation, which focused on reviewing the existing strategy capabilities of two large state research centres and on recommendations for improvement and follow-up actions to be undertaken within the context of economic restructuring. The results were discussed at a national seminar in St. Petersburg, Russian Federation, in June, with senior managers of some 50 state research centres and local industrialists. An integrated follow-up programme will aim at strengthening national capacity in commercialization of R and D, including investment promotion and information services, and building up business partnerships within and beyond the country for sustainable competitiveness.

## **5. Industrial information, investment and technology promotion**

97. The effective promotion and absorption of industrial investment and technology flows is an important determinant of growth. The past decade has seen major increases in flows of investment and technology from developed to developing countries and countries with economies in transition. However, there are great disparities between regions in the magnitude of such flows. Many developing countries lack information on technological opportunities as well as the human resources to handle the technology transfer process effectively. This is important, as competition is becoming increasingly technology-driven. To assist developing countries in this area, UNIDO offers support at the policy, institution and enterprise levels. Training is fundamental to assistance at all three levels. By combining investment, technology and information elements, UNIDO is able to offer an integrated package of services to countries seeking to establish international partnerships for industrial growth and competitiveness. The eventual aim is to establish a network, with UNIDO at its hub, of information and promotion services that will facilitate investment and technology flows to developing countries and countries with economies in transition. The South-South dimension is also an important aspect of numerous activities carried out within this thematic priority. This is illustrated not only in some of the following projects, but also in chapter III.C.

### **New projects**

#### ***Regional business development centres - Bosnia and Herzegovina***

Budget: \$483,000  
Funded by: UNDP

98. The purpose of this project is to provide assistance to the private sector, in particular to small and medium enterprises and potential entrepreneurs in identifying investment opportunities, appraising options, preparing business plans and applying for available credit. Regional investment units are to be established in the Chambers of Economy of Bihac, Travnik/Zenica and Banja Luka. The project is intended to complement similar efforts underway through USAID and the World Bank, with Bosnia Consulting and the German Agency for Technical Cooperation as facilitators, by extending coverage to other regions of the country. Discussions have started to promote nation-wide chambers of commerce.

#### ***Investment promotion programme for Lebanon***

Budget: \$151,600  
Funded by: The Government of Saudi Arabia

99. While confidence among Lebanese nationals in government reconstruction efforts has increased, current information on conditions and on specific investment opportunities is still required to attract private investment. UNIDO has been requested to organize an investment forum to carry out an intensive promotion campaign to inform foreign investors about Lebanon as a re-opened location for business. The effectiveness of UNIDO investment forums in post-conflict areas was fully acknowledged when an investment forum for Viet Nam was organized in the early 1990s. The forum is expected to accelerate the dynamism of the private sector, which is contributing considerably to the country's economic recovery.

#### ***Preparatory assistance for launching the Cartagena Intechmart, and the textile/garment components in the Atlantic coast region - Colombia***

Budget: \$50,000  
Funded by: UNIDO

100. This project is a direct result of the establishment by UNIDO of the Regional Investment, Information and Technology Centre (CRIIT) within the Chamber of Commerce and Industry in Cartagena in March 1997 and the interest shown by the private sector in the Atlantic coast region of Colombia. Focusing on training and project formulation activities, the project became operational in December, with a view to paving the way for the self-financed project for 'Intechmart Cartagena 1998'. These activities will further strengthen CRIIT's

structure and its regional local investment promotion network and, through a follow-up project expected to be approved in 1998, provide assistance in the organization of the Intechmart at Cartagena, scheduled for 7 to 9 June 1998. The enhanced capacity of CRIIT will expand its role as an international business centre and its ability to mobilize foreign investment resources needed by entrepreneurs in the area.

***Development of investment promotion unit at the Saudi Consulting House***

Budget: \$310,788

Funded by: The Government of Saudi Arabia

101. This UNIDO project—the first of its kind in Arab countries—will establish an investment promotion unit at the Saudi Consulting House to provide assistance to foreign and national investors. Services to be provided by the Unit will include: (a) identification and formulation of investment projects in Saudi Arabia and their promotion through the UNIDO IPS network; (b) promotion of investment opportunities in developing countries among Saudi business circles; (c) assistance to Saudi investors in negotiation and finalization of business agreements and implementation of investment projects; and (d) provision of information to international business circles on the country's investment climate. The investment promotion unit will be the focal point for UNIDO investment promotion activities in Saudi Arabia and will be linked to the UNIDO IPS network. A key component is the training of staff in the UNIDO investment promotion methodology and its tools. As a new approach to stimulate foreign investment, the project has attracted the interest of neighboring countries.

***Integrated programme for business partnership/investment opportunities in the agro-food sectors***

Budget: \$1,803,600

Funded by: The Government of France

102. This programme aims at the promotion of investment and technology flows to agro-food enterprises in selected developing countries, utilizing UNIDO's substantive methodologies and resources. The programme will offer private agro-food enterprises the opportunity to acquire expertise in quality and continuous improvement for industrial competitiveness, based on the UNIDO quality approach. In close cooperation with groups of agro-food enterprises, business partnerships and investment opportunities will be identified, formulated and promoted to potential foreign suppliers of technology, operators and investors, utilizing tools and methodologies developed by UNIDO. Initially, the programme will support the agro-food sectors in Brazil, Indonesia, Malaysia and the Philippines. The strategy will also encourage French agro-food enterprises to enter into industrial partnerships with counterparts in selected developing countries.

***Preparatory assistance: industrial cooperation between LDCs in the greater Mekong subregion and Asian investing countries***

Budget: \$65,500

Funded by: UNIDO

103. In its preparatory phase, this activity will define the framework and context for developing investment in the countries of the greater Mekong subregion, with special focus on LDCs. A programming mission undertaken in 1997 served as the cornerstone of this project by analysis of trends, data, business opportunities, existing investment flows, structure, strategies and present activities of investment promotion agencies. Based on the results of the ongoing assessment, a full-fledged integrated programme to increase foreign investment resources flows to the target LDCs will be prepared. The integrated programme covering investment promotion and industrial capacity-building is expected to be financed by UNDP and other donors. Phase I envisages the improvement of the image and image-building capabilities of the target countries as investment sites. Phase II will aim at promoting strategic business opportunities through concrete business collaborations to increase the flow of foreign direct investment from Asian countries.

**Ongoing projects**

***Integrated investment promotion programme for Papua New Guinea***

Budget: \$441,231

Funded by: The Government of Papua New Guinea

104. Diversification of Papua New Guinea's industrial base is the objective of this project. Over 50 project profiles, to be prepared following extensive field work, will be promoted in target markets. To improve the prospects for successful matchmaking, a series of well-targeted promotion tours will be undertaken by counterpart staff to key overseas markets, with a focus on Australia, New Zealand and Southeast Asia. Achievements in 1997 included the training of counterpart staff and national experts in project identification, appraisal and profiling issues. Twenty project profiles were completed, and work commenced on a further 38. The first tour in the series, focusing on wood- and fish-processing industries, was conducted in Australia, Belgium, Canada, the United Kingdom and the United States.

***Strengthening the Algerian Investment Promotion Agency***

Budget: \$673,150

Funded by: The Government of Algeria, UNDP

105. Following earlier assistance in reforming the Algerian investment framework, UNIDO developed a two-year integrated project to assist and strengthen the

Algerian Investment Promotion Agency in investment promotion, information networking and technology transfer. The project had a number of achievements in 1997. The Algerian Investment Promotion Agency was strengthened, following a study of its internal structures. A workshop was conducted on PROPSPIN (Project Profile Screening and Pre-appraisal Information System) and COMFAR (UNIDO Computer Model for Feasibility Analysis and Reporting). Two seminars on build-operate-transfer (BOT) resulted in the development of a new BOT project financed by UNDP (\$460,000). An information and networking workshop also generated a BOT project for UNDP financing (\$150,000), now being elaborated. Some 100 investment projects were identified for promotion through delegates in UNIDO IPS offices. An Algerian delegate is already located at IPS Seoul for a period of three months. Study tours were organized to the Investment Promotion Agency of Malaysia, to the second Round Table of African Investment Promotion Agencies in Ghana in May and to UNIDO Headquarters. Studies have been prepared on the establishment of a free trade zone and on improving the investment climate in Algeria.

#### ***Techmart programme***

106. As illustrated in the description of the 1997 Intechmarts held in India (para. 115 below), the Techmart programme continues to be an effective instrument to promote flows of technology to developing countries and support technology transaction among suppliers and recipients. Closer interlinkages between investment promotion and technology promotion activities were one of the creative elements of 1997 Intechmarts at Bangalore, India, and at Salvador da Bahia, Brazil. During the Bahia Intechmart, local project sponsors interested in technology acquisition from foreign companies were given information on potential foreign business partners and briefed on the role played by UNIDO in promoting projects.

107. Techmart Africa '97, at Grand Bay, Mauritius, with 170 participants from 24 countries, resulted in the signature of 25 letters of intent. The event was conducted in conjunction with the Regional Prize Award for Innovative African Enterprises and a workshop on technology management and African business alliances. Subsequently, the Common Market for Eastern and Southern Africa (COMESA) requested UNIDO assistance in organizing future Techmarts.

108. A Techmart at Minas Gerais, Brazil, was rewarding both for UNIDO and the counterpart organization, the Federation of Industries of the State of Minas Gerais (FIEMG). Attended by 58 foreign participants with technology offers, the event involved some 500 meetings with 39 national technology-seekers and generated serious business intentions amounting to an estimated value of \$100 million. Perhaps even more important is the fact that the Techmart brought to the business

community of Minas Gerais, and to supporting institutions, an awareness of the importance of technology and technological innovation as a strategic element for competitiveness and survival. With this in mind, FIEMG announced its commitment to support similar events on an annual basis until the year 2000.

109. To facilitate the organization and monitoring of Techmarts, a multiple-user version of the "Forum Management System" (FOMAS) software was developed and made available to counterparts. The software also covers preparatory and post-event activities.

#### ***Build-operate-transfer (BOT) programme***

110. BOT-related assistance involves various UNIDO services, including investment promotion, technology policy and transfer, industrial policy, feasibility studies, engineering, sectoral development and environmental protection. UNIDO assistance concentrates primarily on the introductory phase of the BOT strategy in the host country, in the pre-investment phase of projects, and in the evaluation and certification of critical steps during the implementation of BOT strategy and projects. The UNIDO BOT guidelines were a 1997 bestseller, and strong demand was shown for UNIDO support in BOT arrangements.

111. In China, UNIDO is cooperating with the State Planning Commission in formulating regulations and establishing standard concession agreements for BOT projects in the road, power and water sectors. In 1997 UNIDO assisted the Government in the bidding process for the Changsha A power plant and the Shengdu water treatment plant.

112. In Ecuador, UNIDO assisted the national electricity utility to apply the BOT mechanism for power generation, including the construction of hydro-power plants. This included bidding documents and evaluation, as well as on-the-job training of a team of national experts to be in charge of future BOT projects.

113. BOT-related activities were also carried out in African countries. UNIDO cooperated with the Ministry of Finance of Mauritius in the establishment of a BOT office, the development of pilot projects and the strengthening of local consultancy capacities. As described in paragraph 105 above, the project for strengthening the Algerian Investment Promotion Agency resulted in two BOT projects financed by UNDP.

#### **Completed projects**

##### ***Subregional programme to mobilize investment resources for the creation or rehabilitation of SMIs - Regional Africa***

Budget: \$293,443

Funded by: Agence de la Francophonie, the Industrial Development Decade for Africa

114. Focusing on small and medium industries in selected least developed countries in Africa, this project mobilized resources for enterprise creation or rehabilitation. In its second phase, the project supported 60 enterprises in four countries, with combined employment of more than 300. Loans totaling \$65,650 were secured for enterprises in Burkina Faso, \$76,000 in Guinea, \$183,000 in Guinea-Bissau and \$115,100 in Mali. Further development of this approach under multi-fund projects will target 14 French-speaking LDCs in Africa.

***Investment and technology promotion initiative - India (promotion of industrial cooperation between companies from India and developed/developing countries)***

Budget: \$1,326,676

Funded by: The Government of India and UNDP

115. UNIDO's investment and technology promotion activities in India are characterized by a strong element of South-South cooperation, the integration of investment and technology components, considerable funding support from the Indian private sector and an increasing subsectoral and regional orientation. The investment and technology promotion initiative became functional in June 1996 and works as a window to launch varied forms of business cooperation between companies in India and abroad. In 1997, three Intechmarts were organized under the umbrella programme as the main matchmaking events:

***Bangalore, 19-22 March (first regional Intechmart in India):***

- Financed by the Indian contribution to IDF
- Representation from 19 developing countries
- Three specific components (inward investment flows, inward and outward technology flow, technology components)
- \$100,000 funding provided by counterpart agencies, including Small Industries Development Bank of India
- Over 4,000 business meetings held, 60 letters of intent signed (\$300 million total value)

***Calcutta, 15-17 March (leather goods sector):***

- UNDP-financed
- 39 projects promoted with \$33.3 million investment potential
- 419 business meetings, 24 letters of intent signed

***Khajuraho, for Madhya Pradesh, 10-12 December***

- Financed by Indian contribution to IDF
- Participation of 235 companies from 21 countries
- 400 business meetings held, 47 letters of intent with \$2 billion investment potential

## 6. Rural industrial development

116. For most developing countries, sustainable rural industrial development is a key to overall socio-economic development, social equity and, particularly, poverty alleviation. In many developing countries, especially LDCs, the majority of the population still lives in rural areas and is heavily dependent on agro-based productive activities. It is essential to support rural industrial development in a coherent and comprehensive manner, with targeted interventions at the policy, institutional and enterprise levels, paying attention simultaneously to sustainability and gender issues. It is also important, through regional development activities, to support economic integration between rural areas and urban centres. Much of the work in this area was oriented towards creating supportive, autonomous institutions such as regional industrial development agencies that can stimulate local interaction and networking among enterprises and provide access to market information and know-how that the individual entrepreneur or small enterprise cannot afford on its own.

117. UNIDO actively participated in the new ACC Network on Rural Development and Food Security in response to the need to bring an increased technical orientation to activities in this field. UNIDO contributes to the provision of basic human needs through activities aimed at increasing the processing of agricultural products into food, leather footwear and garments, textiles and clothing, furniture and shelter as well as physical infrastructure in the form of buildings and civil works.

### New projects

***Promotion of rural off-farm employment and income-generating activities - Nigeria***

Budget: \$552,500

Funded by: UNDP

118. Developed within the framework of government efforts to alleviate poverty and enhance food security, this training programme for women entrepreneurs is based on the recognition that 80 per cent of rural women in Nigeria are engaged in food processing for household consumption and income generation. The training programme developed by UNIDO for women entrepreneurs in food processing provides women with the technical and managerial skills needed to establish and operate a small-scale enterprise. Trainees will acquire business skills, will be trained on environmentally sound, labour-saving equipment and will be linked to credit schemes to enable them to acquire such equipment. Follow-up services will also be featured. Training will be initiated in eight states, with possible expansion of the programme to other areas at a later stage.

***Product and market development for sisal and henequen - Regional Africa***

Budget: \$2,248,957

Funded by: Common Fund for Commodities

***Abaca - Improvement of fibre extraction and identification of higher yielding varieties - Ecuador and the Philippines***

Budget: \$741,240

Funded by: Common Fund for Commodities

***Product and market development of sisal and henequen - Kenya and United Republic of Tanzania***

Budget: \$3,014,233

Funded by: Common Fund for Commodities, the Government of Belgium and the Industrial Development Decade for Africa

119. These projects are examples of activities developed by UNIDO—all within the framework of projects for rural industrial development or linking industry with agriculture—with Common Fund for Commodities (CFC) financing. Established following the adoption of the UNCTAD integrated programme for commodities, CFC has been operational since 1989. CFC-financed projects aim at improving the position of a specific commodity or the structure of a specific international commodity market. Emphasis is placed on the need of African countries to diversify their primary commodities, and of LDCs and economies in transition for marketing measures.

120. The project for regional Africa is complemented by activities funded by the Government of Belgium and the Industrial Development Decade for Africa and contains a strong emphasis on environmental considerations. Its main components include: (a) development of new sisal varieties and improvement of sisal cultivation and processing; (b) valorization of sisal wastes for the production of new products; (c) research and development in sisal leaf processing into pulpable fibre, and pilot production of pulpable fibre and sisal pulp; and (d) market study and trials for sisal pulp.

121. In Ecuador and the Philippines, the project aims at the design, production and testing of improved fibre extraction equipment, exchange and field trials of high-yield and disease-resistant abaca varieties. Results will be disseminated at the national level in both countries as well as internationally through publications and workshops.

122. The main objectives of the project in Kenya and the United Republic of Tanzania are to develop new end-uses for sisal and henequen; to evaluate the market potential for newly-developed products; and to put a marketing strategy into place. The technologies developed and market information generated will be disseminated to promote commercial adoption. The project seeks to improve production and processing

techniques for sisal leaves and boles, to valorize the current unused process wastes, to carry out pilot production of pulpable fibre, and to test market the new sisal fibres and pulps. The project has several components: (a) introduction of new sisal varieties and improvement of production and process practices; (b) conversion of currently unused process wastes and unused plant materials into valuable products; (c) research, development and pilot operations in sisal leaf- and bole- processing into pulpable fibre and sisal pulp; (d) market study and trials for the new products; and (e) technology dissemination and investment promotion.

**Ongoing projects*****Rehabilitation of wood-processing capacity in the Huambo region of Angola***

Budget: \$171,000

Funded by: The Swiss Humanitarian Aid Agency

123. Requested by the Swiss Humanitarian Aid Agency and approved in 1996 to prepare for the return of economic activity and to support the creation of propitious conditions for peace in the important Huambo area, the project saw considerable progress in 1997. Working closely with the Swiss Agency, missions were undertaken to plan and carry out the repair and commissioning of a cooperative workshop, to organize the production of wood and metal parts for a bridge, and launch it some 15 kilometers from town. Return missions are planned for 1998 to introduce other structural applications and consolidate bridge production capability. This is the first of several projects that will link rural communities with economic activities in the region, thereby contributing to the stabilization process.

***Strengthening the handmade paper industry in India***

Budget: \$711,278

Funded by: UNDP

124. This project assists the handmade paper industry in India to produce high quality handmade paper and board by establishing a centre with a testing laboratory and demonstration plant. By experimenting with new raw materials, processes and technologies, and by formulating a marketing strategy, sales in domestic and export markets will be enhanced. The centre has been operational since 1995. An in-depth evaluation carried out in 1997 concluded that the project positively contributed to productivity enhancement, to the development of a new breed of entrepreneurs, and to poverty alleviation. It has advanced social development, including that of women. The past five-year sector analysis indicates that production has increased by 75 per cent, employment has increased by 33 per cent (of which 35 per cent are women), and papermaking units have increased by 35 per cent. Relative earnings increased by 12.8 per cent in the same period. Women's participation increased from 12 to 25 per cent of the total workforce.

Many manufacturing units have become 100 per cent export-oriented, and exports have increased more than a thousand-fold, primarily due to developed economies. The objective of a related project—also under implementation by UNIDO—is the production of specialty paper equivalent to international grades based on jute/kenaf fibre available in India.

***Promotion and development of small-scale industries in the Cabo Delgado, Niassa and Nampula provinces of Mozambique***

Budget: \$1,002,499

Funded by: The Governments of the Netherlands, Norway and Sweden

125. One aim of this project is to enhance employment opportunities for rural women and demobilized soldiers. In 1997, the focus was on improving sustainability of the Institute for Local Development in technical, managerial and financial terms. Specific technical and managerial training programmes were conducted for Institute staff to improve the quality of support services, establish linkages with other organizations and generate income to cover operating expenses. Some 1,300 entrepreneurs and workers have received management and technical training and advice. Of these, more than 20 per cent were women and over 30 per cent demobilized soldiers. Almost 190 business plans were prepared for financing, of which more than one-third have been approved to date.

**Completed projects**

***Industry modernization programme for the food-processing sector in the former Yugoslav Republic of Macedonia***

Budget: \$88,000

Funded by: The Government of Japan

126. Following a mission of the Government of Japan to the former Yugoslav Republic of Macedonia, the food-processing industry was identified as a top priority area for bilateral assistance. Under the UNIDO project, a field survey undertaken to evaluate the present condition of the subsector involved multi- and bilateral aspects. The project report contained recommendations to the Government of Japan as well as to the Government of the former Yugoslav Republic of Macedonia, focusing primarily on the need to develop a master policy for revitalization of food-processing industries. Thus, the project's principal achievement is expected to be an overall strategic vision for the development of the subsector supported by bilateral financing, for which a mission is planned by the Japanese Government in 1998.

***Process and product development centre for essential oils in Kannauj, India***

Budget: \$632,000

Funded by: UNDP

127. Prior to the approval of this project in 1990, productivity and quality problems in the essential oil and perfumery industry of the rural Kannauj area were obstacles to the competitiveness of local products in domestic and international markets. The project established a flavour and fragrance development centre with well-equipped laboratories and extensive training programmes, resulting in a vast improvement in quality, quantity and competitiveness. The centre is currently in the process of obtaining ISO 9000 certification. Local cultivation of plants was also enhanced, thereby improving the quality of life for many farmers. Noting the varied successful aspects of the project, UNDP has expressed strong interest in an additional phase to promote activities at the national level in a development programme for essential oils.

***Design of an integrated development programme for the wooden furniture industrial system in Ecuador***

Budget: \$182,226

Funded by: The Government of Belgium

128. Within the context of efforts for a self-sustaining wood sector in Ecuador, this project contributed to socio-economic and environmental development by increasing exports and supporting the technical, commercial and economic consolidation of companies. A \$18.5 million programme was formulated with sub-projects covering forestry, industrial processing and training and marketing. This brought to the attention of the many stakeholders the importance of a comprehensive and coordinated approach to development of the sector, linking industry with sustainable forestry. This resulted in the creation of the "Executive Council for the Ecuadorian Wood Industry" (CEEIMA) joining the three public and main private sector bodies concerned in May 1997.

***Rural income opportunities - Thailand***

Budget: \$178,065

Funded by: UNDP

129. This project was part of a joint UNDP/ILO/FAO/UNIDO effort to support a government programme to improve income opportunities of the rural poor in the northeastern region of Thailand—a focus of rural poverty. UNIDO developed a programme to improve the marketing and design of handicrafts produced by some 1,000 families and trained staff of all provincial offices of the Ministry of Industry. The village-based subcontracting scheme developed by UNIDO for improvement of family income is being implemented throughout the country. UNIDO's contribution also improved the handicraft design and marketing capacity of the Northeastern Industrial Promotion Centre as well as the outsourcing of several service functions.

## 7. Africa and the least developed countries: Linking industry with agriculture

130. This is the only thematic priority with a geographic focus. It encompasses a variety of sectoral and subsectoral activities aimed at enhancing agricultural production and increasing the competitiveness of agro-based industries. The emphasis on linking industry with agriculture is in line with the current predominance of the agricultural sector in the economies of African and least developed countries, as well as the potential long-term international competitive advantage for these countries in agro-based products, the multiple forward and backward linkages between the industrial and agricultural sectors and the potential impact of these linkages on poverty alleviation, employment and income generation.

### New projects

#### *Promotion of the traditional textile industry in West Africa - Creation of a regional tissuthèque in Mali*

Budget: \$237,527

Funded by: The Government of Japan

Budget: \$142,500

Funded by: The Industrial Development Decade for Africa

131. The purpose of these two projects is to initiate the steps required for the establishment of a regional tissuthèque with the aim of developing and promoting traditional textiles in West Africa. Activities in 1997 were covered by IDDA financing, and will continue in 1998 under a project funded by Japan. The tissuthèque will be a national institution based in Mali, with a regional dimension, at a suitable location already provided by the Ministry of Industry and Artisans. A steering committee has been formed for monitoring and managing the institution, for which equipment and a laboratory have been purchased. National project staff have been recruited to commence with the collection of samples.

#### *Farm implements and agricultural machinery programme - Côte d'Ivoire, Ethiopia, Kenya*

Budget: \$186,000

Funded by: The Industrial Development Decade for Africa, Industrial Development Fund

132. The fundamental premise behind this programme is that if the link between industry and agriculture is to be a valid one, the industrial element must have a measurable impact on agricultural productivity and food security. The programme concentrates on the design and manufacture of farm implements and agricultural machinery. Particular emphasis will be placed on draught animal technology and manual or non-powered equipment, especially for rural areas where access to

power is limited. Sustainability will be ensured through training and the demand-driven nature of the programme, in which the private sector will be the primary stakeholder. In addition to Côte d'Ivoire, Ethiopia and Kenya—for which projects have been approved—the programme will initially cover Mozambique and Zambia. Expansion into other countries will follow on a gradual and systematic basis depending on available resources.

#### *Agro-related industrial development in Africa (TICAD II)*

Budget: \$23,800

Funded by: The Industrial Development Decade for Africa

133. In support of UNIDO's continued efforts to create a suitable framework for agro-related industrial development in Africa, this project will build on the initiative of the sponsors of the Tokyo International Conference on African Development (TICAD). The Government of Japan, the Global Coalition for Africa, the United Nations Special Coordinator for Africa and the Least Developed Countries, UNDP, the Food and Agriculture Organization of the United Nations and the International Fund for Agricultural Development were the organizers of TICAD I in 1993, and preparations are now under way for TICAD II in October 1998. In this context, a workshop held in Vienna in October 1997—as a basis for the coordination of UNIDO's input to TICAD II—arranged consultations in collaboration with the United Nations Coordinator for Africa and the Least Developed Countries to exchange African and Asian experiences and set the stage for an Inter-Agency Task Force to operationalize the strategies proposed.

#### *Application of quality principles to the food-processing sector in seven sub-Saharan countries - Regional Africa*

Budget: \$2,045,000

Funded by: The Government of Germany

134. This project will assist Ethiopia, Kenya, Malawi, Uganda, United Republic of Tanzania, Zambia and Zimbabwe in building up local and regional capacities for technical support to enterprises in the food-processing sector willing to improve their product and service quality. In line with the principles of the UNIDO quality programme, the systems-wide approach will be applied to continuously improve every aspect of the production process to achieve higher levels of product and service quality while simultaneously driving down costs. In 1997, focal persons were identified and national consultants recruited, all of whom were briefed on project activities, including implementation of a survey. Following analysis of the survey results, the UNIDO methodology for quality improvement will be

implemented with the involvement of the national counterparts and selected pilot enterprises.

### Ongoing projects

#### *Urgent assistance to the fishing industry in Mauritania*

Budget: \$180,604

Funded by: The Industrial Development Decade for Africa

135. Aimed at the introduction of a quality assurance system known as hazard analysis and critical control points (HACCP), this project facilitates access of Mauritania's fish products to international markets. In 1997, inspection and quality control services were approved by the European Union. Strengthening of the institutional capacity continues, particularly to improve laboratory practices. Eleven fish-processing plants finalized their HACCP manuals and are under technical audit.

#### *Development of prototype mobile seed dressing applicators suitable for African countries*

Budget: \$762,000

Funded by: The Government of Germany

136. The proposed expansion of this programme to include other African countries was one result of the 1996 seminar held at Arusha, United Republic of Tanzania. As reported in the 1996 Annual Report, the meeting generated considerable interest in prototype mobile seed dressing applicators, which had also been displayed in many exhibitions in Africa. Hence, a related follow-up proposal has been developed for user- and environment-friendly technology to assist small- and medium-scale farmers in LDCs and low-income economies in Africa in protecting their crops from pest damage.

#### *Regional Africa leather and footwear industry scheme*

Budget: \$5,063,178

Funded by: The Governments of Austria, Czech Republic, Germany, Italy and Switzerland

137. Now in its second phase, this project was active in many aspects in 1997. Leather and leather products associations became key actors in developing and implementing strategies for the sector. Support was provided to selected tanneries, footwear and leather goods factories to enhance their capacity to manufacture products for international markets. In Kenya, for example, Sana Shoe's successful "out-of-Africa-look" sandals will receive assistance to provide acceptable quality and quantity for European markets. In its environment protection component, the project addresses pollution control linked to tannery effluents. Training continued to be provided by the Training Production Centre for the Shoe Industry, which also provided extension services to local footwear manufacturers.

Important contacts were established with the Italian Tanners Association, and two main events were held in 1997: (a) participation of staff from 20 tanneries in the Linea Pelle Fair, Bologna, Italy, in May; and (b) for the first time, representatives from the leather industry in all African countries were invited to participate in the trade fair-cum seminar "Africa Leather" at Johannesburg, South Africa, in December.

#### *Promotion of the textile industry in Mali and Guinea*

Budget: \$379,000

Funded by: The Government of Japan

138. The project aims are to train artisans/entrepreneurs and improve product quality and design of handicraft textile products to facilitate access to international markets and to develop entrepreneurship at the regional level. In 1997, a two-week seminar in Mali provided practical training to artisans in hand weaving of traditional textiles. Continuous training covered entrepreneurial skills, micro-enterprise management and market access. A study tour was organized for five national staff from Mali and Guinea to handicraft institutions in Germany and France and to make arrangements for an exhibition in 1998. A noted interior architecture company was visited and orders are expected for hand-woven, hand-painted and printed upholstery material. Associations were formed in nine different regions in Mali and Guinea with more than 100 artisans.

### Completed projects

#### *National Africa Leather and Footwear Industry Scheme - Ethiopia*

Budget: \$350,397

Funded by: The Government of Switzerland

139. Thanks to the introduction of modern working practices and management control of the production process, this project realized major success in outputs related to footwear and leather product development. This enhanced the quality of shoes produced and increased their competitiveness in international markets. Training in leather goods technology and manufacture was a further component in support of the project's contribution to sustaining high-quality production. Pollution control covering two tanneries was also examined, with the expectation of another project covering additional tanneries.

#### *Promotion and development of agro-related metalworking industries in Asian and Pacific LDCs (Phase II)*

Budget: \$529,000

Funded by: The Government of Germany

140. The Special Programme for the Industrial Development of Asia and Pacific launched in 1989



focused on agro-related metal-working and food-processing industries as industrial subsectors supporting the vital agricultural sector of LDCs in the region. Training—a key project component—was designed to upgrade the blacksmithing skills of participants to become blacksmith trainers as well as to provide basic training in the operation and maintenance of agricultural machinery. National Focal Points in Bhutan, Cambodia, Lao People's Democratic Republic, Myanmar, Nepal and Western Samoa were responsible for follow-up activities. In consultation with provincial administration authorities, the Focal Points organized provincial training programmes in blacksmithing. The trainers selected in each country will be assigned to conduct the provincial courses according to a comprehensive syllabus provided by UNIDO. Bhutan has already convened provincial training courses in remote villages.

141. Another main component aimed at catalyzing the development of agro-related food-processing industries and strengthening the capabilities of small- and medium-scale metal-working industries in fabricating related machinery. A technology transfer package for a hammer mill was supplied to each participating country for local production. The equipment was manufactured and delivered by the African Regional Centre for Engineering, Design and Manufacturing (ARCEDEM), a UNIDO-sponsored intergovernmental institution located in Ibadan, Nigeria. This component was carried out in Bhutan, Cambodia, Lao People's Democratic Republic and Myanmar.

### **C. Economic and technical cooperation among developing countries**

142. Among the sample projects described in their thematic context in the preceding section, many contain activities in support of economic and technical cooperation among developing countries (ECDC/TCDC). The following paragraphs provide a brief overview of selected activities with major ECDC/TCDC elements. The projects described reflect the careful consideration given to the selection of strategies and development of programmes for ECDC/TCDC within the context of the growing economic and industrial diversity among groups of developing countries in the various regions.

143. To support the establishment of an effective information network in the countries of Central America, a project was approved to examine the information and development needs of business communities. Another programme sought to enhance agro-industrial SME competitiveness in Mercosur. In August, UNIDO co-sponsored a high-level ministerial meeting in Venezuela for Latin American countries, which focused on the industrial development of the region and the role of the private sector with particular reference to labour organizations.

144. In cooperation with the World Bank, UNIDO developed a joint programme on strengthening and revitalizing the African privatization network for the regular and widespread exchange of experiences, know-how and information, and an improved dialogue among government, private sector and labour organizations. This joint initiative reflects the special support given by both UNIDO and the World Bank to the Alliance for Africa's Industrialization.

145. UNIDO's investment programme facilitates the accelerated flow of investment and technology among developing countries. This is evidenced by the growing number of industrial entrepreneurs from developing countries who participate in UNIDO investment forums and Intechmarts. Typically, a more accurate assessment of the impact of these events can be made in the year following their initiation. For example, the Rajin-Sonbong Zone international investment and business forum held in September 1996 in the Democratic People's Republic of Korea led to the conclusion of nine contracts (\$285 million) and the signing of 29 memoranda of understanding (\$834 million) and 10 letters of intent (\$747 million) by the close of 1997, a significant number of which relate to activities with other developing countries. Several developing countries in Latin America and the Caribbean as well as from Asia and Europe were represented at the Techmart held at Belo Horizonte, Brazil, in December. One outcome reported by the Ministry for Science and Technology of Slovenia was the negotiation and conclusion of an agreement on scientific and technical cooperation between Brazil and Slovenia. Moreover, each of the 20 Slovenian enterprises that participated held intense meetings with Brazilian companies, with encouraging results that are likely to yield concrete developments in 1998.

146. Two IDDA supplementary activities initiated in 1997 and continuing in 1998 include an important South-South dimension. To promote the transfer to selected African cities of existing expertise in Rio de Janeiro, Brazil, in the planning of investment, technology and information activities in urban areas, a partnership development programme meeting took place in Rio de Janeiro from 10 to 13 November. It was attended by 12 representatives of cities in Africa (including six LDCs), delegates placed in IPS Paris from four African countries, and two African telecommunications specialists. The meeting provided an opportunity to exchange information and experience on major topics of interest, such as urban development, technology transfer, investment promotion, employment creation, training activities and cleaner production, within a South-South conceptual framework. The meeting resulted in 66 agreements for cooperation projects for selected African cities in the following sectors: waste treatment, low-cost housing, agro-industry, health and telecommunications. Follow-up activities will involve the monitoring of

specific arrangements and presentation of selected projects to the African Development Bank.

147. Two integrated programmes for African cities in investment, technology and industrial information also feature subsequent mobilization of financial resources. With the aim of assisting cities in Africa in their endeavours to establish an appropriate infrastructure, the project will also alleviate poverty and create new jobs. A basis will be provided for negotiation with financing institutions and multilateral and bilateral donors on the implementation of integrated investment, technology and industrial information initiatives. The programme for English-speaking countries in Africa was initiated with a meeting for 60 mayors at Nairobi, held from 14 to 16 October, for which a preliminary portfolio of projects was prepared. During the meeting 71 projects were formulated or reformulated to ensure their suitability for presentation to the international donor community and financial institutions in 1998. This exercise involved the African Development Bank to ensure that a joint programme could be elaborated. Plans are being initiated for similar activities in 1998 for francophone countries in Africa, with special emphasis on LDCs.

148. In the UNIDO delegates programme, there is scope for South-South cooperation by placing a delegate from one developing country in a commercial centre of another. Considerable financial support has been received from a number of sources for this programme, with a number of donors expressing interest in financing delegates placed in developing countries. In 1997, a delegate from the United Republic of Tanzania was placed in the UNIDO Investment Technology Promotion Initiative office in New Delhi. An innovation during the year resulted from a specific request from the Government of Zambia for the placement of a delegate in South Africa. Under IDDA funds, UNIDO arranged for a Zambian delegate to be hosted by the Afrikaans Handels Institute in Pretoria. As IPS offices or Investment and Promotion Units are opened in developing countries, the ECDC/TCDC dimension will increase.

149. To attract and promote investment resources from emerging Asian investing countries for the greater Mekong subregion countries, especially LDCs, a preparatory assistance proposal was approved. This preparatory assistance targets Cambodia, Lao People's Democratic Republic and Myanmar, and includes Malaysia, Singapore and Thailand as donors. The project will analyze trends, data, sectoral business opportunities, as well as strengths and weaknesses, and is expected to lead to the development of a full-fledged project for increasing foreign investment resource flows to LDCs in the subregion.

150. In 1996, a project financially supported by Japan to transfer Philippine investment know-how to Kyrgyzstan initiated a "triangular" concept, designed to involve the participation of developed countries in UNIDO

ECDC/TCDC activities on a cost-sharing basis. This co-sponsoring approach continued in 1997, again with welcome support from Japan, for a meeting held in Vienna in October to promote agro-related industrial cooperation between African and Asian countries.

151. To enable selected African countries to benefit from successful experiences of newly industrializing countries (NICs), a project was approved that will use UNIDO systematic analysis to explore the possibilities of replicating the success of agro-related industries in NICs. This project will assist in elaborating concrete measures towards creating the requisite preconditions and capacity-building for efficient manufacturing in selected African countries. A programme was also implemented to promote exchange of experiences between Chinese and Indian policy-makers and industrial entrepreneurs in the development of rural industries. The implementation of this project facilitates promotion of business partnerships.

152. More industrialized developing countries are functioning as major providers of industrial technology and information for South-South cooperation. During the year, a workshop held in India aimed at disseminating technology and know-how in bioactivity screening and evaluation of medicinal plants. Turkey hosted a training programme on the industrial processing of medicinal and aromatic herbs to upgrade the knowledge and skill of pharmacists and chemists from African countries and LDCs from other regions. As part of the preparatory assistance for the global network of ecotoxicology centres for developing countries, UNIDO collaborated with the Society of Environmental Toxicology and Chemistry of the Republic of Korea to organize a workshop for 1998 to identify problems and regional strategies for the safe management of chemicals of ecological concern.

153. An expert group meeting co-sponsored with the League of Arab States brought together participants from 14 Arab countries, including two LDCs, at Cairo in November. The 20 participants shared experiences relating to technical approaches and national capacities for industrial statistics and made plans to intensify cooperation among participating countries.

#### **D. Human resources development**

154. Industrial human resources development (IHRD)—as a special consideration cutting across thematic priorities—continued to represent an important feature of nearly all UNIDO programmes. Thus, practically all substantive divisions carried out IHRD activities in one form or another. These activities covered a broad range of sector-specific and thematic areas responding directly to the concerns of Member States, with particular emphasis on industrial policies, institutional support, investment and environment. Other areas included training of trainers, managers, entrepreneurs and technicians, with particular attention to the needs of

SMEs and the integration of women in industrial development.

155. In direct support to developing countries—particularly LDCs—and countries with economies in transition, more than 350 UNIDO projects carried out in 1997 were directly related to IHRD. Those activities related in particular to capacity-building at the policy, institutional and enterprise level through on-the-job training, individual fellowships, study tours and group training programmes.

#### *Strategy and policy advice*

156. National authorities in the United Republic of Tanzania were assisted in the formulation and execution of a UNDP-financed SPPD (ex-TSS-1) project on assessment of IHRD requirements of basic and priority industrial sectors, with emphasis on food-processing and engineering industries. A policy-level workshop held at Dar es Salaam discussed the project results and adopted a set of recommendations addressed to the Government, the private sector and IHRD institutions. Follow-up activities have been incorporated in a private sector programme to be financed by UNDP.

157. Also under SPPD, assistance was provided to the Zimbabwe Industrial Development Corporation (IDC) in developing a policy and strategy for IHRD capacity-building. Based on a presentation of project results, a set of specific recommendations were adopted by chief executives of IDC group companies, and implementation of some of these recommendations has begun. Project proposals for SPPD financing were formulated for Angola, Botswana, Cameroon, Chad, Gabon, Gambia, Ghana, Kenya, Lesotho, Nigeria and Uganda.

158. Preparatory work was carried out to develop an integrated IHRD programme for Africa, to be funded by a special-purpose contribution to IDA from the Islamic Republic of Iran. A preparatory mission was undertaken to define the parameters of this programme and the modalities of its implementation. In Bahrain, preparatory assistance was given to the Government in the development of a programme to improve the competitiveness and productivity of SMEs. The programme contributed to the assessment of the demand for and supply of skilled labour in the plastics industry.

159. In the Libyan Arab Jamahiriya, a sustainable human resources development programme for the industrial sector was approved and its implementation launched. On the basis of the Industrial Human Resources Diagnosis and Reorientation Map (IHRD-ROM) and other instruments developed by UNIDO, the project will assist the national authorities to assess IHRD requirements for the industrial sector and apply an integrated approach to developing local capabilities as well as upgrade the technological and managerial skills

of the Libyan workforce with special emphasis on entrepreneurial capabilities.

#### *Institutional support*

160. In the Czech Republic, the assistance provided to the Institute Rozvoje Podnikani was completed. A job training and outplacement centre was established to support labour market restructuring in the Ostrava region. The Institute assisted companies in the process of right-sizing as a result of the privatization process. This involved an integration of the total strategy requirements for an enterprise, including human resources, production and marketing, financial and growth strategies, all designed to meet a defined return on investment. Two training sessions were conducted on right-sizing and a study tour to England visited companies undergoing similar processes. Follow-up assistance is being promoted to develop a consultancy methodology, including a comprehensive software tool and a method for business process modeling for the Institute with the assistance of the Business Development Institute of Ostrava.

161. In Togo, assistance was extended to the national authorities to formulate an integrated programme on human resources development for free zones, which was submitted to UNDP for consideration and funding. In this context a study tour was organized to Austria, Kenya, Mauritius and Nigeria for the new Director-General of the free zones to define an integrated approach for their development and promotion.

162. Technical cooperation continued with the Democratic People's Republic of Korea through a project on international economic cooperation, featuring a major IHRD component. Focusing on training of trainers, the aim is to establish a critical mass of competent staff in the institutions responsible for the initial operation of the economic free trade zone.

#### *Special training programmes*

163. With the support of the Government of Japan a technology management and industrial training seminar was implemented in cooperation with a Tokyo training centre. Seven participants from Asian countries were exposed to advanced Japanese managerial methods and experiences in industrial and technological policies, research and development. UNIDO's contribution included the provision of training methodology and inputs on international practices in technology management.

164. With the financial support of the Hungarian voluntary contribution, another training programme on maintenance of bio-medical equipment was, as in previous years, carried out in Budapest. Eleven experts from African countries increased their understanding of the concept of bio-medical engineering and gained practical experience in maintenance testing and fault diagnosis of computer equipment. Advanced multimedia

training techniques and technology were introduced for the production—for the first time in UNIDO—of CD-ROM based software to supplement substantive training material, along with a special manual and related training for the use of CD-ROM.

165. The application of a comprehensive training and capacity-building strategy and networking to sustain the businesses of women entrepreneurs and to contribute to their growth potential was continued through the integrated training programme for women's entrepreneurship development in the food-processing sector. Project sustainability and commercialization is the ultimate aim of this technical cooperation. Implementation of the pilot programme in the United Republic of Tanzania was completed with the training of trainers and women entrepreneurs in the food-processing business. Training was provided to approximately 200 women entrepreneurs in the upgraded technical and managerial aspects of food-processing enterprises. Additional training was provided to 90 trainers in marketing skills and quality management. In Togo, based on the training needs assessment carried out by a national expert, a programme for the training of women entrepreneurs was developed in close cooperation with UNDP and ILO to strengthen the capabilities and capacities of women entrepreneurs in agro-food processing.

166. The programme was also implemented in Guatemala, Honduras and Nicaragua, where it provided trainers and women entrepreneurs with the basic skills required to establish and operate small-scale production units in the food-processing subsector. The first phase was undertaken on a pilot basis, with training material developed in Spanish, and the training of 40 trainers and 70 women entrepreneurs. The second phase was launched, aiming at consolidating the capacity-building activities implemented during the first phase. In addition to 90 trainers, it is estimated that some 200 women entrepreneurs will be trained in each country.

167. As a follow-up to the five-day workshop on railway transport systems held in cooperation with the Swiss authorities, a second needs assessment survey was carried out. Another workshop scheduled for May 1998 will focus on specific aspects of the railway system in the participants' countries. In cooperation with the Government of Turkey, UNIDO organized group training programmes in selected industrial subsectors, covering utilization of medicinal and aromatic plants, industrial pollution assessment and control, and cotton textiles. Among the achievements of the programme was the development of networking and the establishment of business contacts.

#### *Operational instruments*

168. Development and refinement of the IHRD operational instruments was continued. The IHRD-ROM was further refined and applied in the United Republic of

Tanzania and Zimbabwe. The users manual initiated in 1996 was updated in the light of actual experience in its field application. Requests were received for the application of the Graduate Resources Integration Programme (GRIP) from a number of countries, as were the services of the Global Learning Opportunities for Business Education cum Industrial Networking (GLOBE-IN). Significant efforts were devoted to keeping these instruments up to date.

169. An innovative project was initiated on the strengthening of the HRD component in technical cooperation activities through the development of multimedia training tools. The project will develop and produce interactive CDs for training and promotion of high priority UNIDO activities. A pilot project initiated for the production of such a CD for the cleaner production programme is designed to encourage small and medium industry owners/operators to apply income-generating cleaner production procedures in their enterprises.

#### *Cooperation and networking*

170. In addition to collaboration within the framework of specific technical cooperation projects, UNIDO cooperated with other United Nations organizations, multi- and bilateral development agencies, IGOs and NGOs by participating in and contributing to a number of conferences dealing with IHRD issues. These included the International Conference on Technological Education and National Development (April, Abu Dhabi), the Conference on the Formulation of National Strategies and Regional Cooperation for Higher Education for the 21st Century (July, Tokyo), and the International Symposium on Engineering Education 1997 (September, Klagenfurt, Austria).

171. In cooperation with the Umea International Centre for Human Resources Development at Umea, Sweden, UNIDO convened a symposium on international cooperation in human capital formation for industry, which brought together representatives of bilateral development agencies, United Nations agencies and organizations, international financial institutions as well as individual experts from developed and developing countries. The symposium examined pertinent issues of international cooperation in IHRD for the coming years, reviewed trends, experiences and emerging challenges of IHRD, and identified new concepts and approaches for international cooperation. The recommendations of the Symposium played an important role in refining the new orientation of the UNIDO IHRD programme.

#### **E. Integration of women in industrial development**

172. Within the framework of its Plan of Action developed as a follow-up to the Fourth World Conference on Women, UNIDO continued its support to

enhance the role of women in industrialization. While mainstreaming gender considerations was pursued at all stages of programme and project formulation and implementation, emphasis was placed more on technical cooperation projects. Gender mainstreaming was supported substantively through the implementation of women-specific programmes and projects—particularly the high-impact programme for women's entrepreneurship development—and through policy advice to Governments in the form of an integrated programme for the promotion of women's participation in the manufacturing sector. Furthermore, UNIDO actively contributed to various meetings at inter-agency, governmental and NGO levels where the issue of gender mainstreaming was examined. Priority was given to entrepreneurship and managerial skills development for small-scale businesses. Inter-agency cooperation was facilitated both for the substantive project activities and co-financing. While geographical emphasis focused mainly on Africa, programmes were developed in Latin America and in countries with economies in transition.

#### *Implementation of gender-mainstreaming strategies*

173. Gender mainstreaming is one of the key priorities to be addressed at the United Nations Commission on the Status of Women within the framework of the mid-term review of the implementation of the Beijing Platform for Action in 1998. System-wide efforts to accelerate gender mainstreaming were called for by resolution 52/195 on women in development adopted by the United Nations General Assembly. The resolution specifically requests the United Nations system to support developing countries to integrate gender concerns into national programmes and to implement those programmes. In that context, UNIDO plays a key role in the integration of gender concerns into sustainable industrial development.

174. The attachment of women-in-development experts to project formulation missions to Central America enhanced the integration of gender considerations in the development of rural, micro- and small-scale industries. In Guatemala, as a result of participation in a TSS-1 project on evaluation for industrial decentralization in three departments of the country, a project proposal was formulated on capacity-building for promotion of micro- and small-scale industry development in Huehuetenango Department. Similar activities with a strong gender component to address the needs of rural poor, including women, were proposed for rural industry in Honduras.

175. Addressing the issue of gender and environment, a training component on gender was prepared for an environmentally sustainable industrial development training package. This can be used within the package or as an independent training kit on gender and environment.

#### *Development and implementation of women-specific projects and programmes*

176. A global analysis of the participation of women in manufacturing applied a specifically developed UNIDO methodology and database. A total of 102 countries—using 19 of the most influential social, economic and political indicators that are available—were grouped according to patterns of women's participation in industry. Major challenges and development strategies were identified for 10 clusters of countries.

177. At the level of national policy advice and strategy development, efforts continued to apply the results of the regional analysis on the participation of women in manufacturing in Latin America and the Caribbean to selected countries. Following on from the 1996 initiative developed for Colombia, a new activity was elaborated aimed at defining an integrated national programme to increase the role of women in industry-related activities in Argentina, Brazil and Chile. It is foreseen that subregional strategies will be identified that could be applicable to all Mercosur countries.

178. The high-impact programme on women's entrepreneurship development was further promoted in Africa, with needs assessment missions carried out in Côte d'Ivoire (textiles and agro-food) and Zimbabwe (agro-food). In Viet Nam, the final stage of the training programme for women entrepreneurs in the food-processing industry featured a pilot course followed by four provincial courses. Major achievements included the production of an adapted training manual with business management and food technology training, the creation of a network of trainers within various institutions, and cooperation with the United Nations Development Fund for Women (UNIFEM), United Nations Children's Fund (UNICEF), the University of Hanoi and the Free University of Brussels for validation of training materials. Based on the success of the first phase, a request was made to continue the project, and a draft project document for the second phase is under negotiation with UNDP.

179. In India, UNIDO worked closely with UNDP and ITC in support of nation-wide, trade-related entrepreneurship development for women. A national programme document was prepared including various proposals and concepts contributed by UNIDO. Consequently, UNIDO is entrusted with the implementation of activities related to product development focusing on food, leather, non-wood forest products and spices to increase the value added in these subsectors.

180. At the request of the Government of Togo and in cooperation with UNDP, a programme formulation mission was undertaken for support to women entrepreneurs. A draft programme for the establishment

of credit and financing schemes, particularly for small-scale business operation, was discussed with the African Development Bank within the scope of its loan scheme to Togo.

181. In China, the project for the development of managerial skills for women managers in township and village enterprises came to its final stage with the finalization of the model training package providing extensive training for instructors to conduct the programme at the provincial level.

182. Preparatory assistance in the Russian Federation will strengthen the capacity of women entrepreneurs to participate in market economy-oriented business activities. In response to a request from the city and district of Marx/Saratov, a mission was dispatched at the close of the year which identified areas for collaboration in testing UNIDO approaches for small- and medium-scale business development.

183. Requests continue to be received for the introduction of multi-purpose trailer platforms, the technology for which was developed for the pilot project on food-processing and related equipment for rural women in sub-Saharan Africa. In response to the demand, UNIDO, in cooperation with the International Fund for Agricultural Development (IFAD), prepared a guide for the preparation, installation, management and operation of the platforms. Consolidating various lessons learned from the pilot phase in Burkina Faso and Mali, the project will assist UNIDO and IFAD in developing the programme in other countries. In that connection, a preparatory assistance project was jointly formulated

with, and for co-financing by, IFAD for the introduction of platforms in Benin, Ghana, Nigeria, Senegal and Togo.

#### *Inter-agency cooperation and interaction with NGOs*

184. UNIDO participated actively in the deliberations of the ACC Inter-Agency Committee on Women and Gender Equality (UN IACWGE) and the United Nations Commission on the Status of Women. The UNIDO input related to strategic objectives and action in critical areas of the Platform for Action, Women and Economy as linked to UNIDO mandates. For the issue on gender mainstreaming, UNIDO participated in a workshop on gender mainstreaming organized by the Division for the Advancement of Women, the OECD/DAC WID Expert Group and UN IACWGE. The meeting identified challenges and best practices for gender mainstreaming in bilateral and multilateral organizations.

185. UNIDO attended the seventh session of the Regional Conference on the Integration of Women into the Economic and Social Development of Latin America and the Caribbean organized by the Economic Commission for Latin America and the Caribbean. In presenting its recent activities in the region, UNIDO outlined its contribution to the Regional Programme of Action for the Women of Latin America and the Caribbean, 1995-2001. UNIDO was called upon to contribute lectures and presentations at other international forums, including a seminar organized by the Swiss Development Cooperation on the promotion of female entrepreneurship, and an international conference on industrial human capital formation at Umea, Sweden.



## CHAPTER IV

### UNIDO AS A GLOBAL FORUM FOR INDUSTRIAL DEVELOPMENT

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#### A. Conceptual introduction

1. For developing countries and countries with economies in transition, failure to meet formal and informal international conventions, norms and regulations in the social and environmental context is often a barrier to entering or successfully competing in global markets for industry. In 1995, UNIDO consolidated activities in its function as a global forum for industrial development. Details of the global forum concept were provided in the annual reports for 1995 and 1996, and progress achieved in 1997 is recorded below.

2. As part of its responsibilities under the global forum function, in October, UNIDO actively participated in the work for a major conference on new partnerships for social cohesion convened by the Danish Government at Copenhagen that brought together industrialists and public sector representatives. UNIDO participated in the "think tank" formed by the Ministry of Social Affairs and was a member of the international group of experts in charge of preparing the documentation. UNIDO also organized a joint working session with the International Labour Organization on perspectives for developing countries and countries with economies in transition.

#### *UNIDO seal of accreditation*

3. The publication of the International Organization for Standardization (ISO) 9000 series in 1987 heralded a new era of harmonization of industry quality management on an international scale. The adoption of ISO 9000 series standards by many countries and institutions has resulted in a rapid improvement in quality capability in a large number of commercial and industrial organizations. Today, the critical issue is to ensure that certification schemes are compatible and mutually accepted across frontiers.

4. The process of setting up accreditation schemes could affect trade and business opportunities for those

countries not yet prepared to develop a mutual recognition agreement at regional and international levels. For countries with limited financial resources, the lack of certificates enjoying wide international recognition and the high cost to entrepreneurs of international certification represent major obstacles to success in the global marketplace. Thus, a clear need emerges for developing countries to establish agreements for mutual recognition of certificates. Against this background, ISO established the Quality System Assurance Recognition programme in 1987. With its complex requirements, the programme has proven too costly for developing countries and economies in transition. In addition, the International Accreditation Forum (IAF) has issued policies and procedures for the establishment of the Multilateral Recognition Agreement (MLA) for the ISO 9000 and ISO 14000 series of standards (Environmental Management Systems).

5. As a consequence, UNIDO has been approached by many countries to promote wider participation by developing countries and countries with economies in transition in international trade. At the ISO General Conference in September 1996, UNIDO presented a concept for accreditation schemes and for identifying a joint operation procedure. In September 1997, a programme of cooperation between UNIDO, ISO and IAF—the UNIDO Seal for Accreditation Schemes—was signed for implementing the scheme for pre-audit of accreditation bodies. The scheme aims at assisting developing countries and countries with economies in transition in fulfilling the requirements of IAF for the signature of MLA, with ISO participating in upgrading the capacities of the required human resources, and UNIDO carrying out the pre-audits to assess conformity.

#### *Guidelines for industrial science and technology parks*

6. In the international arena, science and technology parks have become stimuli for innovation through linking



manufacturing to scientific know-how. While the direct employment and output effects are limited, it is primarily the enhanced linkage between business, research and industry and the attraction of high-tech investment that can activate a regional development process. The underlying conceptual framework for the establishment of science and technology parks has been developed within the framework of a UNIDO-financed project (specifically dealt with in chapter III.B, thematic priority 1), which has resulted in the elaboration of analytical tools, training packages and competence development programmes, as well as a system for certification of the parks. Work will continue to incorporate all the information into a 'tool box' on science and technology parks in the form of printed materials. The applicability of the tool box will also be tested in a number of pilot cases and seminars, which will help to facilitate wider promotion of the service package to potential clients.

#### ***Performance norms and benchmarks for industrial processes***

7. A generic methodology for assessing the environmental and social performance of industrial enterprises was developed and tested in three countries (India, Indonesia, Zimbabwe). The methodology combines concepts from the life cycle approach to assessing industrial processes, benchmarking and social auditing. The initial application has been completed for nine textile dyeing and printing firms in the sample countries. The firms were familiarized with the methodology by local counterparts from the Confederation of Indian Industries, the Institute for Research and Development of the Textile Industry in Indonesia, and the National Cleaner Production Centre in Zimbabwe. Based on the information collected, a report on the assessment of environmental and social parameters in the nine companies is currently being finalized.

8. A software package containing a comprehensive knowledge-base of international, national and corporate codes of practice relating to environmental norms and standards for the textile sector has been elaborated for finalization in early 1998. The knowledge-base also contains a list of all major eco-labeling schemes for the textile sector. The software has been developed to enable firms to compare their performance against international, corporate and national norms, standards and eco-labels. At the same time, it provides the user with technical and managerial options for improvement in the event that environmental and social requirements are not met. This self-assessment tool also allows companies to benchmark their performance against each other as well as against international or multinational corporate standards. The tool is particularly useful for companies that either operate in or are thinking of entering the export market. The system has been designed for easy adaptation for use in other industrial sectors.

## **B. Industrial statistics**

9. In the international distribution of statistical work recommended by the United Nations Statistical Commission, UNIDO assumes full responsibility for collection, verification and dissemination of industrial statistics for all countries that are not members of the Organisation for Economic Cooperation and Development (OECD). Under this arrangement, UNIDO coordinates closely with OECD, which is responsible for the development of statistics from its member countries, to ensure a global coverage of industrial statistics. In 1997, UNIDO carried out the third round of the annual collection of detailed industrial statistics from 174 developing countries.

10. The statistics collected are data related to an aggregate of firms in widely diverse national contexts. The data are reported to UNIDO in a form that adheres in some measure to international conventions, yet retains significant idiosyncratic features. UNIDO thus assumes the task of lending global credibility to data marked by national characteristics and placing them in a harmonized context that permits international comparability. OECD does the same on its part and, once merged, the two data sets provide a world view of industry in figures.

11. Using the database thus created, UNIDO developed information products tailored to the needs of its clients that require global statistics. Three major UNIDO industrial statistics databases are sold for secondary dissemination and final users or are exchanged for data from national sources: these cover industrial statistics at the four- and three-digit level of the International Standard Industrial Classification (ISIC) codes and industrial demand-supply balances. In 1997, 205 copies of the various UNIDO databases were supplied to international brokers such as the World Bank, the World Trade Organization and OECD, national entities such as ministries of trade and industry, private commercial companies such as marketing firms or commercial departments of industrial enterprises, private non-profit entities such as research companies, and academic institutions.

12. In 1997, a selection of tables comprising national and regional statistical indicators compiled by UNIDO became available on the Internet for the first time, and the foundation for disseminating database products on CD-ROM was established.

13. In the context of its global forum function, UNIDO is responsible for publishing a recurrent publication, *The International Yearbook of Industrial Statistics*. The 1997 edition, issued by a commercial publisher, presented statistics and derived indicators for over 100 countries as well as for a number of selected country groups.

14. UNIDO also provided a Windows version of NISP (National Industrial Statistics Programme) software to

national users through technical cooperation programmes. NISP is used for data collection, tabulation and dissemination of statistics created by UNIDO. It is fitted with all the standard features and procedures internationally recommended for processing industrial statistics. Thus, when NISP is adopted by data producers, it will significantly enhance the global circulation of data.

15. Besides generating global information, UNIDO also contributes to the establishment of international standards and norms in the field of industrial statistics. The value of statistics greatly depends on international comparability, which in turn depends on universal acceptance of conventions. UNIDO maintains day-to-day contacts with more than 100 national statistical offices and several international organizations. As a member of the Statistical Commission and its Task Force on Industrial and Construction Statistics and Working Group on International Statistical Programmes and Coordination, the ACC Subcommittee on Statistical Activities, and the International Statistical Institute, UNIDO participated in five international meetings on international coordination and related activities in the course of the year. In addition, in cooperation with the League of Arab States, UNIDO held an expert group meeting with representatives from national statistical offices in Arab countries. UNIDO presented two papers on the production and use of industrial statistics in developing countries.

16. UNIDO contributes to a system-wide programme on indicators of sustainable development, in which it has the role of lead agency for the industry-related component. During 1997, UNIDO began to work on the development of a system of industrial development indicators. When completed in 1998 this work will assist developing countries in monitoring the results of their industrialization initiatives and provide a framework for comparing levels and types of industrialization across countries and over time.

17. Closely related to its statistical activities, UNIDO contributes to the global exchange of ideas through a programme of research and publications. Statistical publications prepared in 1997 are described in chapter IV.D.

### C. Industrial information

18. The Information Networking for Technology, Investment and Business (INTIB) activities carried out were directed mainly at strengthening the national capabilities and capacities of developing countries and countries with economies in transition to meet the information and support service needs of small and medium enterprises (SMEs) through the efficient use of networking and modern information and communication technologies (ICTs). This strategy was supported by the INTIB Advisory Group Meeting held in May.

19. Information support was also given to the investment and technology promotion programme and other substantive programmes throughout UNIDO, such as the National Cleaner Production Centres network, particularly through the effective use of ICTs such as the Internet.

20. In line with UNIDO's emphasis on the African region and least developed countries (LDCs), capacity-building activities were conducted for six African countries to increase their capabilities in accessing and exchanging industrial information to facilitate enhanced industrial investment and business opportunities using the Internet. A similar project for another five African countries was approved under Japanese funding for implementation in 1997-1998. Needs assessments studies have already been carried out in 18 LDCs in sub-Saharan Africa and 14 full-fledged project documents are currently under review by UNDP for possible financing.

21. In the Asia and Pacific region, assessment studies were carried out in nine least developed and low-income countries, resulting in the development of full-fledged projects. Project documents for several countries have already been finalized and were presented at a regional meeting on information and networking, held at Colombo, Sri Lanka, in November, with participants from eight LDCs and low-income countries. The meeting provided an excellent opportunity for participants to have a first-hand look at a project developed and successfully implemented by UNIDO in Sri Lanka for a national industrial technology and market information network to provide sustainable support to businesses, particularly SMEs. Two of the projects presented are being positively considered for funding by UNDP.

22. In the Arab region, project formulation missions were carried out for Egypt and the Syrian Arab Republic, resulting in a project for a networking programme for 15 Arab countries: preparatory assistance for the establishment of effective national information networks and a regional Arab business network (stage I).

23. In Latin America and the Caribbean, projects are underway in Bolivia and Peru, and needs assessments are being carried out in Colombia, Cuba and Central America. These have resulted in the formulation of proposals for discussions with counterpart organizations and potential donors. Similar needs assessment studies will be conducted in early 1998 covering the Caribbean region, including small island developing countries. The establishment of national information networks has also been promoted in various countries in the region. These networks address the needs of enterprises—particularly SMEs—for industrial, technology and market information and value-added services. A number of project proposals and negotiations with counterparts are underway.

24. The information programme implemented by UNIDO in Central and Eastern Europe and the Newly Independent States of the former Soviet Union (NIS) aims at strengthening the capacities of existing industrial and business information agents. This programme facilitates cooperation and coordination between countries, while meeting the needs of SMEs for better access to business information. The programme also assists the transfer of leading-edge technologies and management techniques related to industrial and business information activities in the region. A special technical assistance project in support of UNIDO's programming in the region has strengthened the capabilities of the Vienna-based Permanent Missions of Eastern Europe and NIS countries to utilize UNIDO's Internet-based World Wide Web services, and has thus contributed to the efficient flow of information between the Member States and UNIDO.

25. Special efforts were made to develop and launch an integrated programme to build up the information, technology and investment promotion capacities in Central Asian countries.

26. In order to provide wider access to its industrial information resources, UNIDO has improved and expanded its presence on the Internet. The UNIDO web site provides easy access to all UNIDO documentation and databases that are publicly available. Newsletters, training opportunities, calendar of events and detailed information on all UNIDO programmes are available. One interesting new feature is the interactive guide to business networking, which provides reliable business contacts in developing countries as well as validated technology, investment, business opportunities, subcontracting exchanges, and other industrial information. Linkages have been established with investment/technology project sponsors and network partners for investment, and information support is being provided to UNIDO Investment Promotion Service offices and field offices.

27. A strategic alliance was established with the Multilateral Investment Guarantee Agency (MIGA) to use IPAnet services for UNIDO and its partners in developing countries. Joint training programmes on investment promotion were organized in Vienna for Vienna-based missions and in other countries for investment officers. Further expansion of cooperation is envisaged.

28. To enhance the public image of UNIDO information services and increase awareness of UNIDO activities, a substantive input was provided to the Group of 77 South-South Conference on Trade, Finance and Investment, held at San José, Costa Rica, in January. A special presentation on supporting business processes and South-South cooperation and a cyber café were organized and highly appreciated by participants. Cyber cafés have since become a regular feature at conferences in which

UNIDO participated, in particular at the UNIDO General Conference.

29. UNIDO had a special panel on sustainable information networks for business in developing countries at the Global Knowledge '97 Conference, held at Toronto, Canada, in June. Nine participants from developing countries, including five panelists, were sponsored by UNIDO.

30. INTIB was a major input in the interagency project on universal access to information and communication services initiated by the International Telecommunication Union for the entire United Nations system. One of the ACC decisions on this project was to develop a Global UN-Extranet where INTIB is the focal point for UNIDO.

31. The Emerging Technology Series, a new technology monitoring product initiated at the beginning of 1996, appeared regularly, covering information technology, new and advanced materials, genetic engineering and biotechnology, marine industrial technology and high technology spin-offs, with special coverage on trends in parallel processing, food-processing technologies for Africa, the use of geographical information systems and hydrogen energy technologies. Based on the positive acceptance of the Series, an agreement was made with the International Centre for Science and High Technology on joint production and dissemination of some issues.

## D. Research publications

### *Industrial Development Global Report 1997*

32. The main theme of the 1997 edition of the Global Report is financing industrial investment. During the last few decades, global economic growth has slowed. In many developing countries and countries with economies in transition, per capita incomes have continued to decline and poverty remains the single most important concern. At the same time, high-growth countries are found to be more successful in reducing poverty and improving income distribution. There is therefore a need to revive world economic and industrial growth to ensure an improvement in human welfare as well as the prospects for future generations. Industrial investment plays a crucial role in this regard.

33. As in the past, the Global Report consists of two separate parts: an analytical section and a statistical section. The first part addresses the challenges facing developing countries and countries with economies in transition in their efforts to achieve the level of investment required to ensure high economic growth rates. The links between savings and investment are investigated to determine the viable means of financing capital investment at the enterprise level—and in particular to overcome the obstacles hindering the expansion of small- and micro-enterprises—as well as

the appropriate policy framework to promote investment. Part two provides a variety of industrial indicators for 178 countries and territories around the world.

34. The Report and its accompanying executive summaries are published in English, French and Spanish.

#### ***Industrial Estates - Principles and Practice***

35. Industrial estates are an important tool for stimulating industrial growth and providing cost-effective infrastructure and communal services. This introductory document on industrial estates is based on a series of field studies commissioned by UNIDO and intended for use by decision-makers in the public and private sectors. It discusses the role of such estates in industrial development as well as organizational and infrastructural issues. The text is illustrated with examples of estate development from a series of countries, and the scope of UNIDO assistance available for this purpose is briefly outlined.

#### ***Regional Industrial Development Agencies - Types, Tasks and UNIDO Assistance***

36. Mobilizing regional and local development potential in a globalizing economy has become a major challenge for many countries, and the demand for UNIDO services in this area is rapidly increasing. This document focuses on the institutional framework for regional development. After offering a general discussion of regional agencies as an instrument of development, it argues the case for the establishment of such agencies specially adapted to the industrial development needs of regions in the transitional and larger developing economies. The document also identifies the kind of regions where such agencies can play a role and discusses the support that could be offered by UNIDO.

#### ***Practical Case Studies in Industrial Subcontracting and Partnership***

37. This document presents an analysis of practical case studies. It demonstrates that subcontracting is an efficient tool for increasing the utilization rate of installed industrial capacities as well as industrial production and employment in the small and medium industry sector. It also underlines the role of subcontracting in promoting the production of better quality goods at lower prices, and its contribution to a more efficient allocation of industrial resources, and thus to national industrial growth and integration.

#### ***A Comparative Analysis of SME Strategies, Policies and Programmes in Central European Initiative (CEI) Countries***

38. This ten-volume report represents the result of a UNIDO research project carried out at the request of the CEI Working Group on Small and Medium Enterprises. It consists of a comparative analysis of SME strategies,

policies and programmes in individual CEI countries aimed at providing a systematic basis for identifying areas of mutual interest for future cooperation, as well as a compendium of SME support institutions in the CEI countries to facilitate increased inter-country institutional linkages. The findings of this study established a framework for the CEI Working Group to coordinate future research and development activities, and provided UNIDO and other donors with guidelines for fine-tuning their support activities.

#### ***World Information Directory of Industrial Technology and Investment Support Services***

39. This document is a unique source of information on institutions and organizations providing industrial technology, investment, consultancy and training services. It is divided into two chapters: the first provides information on 75 investment facilitators in 57 countries; and the second contains 169 profiles of specialized information sources in 43 countries. Both chapters are organized to provide profiles of each listed organization, sorted alphabetically by country and name. Cross-references are also provided to facilitate searches. All organizations listed are members of UNIDO's International Referral System (IRS). The directory is also available in electronic form.

#### ***Directory of Industrial Investment and Technological Information Sources in Hungary***

40. This directory is the product of a joint initiative between the UNIDO INTIB programme and the National Technical Information Centre and Library in Hungary. Like the other national and regional directories prepared under the INTIB programme, it is intended to improve the flow of industrial investment and technological information both within Hungary and between Hungary and the rest of the world. The directory is divided into two chapters, the first of which covers 12 national investment agencies and the services they provide, while the second contains profiles of 26 providers of specialized information services, which range from lists of available technologies to descriptions of manufactured products and training opportunities.

#### ***Assistance in Designing a National Industrial Strategy and Industrial Policy for Croatia - A Technical and Policy-level Analysis***

41. This report provides advice on an industrial strategy and policy for Croatia. It gives general information on the country's manufacturing sector, trade regulations, conditions of payment, privatization process and investment climate. A development strategy for the industrial sector is also outlined. The textiles, glass and ceramics, metallurgy, electronics, petrochemical, wood and machine-tools sectors are analyzed in detail, with summaries of technical cooperation projects proposed by UNIDO for each sector.

**Slovakia Country Support Strategy**

42. This document consists of two parts. The first provides a detailed analysis of Slovakia's economic development performance and industrial structure based on statistical data up to 1996. The first two chapters of part one provide an overview of macroeconomic reforms carried out in the post-1989 period and key issues concerning Slovakian industry, while the third and fourth chapters discuss the issues of industrial sector transformation, financial sector reform, enterprise privatization and restructuring and industrial policy, as well as an overview of foreign technical assistance delivered to Slovakia since the early 1990s. The second part of the document identifies 21 new programmes and projects for potential future UNIDO technical cooperation with Slovakia (subject to funding) in the fields of industrial restructuring, investment promotion, SME development, environmental protection and industrial and technological information.

**Bosnia and Herzegovina - Rebuilding Industry**

43. This brochure describes UNIDO's programme for reconstruction, rehabilitation and restructuring in Bosnia and Herzegovina. The role of UNIDO in post-war economic recovery is explained. In support of efforts to secure financing, summaries of nine proposed projects are presented. These include the integrated programme for industrial recovery and private sector development, rehabilitation of the wood industry and the establishment of a medical equipment repair and maintenance centre.

**Food Processing Technologies for Africa**

44. This document, a special issue of the Emerging Technology Series, is based on papers presented at the Technical Symposium on Food Fermentation Technology held at Dakar, Senegal, in December 1993. The papers were substantially updated prior to their publication in the present document, which discusses the technology options for food processing appropriate to the African continent, including the application of biotechnology. The publication shows that a number of programmes and projects could be undertaken commercially, while others would require further research and development. In this context, the publication aims to create awareness among policy-makers, as well as the general public in Africa, of the potential benefits of biotechnology in meeting the needs of African countries.

**Statistical research publications**

45. *Using Statistics for Process Control and Improvement* provides an introduction to basic concepts and techniques of statistical process control, which is expected to bring new management techniques within the reach of small- or medium-scale enterprises in developing countries and countries with economies in transition. *Industry and Sustainable Development*

defines the role of industrial activity within the whole of sustainable development and outlines methods to assess empirically industry's vital contribution to the process. The statistical publication *Industry Resources, Output and Trade*—for which preparations were started in 1997—is intended to provide a comprehensive empirical review of manufacturing performance and its major determinants in developing countries.

**E. Global technology centres**

46. UNIDO global technology centres facilitate international collaboration for the development of partnerships and strategic alliances and are seen by both developed and developing countries as providing a valuable mechanism for linking new technology promotion with investment opportunities in new businesses. In 1997, four centres were in operation, with a further three at the promotion and negotiation stage.

**International Centre for Science and High Technology (ICS)**

47. The 1997 work programme focused on chemistry, environment, new materials and high technology. In selecting the sectoral subprogrammes and their related activities, special consideration was given to their relevance to the scientific and technological development of developing countries and countries with economies in transition, with a special focus on environmental problems. More than 50 events (including workshops, seminars, training courses, awareness-building meetings) were carried out in close cooperation with institutions in developing countries. A number of products (guidelines, reports, publications) were also developed and made available. In implementing the ICS work programme, project proposals with a total value of \$19 million were identified and discussed with institutional counterparts in recipient countries. These proposals will be further developed and promoted in 1998. At its seventh session, the General Conference adopted a decision on ICS in which the Conference took note of the ending by mutual consent of the Institutional Agreement between the Government of Italy and UNIDO regarding ICS and noted the commitment of the Government of Italy to enter into a tripartite agreement with UNIDO and the United Nations Educational, Scientific and Cultural Organization (UNESCO) for the future operation of ICS. At the request of the Conference, consultations are being initiated with UNESCO and the Government of Italy to facilitate these arrangements, while ensuring the continuation of ongoing activities and projects as well as future cooperation in the field of industrial technology.

**International Centre for Application of Solar Energy (CASE)**

48. UNIDO and CASE convened an international conference in New Delhi on village electrification through renewable energy. As a complementary activity,

UNIDO organized an expert group meeting on new materials and solar energy. A memorandum of understanding on solar energy was signed between UNIDO, CASE and the Government of the Philippines. CASE has also provided assistance to a number of UNIDO programmes and projects in Africa and Palestine to promote the commercialization of renewable energy.

#### ***Hangzhou International Centre for Small Hydro Power (HIC)***

49. The Centre performs the role of coordinator and executive office of the International Network for Small Hydropower, with focal points in 61 countries. A UNIDO project to strengthen the capacity of HIC was implemented with emphasis on establishing an information database on small hydro-power technologies, training of HIC staff and awareness-building among network members.

#### ***International Centre For Materials Evaluation Technology (ICMET)***

50. A training course on X-ray diffraction techniques was designed, to be conducted in New Delhi in early 1998. Preparatory work was developed to run a training course on testing techniques for fine ceramics in March 1998 in Taejon, Republic of Korea. ICMET has also strengthened its links with ISO and VAMAS (Versailles Project on Advanced Materials and Standards). Within the ICMET and VAMAS programmes six collaborative research projects were formulated and preparatory work was carried out. As a result of promotional work, the Government of India agreed to formulate and fund a national programme in testing and evaluating new materials for implementation within the context of the ICMET project.

#### ***Proposed new centres***

51. Progress was made on the establishment of an international centre for advancement in manufacturing technology in India. Consultation missions were undertaken to nine countries in Asia, Latin America and Europe, and a feasibility report was finalized for submission to the Government of India.

52. Preparatory work was carried out to develop the mission, functions and a work programme of an international materials assessment and application centre with the support of Brazil. The results will be considered in early 1998 by a panel of advisers.

53. In cooperation with the Government of Greece, UNIDO is promoting the establishment of a business development centre to stimulate advancement in the marine industries sector in the Mediterranean region, with particular emphasis on North-South cooperation. Consultation missions were undertaken to nine Mediterranean countries to discuss the proposal and a justification report is being finalized for submission to

the Government. An expert group meeting on the subject was held in November.

#### **F. Investment promotion network**

54. A number of initiatives introduced in 1996 bore fruit during 1997. In particular, in accordance with the wishes of Member States, priority was placed on investment promotion in Africa. This priority was evident in the delegates programme, one of UNIDO's major investment promotion tools. During 1997, one-third of delegates placed in the Investment Promotion Service (IPS) network were from the African continent.

55. The year also witnessed a perceptible strengthening of the relationship between UNIDO Headquarters and the IPS network. This was characterized by more meaningful dialogue and interaction between Headquarters and the IPS offices resulting in enhanced cooperation for such events as the Investment Forum at Manila and EUROPALIA (see para. 58 below). Investment Promotion Services played a very positive, supportive and active role in the promotion of several important initiatives and programmes launched by Headquarters. A clear example was the series of promotional programmes organized by the Services in Milan, Osaka, Paris, Seoul, Tokyo and Vienna to promote the Intechmart at Khajuraho, India.

56. During the year, the network, including NIMTECH (the focal point for the UNIDO investment promotion programme in the United Kingdom), underwent an overall expansion. IPS Seoul assumed full operations in February, and the Investment Promotion Unit in Saudi Arabia—which will serve as a focal point for UNIDO investment promotion activities—was established in April. Negotiations continue with the Governments of Pakistan and the Philippines for the possible establishment of IPS offices in these countries. Discussions were held with the Government of Nigeria to open the first IPS on the African continent. Action was also taken to broaden the network through the establishment of focal points in selected countries, Denmark and the Netherlands. In Switzerland, owing to a change in Government policy, IPS Zurich discontinued its activities at the end of August.

57. In May, a roundtable meeting was convened at the Board of Investment Headquarters in Manila with selected national investment promotion agencies from Asia and the Pacific, Heads of Service of the UNIDO IPS network, and selected UNIDO Country Directors. Special attention was paid to ensuring the participation of LDCs in the region at the roundtable. The meeting drew up a series of recommendations for UNIDO action in investment promotion for developing countries in Asia. Among these recommendations was the organization of a series of missions to the region, notably to LDCs, to advise on appropriate investment legislation. In response, a mission was fielded by IPS Tokyo to the

Lao People's Democratic Republic to hold discussions with investment promotion officials. Addressing a recommendation for greater involvement of LDCs in the UNIDO delegates programme, a delegate from Nepal will be placed in IPS Tokyo in early 1998.

58. Active support by the IPS network of promotional events organized by Headquarters included the investment forums in the Philippines and in Côte d'Ivoire, in May and November respectively, with the concurrent organization by IPS offices of parallel promotional events. In August, the fourth EUROPALIA—organized largely by IPS Paris and involving other European IPS offices—was convened in Buenos Aires. The event concentrated on investment in the agro-food sector between European and Latin American manufacturers. Jointly organized by UNIDO IPS offices and the European Commission, EUROPALIA has been held annually since 1994 to promote industrial cooperation between Europe and Latin America in the agro-industry sector.

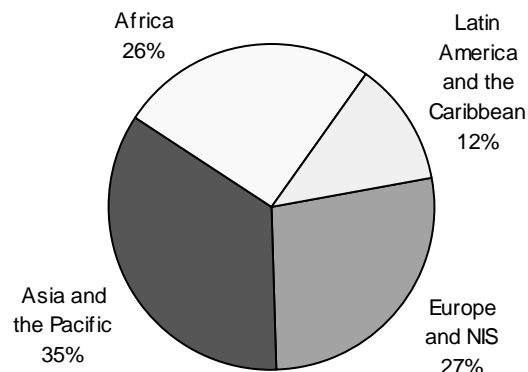
59. In October, BORITEC '97 was held in cooperation with the Milan Fair Authority. An annual event, BORITEC provides an opportunity to hundreds of entrepreneurs from developing countries and countries with economies in transition to present investment proposals and industrial offers to business visitors from all over Europe. Finally, IPS Warsaw convened the First Economic Forum Poland/Latin America in November.

60. The year also featured active interaction by members of the network. This was clearly reflected in the activities of IPS Vienna. Based on information provided by IPS Warsaw, a number of Austrian companies selected by IPS Vienna have entered into active negotiations with Polish counterparts. Similarly, the Centre for International Industrial Cooperation in Moscow prepared the ground for a mission by businessmen from Austria. Eighty individual meetings between Austrian and Russian counterparts were arranged and promise to result in concrete international industrial partnerships.

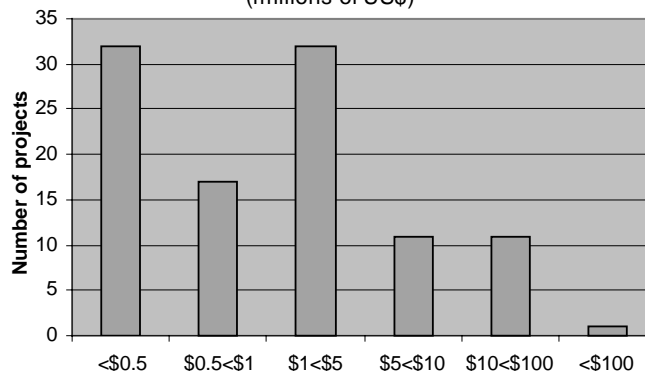
61. A major administrative decentralization exercise took place during 1997. The operational manual for IPS offices was revised and included new procedures delegating greater responsibility, including on personnel and financial issues, to IPS offices in a number of administrative matters effective 1998.

62. As shown in figure 12, significant shifts occurred from 1996 to 1997 in the regional breakdown of

**Figure 12. Share of investment projects concluded, by region - 1997**  
(share of total value)



**Figure 13. Investment projects concluded, by size - 1997**  
(millions of US\$)



investment projects concluded. Asia and the Pacific accounted for 35 per cent of projects (up from 26 per cent in 1996), with 27 per cent for Europe and the NIS (down from 34 per cent), while the share for Latin America and the Caribbean fell from 31 to 12 per cent. The increase for Africa from 9 to 26 per cent reflects the greater emphasis on projects in that region, including the participation of nationals of African countries in the delegates programme. Figure 13, showing concluded investment projects by size, reflects the continuing emphasis on the promotion of small and medium investment projects. In 1997, 33 per cent of projects concluded were below \$0.5 million, and 78 per cent were below \$5 million.

## CHAPTER V

### THE REGIONAL DIMENSION

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1. The present chapter provides brief descriptions of the key challenges faced and presents the thrust of UNIDO activities in each developing region and in the case of the least developed countries. It provides aggregate figures on UNIDO involvement broken down by source of funds and by project component. It does not entail a comprehensive review of regional activities as this would overlap with the contents of chapter III. The chapter highlights key regional events such as ministerial-level meetings. It also provides information on UNIDO field representation.

#### A. UNIDO Field Representation

##### *Introduction*

2. UNIDO's presence in the field was the subject of intense review during 1997. The lead role that field offices should play in the implementation of UNIDO activities was recognized particularly in the context of the Business Plan, in which Member States strongly emphasized the need to decentralize substantive responsibilities and activities to the field, coupled with enhanced delegation of authority.

3. Also, in March 1997 the United Nations Secretary-General outlined his proposal on the reform of the United Nations system. The proposal was further elaborated and presented to the General Assembly in July. The Secretary-General stressed the need for greater cooperation and coordination among funds and programmes within the United Nations system in the field as well as the need for a unified United Nations field representation.

4. While a new agreement concerning coordination arrangements between UNDP and UNIDO at the country level was signed in October 1996, its implementation was overtaken by events. It was, however, well understood that a strengthened field presence would require not only greater field cooperation with other United

Nations agencies and donor development agencies, but also stronger support from the unified United Nations offices in administrative areas.

##### *Status of field representation*

5. As of 31 December 1997, UNIDO maintained 24 field offices headed by UNIDO Country Directors (UCDs), nine of which were in Africa (excluding African Arab States), three in Arab States, seven in Asia and the Pacific, and five in Latin America and the Caribbean. In addition, there were three offices in the field headed by UNIDO National Directors and two by National Programme Officers, four by Junior Professional Officers (JPOs) and seven staffed by General Service personnel. The staff structure of UNIDO field offices by region and country is shown in addendum 1 to the annual report (IDB.19/10/Add.1, appendix L, table 1).

6. As of 31 December 1997, a total of 20 JPOs and 11 Associate Experts, financed by 10 donor countries, were assigned to 24 countries. Of the total, nine JPOs and two Associate Experts were located in countries without a resident UCD. The number of work-months of JPOs and Associate Experts financed by each donor country during 1997 is shown in addendum 1 to the annual report (IDB.19/10/Add.1, appendix L, table 2).

##### *Developments in the field representation programme*

7. The restructuring of UNIDO's field presence was regularly considered by the Policy Advisory Group on Field Representation as well as by the Programme and Management Committee, and their conclusions reported to the policy-making organs. In addition, the adoption of the Business Plan and the report of the ad hoc open-ended working group on issues related to field representation gave important directions in re-orienting UNIDO's field representation programme.

8. In April, the Industrial Development Board established at its seventh special session an intersessional



working group to advance further the process of defining the future role and functions of UNIDO. The intersessional working group presented the Business Plan on the Future Role and Functions of UNIDO, which was adopted by the Board at its seventeenth session in June. The Business Plan provided the basic framework for the Organization to refocus its functions and priorities and to orient its activities accordingly while ensuring sustainability and efficiency. It called for an "effective decentralization of activities and strengthened field representation" through a process of delegation of authority and re-assignment of key functions and responsibilities to field offices.

9. The new approach was reflected in the programme and budgets for the biennium 1998-1999. Within that context, the Programme and Budget Committee, in September at its thirteenth session, established an ad hoc open-ended working group "for the purpose of examining issues related to field representation, including further opportunities for administrative savings and the extent to which those resources could be redeployed to the field". Based on the framework defined in the Business Plan, the report of the working group provided the policy guidelines and recommendations within which the restructuring of the field representation will take place. The document recommended that the reorientation of the programme should proceed along the lines of substantive decentralization, empowerment of field offices, adequately staffed field offices, prompt delivery of quality of services and cost-effectiveness.

10. Against this background the Organization has started the process of reorienting its field representation based on the principles of decentralization and delegation of authority to the field. A proposal was elaborated for UNIDO's future field representation policy as an input for the programme and budgets for the biennium 1998-1999. The report of the ad hoc open-ended working group represented a fundamental element in the consensus achieved by the policy-making organs that led to the 1998-1999 programme and budget recommendation by the Committee and to its subsequent adoption by the Board. With the approval of the programme and budgets by the General Conference in December, the implementation phase of the reorientation of the UNIDO field representation programme was launched.

11. The new approach to UNIDO's field presence is centered around five fundamental principles: (a) functional decentralization of general activities for country-level programming; (b) empowerment of field staff through delegation of financial and administrative authority; (c) selective implementation of projects in the field; (d) mobilization of extrabudgetary financial resources at the field level; and (e) flexible and cost-effective adaptation of field offices to suit the specific needs of individual countries and regions.

12. In pursuing decentralization, the aim of the Organization is to become more demand- and service-oriented, and responsive to the needs of its clients. Empowering field offices with more substantive functions, UNIDO will be closer to its clients. As stated in the programme and budgets, 1998-1999, "This will also ensure that technical cooperation services are delivered on a timely basis while achieving greater impact in recipient countries and being responsive to the rapidly changing economic and social conditions and emerging pattern of development assistance at the regional and country level".

## B. Africa

13. In 1997, for the third consecutive year, economic recovery was recorded in many African countries. Gross domestic product for the region—estimated at \$502.7 billion in 1996—continued to grow at an annual growth rate of about 3 per cent. The 33 least developed countries (LDCs) in Africa also registered an annual growth rate of approximately 3 per cent per annum. There was modest but steady growth in the industrial sector. Although growth in manufacturing value added (MVA) for the region as a whole fell to 4.1 per cent from 4.5 per cent in 1996, some subregions recorded impressive MVA growth rates. A few countries, such as Botswana, Cameroon, Côte d'Ivoire and Mauritius, were able to achieve MVA growth of 7.4 per cent, 8.4 per cent, 7.3 per cent and 7.4 per cent respectively.

14. With its agricultural, mineral and energy resources, Africa has tremendous potential for industrial development. However, accelerated globalization, the growing significance of industrial production and trade within regional blocks and diminishing resource flows, including official development assistance, present a serious challenge to the development efforts of African countries and the competitiveness of their industrial sectors. In this context, regional cooperation and integration of African economies have been given a new impetus to sustain economic growth and development.

15. African countries have undertaken major initiatives to establish partnerships for sustained economic growth and development. In particular, UNIDO and the African countries have defined a new partnership for accelerated industrial development in Africa: the Alliance for Africa's Industrialization. Only months after the launch of the Alliance at Abidjan, Côte d'Ivoire, in October 1996, a Plan of Action for the Alliance was formulated by Member States. Governments, representatives of the private sector and development finance institutions, in consultation with UNIDO, the Economic Commission for Africa (ECA), the Organization of African Unity (OAU) and other United Nations organizations were all involved in formulating the Plan of Action. The Plan of Action was adopted by the Conference of African Minister of Industry (CAMI) at its thirteenth session held at Accra, Ghana in May 1997. The Plan was

subsequently endorsed by the Assembly of Heads of State and Government of OAU in June, by the Industrial Development Board of UNIDO in July and the General Conference of UNIDO in December 1997.

16. The Plan of Action comprises four thematic priorities: capacity-building for industrial competitiveness; linking industry and agriculture to enhance productivity and competitiveness in agro-industry; promoting growth in small and medium enterprises; and promoting private investment and other forms of international industrial cooperation. These priorities are consistent with those of the United Nations System-Wide Special Initiative for Africa, as well as the Business Plan on the Future Role and Functions of UNIDO. The institutional arrangements for the implementation of the Plan of Action are being established at the national, subregional and regional levels. In particular, the Group of Patrons composed of Heads of State and Government will serve as advocates for Africa's industrialization. It is expected that by the end of 1998 many African countries will have established industrial partnership councils for public and private sector consultations and consensus-building at the national and subregional levels.

17. Within the context of the Alliance and to realize the objectives and goals of the Second Industrial Development Decade for Africa (IDDA), UNIDO offered a wide range of services in support of Africa's industrial development focusing, *inter alia*, on the following areas:

***Capacity-building, including strategies, policies and institutional support for industrial competitiveness***

- Côte d'Ivoire: Assistance in the formulation of a medium- and long-term industrial and commercial strategy. In addition to strengthening the capacity of the Ministry of Commerce and Industry in defining strategies and policies for industrial development, assistance is being given to update the industrial master plan focusing on private sector development, small and medium industries (SMIs) and the integration of women in industrial development.
- UEMOA (Union Economique et Monétaire Ouest Africaine): Support in the formulation of a joint industrial policy, with special emphasis on agro-industries for member States of UEMOA.
- Regional Africa: Capacity-building for interactive policy formulation and promoting partnership platforms in the framework of the Alliance. Through this project UNIDO will assist in strengthening the capacities of government and the private sector to manage the process of industrial development.

***Linking industry and agriculture to enhance productivity and competitiveness***

- Ethiopia: Contribution to the reduction of post-harvest losses through training and extension services focusing on women in the food-processing

industry. The project aims at introducing technologies that will contribute to the reduction of post-harvest losses, with women as the target beneficiaries.

- Nigeria: Promoting rural off-farm employment and income-generating activities. UNIDO services will focus on needs assessment of women entrepreneurs, management of SMIs, training of trainers for women in food-processing industries, assessment of post-harvest technologies and testing/standardization of agricultural equipment.
- Regional Africa: Promotion of the traditional textile industry in West Africa. This project, featuring the creation of a regional *tissuthèque* in Mali, is described in chapter V.G.

***Promoting growth in small and medium enterprises (SMEs), including rural development and the informal sector***

- Gambia: Exposure to new technology; market assessment; new investment areas; skills production centre. In the context of a large UNDP programme on poverty alleviation and enhancing sustainable livelihood, UNIDO will assist in designing a programme for women and youth in new technology and investment areas and in undertaking opportunity studies/pre-feasibility studies for new investment.
- Mauritius: UNIDO will support the country's efforts in promoting international subcontracting and networking for SME development.
- Senegal: In the context of the government programme to eradicate poverty, assistance is being given to define a more focused programme for SMI development aimed at creating employment and generating income.
- Zimbabwe: Development of the SMI sector using clustering and networking. The project aims at defining a strategy for SMI development and developing a number of networks as well as designing a programme to ensure the sustainability of the networks.

***Investment and technology promotion***

- Regional Africa: Investment, technology and information programme for selected English-speaking African countries. The focus is on effective networking at the country, regional and international levels to provide information to the business community on opportunities for investment, technology transfer, exports and imports.
- Regional Africa: Capacity-building in industrial technology and market information with emphasis on LDCs. Five Information Networking for Technology, Investment and Business (INTIB) focal points will be strengthened to adequately provide

industrial, technological and business information of relevance to both the public and private sectors.

**Environmental management and cleaner production**

- Cameroon: UNIDO will assist enterprises in phasing out CFC-11 and introducing a cleaner production process as well as installing more effective safety equipment.
- Benin, Burkina Faso, Cameroon, Guinea and Senegal: Assistance is also being given to these countries to formulate investment projects in the foam and refrigeration sectors as well as strengthening technical capabilities in refrigerant recovery and recycling.
- Regional Africa: Introduction of wet-white clean technology leather process in Eastern and Southern Africa. The project aims at introducing new technologies in leather production to reduce the level of pollutants from wet-blue chrome leather processing.

**Private sector development, productivity and the application of standards for international competitiveness**

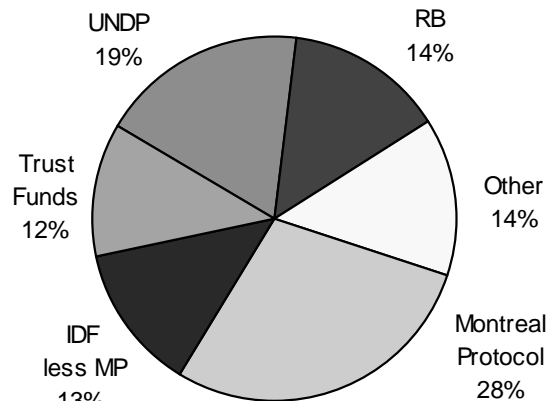
- Mauritania: UNIDO will assist in developing a support programme for private sector development.
- Uganda: Assistance aims at strengthening the Uganda National Bureau of Standards in standardization, quality assurance, testing and metrology.
- Regional Africa: Support to the African Privatization Network. Assistance is being given with a view to promoting private sector development in the context of the Alliance.

**UNIDO technical cooperation**

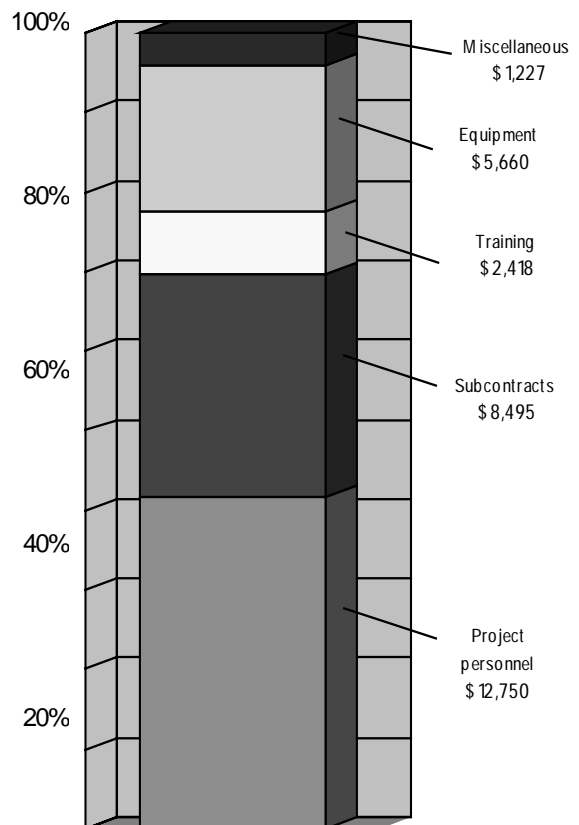
18. Technical cooperation delivery in Africa totaled \$30.6 million in 1997. While this represented the largest share for any region (37 per cent), it was slightly less than 1996 delivery (\$33.4 million). At 28 per cent of the total, Montreal Protocol accounted for the largest source of funds for UNIDO expenditure in Africa, followed by UNDP (19 per cent), and UNIDO regular budget (14 per cent). The Industrial Development Fund (IDF) and projects for national execution, with UNIDO as implementing agency, accounted for 13 per cent of total delivery, respectively.

19. For the African region as a whole, 90 new projects with a value of \$21.7 million were approved. Among new approvals, \$3.9 million, or 18 per cent, were projects for national execution for which UNIDO is the implementing agency, closely followed by trust fund projects (\$3.8 million, or 18 per cent). New approvals under the Montreal Protocol and IDF amounted to \$5.1 million and \$1.9 million respectively (24 and 9 per

**Figure 14. Technical cooperation expenditure in Africa in 1997, by source of funds**  
(Total of \$30.6 million)



**Figure 15. Technical cooperation expenditure in Africa in 1997, by project component**  
(In thousands of US dollars)



cent). A breakdown of project approvals by region and source of funds is provided in appendix A (IDB.19/2/Add.1, appendix A, table 3C).

20. In seeking to enhance programme development at the country, subregional and regional levels and, in response to specific requests from Member States and subregional organizations, programme development and review missions as well as project formulation missions were fielded to Burkina Faso, Congo, Côte d'Ivoire, Eritrea, Gabon, Ghana, Madagascar, Mauritius, Mozambique, Togo, Zambia, SADC (Southern African Development Community), UEMOA and COMESA (Common Market for Eastern and Southern Africa).

21. Within the framework of the Tokyo International Conference on African Development, UNIDO participated in the second Asia-Africa Forum in June at Bangkok, Thailand, organized by the Governments of Japan and Thailand, the United Nations, UNDP and the Global Coalition for Africa. As a follow-up, a workshop on agro-related industrial development and interregional cooperation between Asian and African countries was conducted in November, jointly by UNIDO and the United Nations Office of the Special Coordinator for Africa and the Least Developed Countries.

22. In the context of strengthening private sector involvement in the industrialization process in Africa, the Second African Private Sector Forum was held concurrently with the thirteenth meeting of CAMI at Accra. The Forum brought together key players in the private sector, development finance institutions and high-level experts on industrialization from developed countries, African countries and developing countries of other regions. The forum reviewed problems and constraints to the achievement of industrial competitiveness in Africa and the role of the private sector in realizing the objectives and goals of the Alliance. A UNIDO subregional forum, convened at Dakar in November, focused on involvement by non-governmental organizations in private enterprise development, with particular reference to rural, micro and small-scale industries in West African LDCs.

23. UNIDO continued to cooperate with African regional and subregional organizations, in particular with OAU and ECA in the implementation and monitoring of the programme for the Second IDDA. This cooperation focused on the development and implementation of programmes and projects in the context of the African Economic Community, the United Nations New Agenda for the Development of Africa and the United Nations System-Wide Special Initiative on Africa. UNIDO, ECA and OAU jointly carried out a mid-term evaluation of the programme for the Second IDDA with a view to assessing constraints and achievements as well as identifying factors that would facilitate progress. The evaluation also formulated recommendations for the orientation of the programme in relation to the Alliance.

24. UNIDO participated in meetings of the policy organs of regional and subregional organizations, including the Assembly of Heads of State and Government of OAU, the ECA Conference of African

Ministers of Development and Economic Planning, the SADC Consultative Conference, the Economic Community of West African States Summit and the COMESA Authority of Heads of State and Government. UNIDO also participated in a number of important conferences, seminars, meetings and workshops to address regional development issues.

### C. Arab countries

25. As a group, the countries of the Middle East and North Africa are heavily dependent on petroleum and its derivatives. Hence, oil price movements generally set the pattern for economic activity, with the boom years of the 1970s providing the framework for rapid economic growth, characterized by the acquisition of state-of-the-art technologies for the manufacturing sector. Since the 1980s, the oil price slump has resulted in a drop of the investment ratio from a high of 33 per cent at the end of the 1970s to 20.4 per cent in 1995.

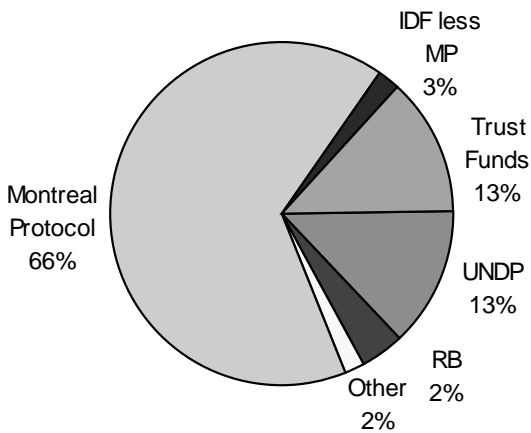
26. As a consequence of oil price fluctuations, the countries of the region are making a concerted effort to move away from excessive dependence on petroleum. There has been a marked shift towards diversifying the manufacturing sector. Current world economic growth trends, resulting from recent agreements on trade liberalization and globalization of production and service provision, have enhanced prospects for diversifying into non-oil sectors, since location or resource endowment are no longer the primary determinants of economic performance. Countries in the region are taking vital economic measures that aim to promote business confidence, encourage private investment and promote trade and economic reform. UNIDO has been a reliable partner in fostering and promoting these changes.

#### *UNIDO support*

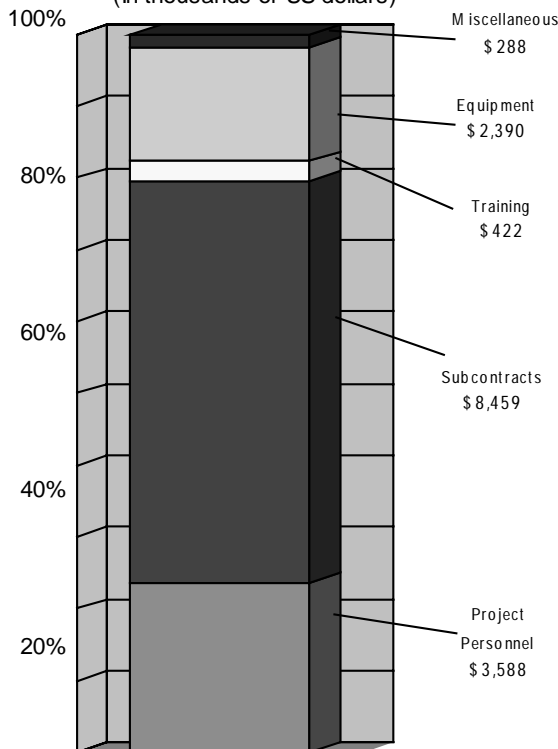
27. Technical cooperation delivery to Arab States totaled \$15.1 million in 1997, down from \$18.7 million in 1996. Montreal Protocol activities, at \$10 million, accounted for 66 per cent of expenditure. Delivery from trust funds and UNDP sources came to \$2 million each. Some \$0.4 million came from IDF while regular budget delivery amounted to \$0.6 million. (For a percentage breakdown of sources of funds, see figure 16; figure 17 shows expenditure by project component.)

28. During the period under review, UNIDO played an active role in several initiatives that are geared towards strengthening industrial diversification in the region and encouraging private sector participation. UNIDO was a key partner in the organization of the Seventh Conference of Arab Investors and Businessmen, held at Beirut from 18 to 29 October. The conference, which brought together some 500 participants representing the private sector and business community, including financial and trade promotion institutions, discussed the role of small and medium-scale industries and examined scenarios for their promotion.

**Figure 16. Technical cooperation expenditure in Arab States in 1997, by source of funds**  
(Total of \$15.1 million)



**Figure 17. Technical cooperation expenditure in Arab States in 1997, by project component**  
(In thousands of US dollars)



29. As a member of the preparatory committee and in close cooperation with the Arab Union of Chambers of Trade, Industry and Agriculture, UNIDO is involved in preparatory activities for the Eighth Conference on Industrial Development in the Arab Countries, to be held at Damascus in early 1998. This important conference, for which UNIDO has prepared one of the main

discussion papers, will examine the present status of industrialization in the region and chart a strategy for future action, particularly in light of the current economic environment characterized by widespread trade liberalization and globalized production and competition.

30. Given the small population in many countries of the region, regional cooperation and integration of markets are important prerequisites for the success of industrialization. In cooperation with the League of Arab States (LAS), UNIDO convened an expert group meeting on industrial statistics at Cairo in November. Focusing on the importance of industrial statistics as a vital tool for planning, the meeting examined ways to strengthen the industrial statistics operations of national statistical offices of LAS member countries, promote cooperation and exchange of statistical information through networking, and strengthen linkages between national statistical offices and UNIDO. The meeting was attended by substantive staff of national statistical offices and by selected international organizations.

31. A workshop on restructuring and performance improvement in the iron and steel sector, conducted at Cairo jointly with the Arab Iron and Steel Union (AISU), constituted a major step in joint efforts to ensure the competitiveness of Arab industries in the globalized market environment. The workshop was designed to review action for restructuring and performance improvement in the iron and steel sector and to prepare AISU for a large-scale regional restructuring study.

32. Within the framework of UNIDO assistance to the Palestinian people, three projects were under implementation in 1997. These covered renewable energy applications, development of local building materials and the construction industry, and support to the development of industry associations. Funding was secured for a project to establish a biomedical equipment repair and maintenance centre. As a source of expertise, maintenance and technical training, the centre will provide support to other hospital sites and users of medical services in the West Bank and Gaza Strip. Based on discussions with the Palestinian authorities, a project proposal to support the establishment of the Palestinian Standards Organization was fully developed, and funding modalities and possibilities concluded.

33. Cooperation between UNIDO and key regional development institutions was strengthened. For example, practical mechanisms for cooperation with the Islamic Development Bank were established, resulting in a clear understanding of the modalities and most promising areas for future cooperation, and identification of a number of joint activities. A proposal initiated with the Secretary General of the League of Arab States would feature annual meetings to foster sustainable industrial development in the region as well as to strengthen regional industrial cooperation. During the year, relationship agreements were concluded with the Arab

League Educational, Cultural and Scientific Organization and the Arab Maghreb Union.

#### D. Asia and the Pacific

34. Notwithstanding the recent turmoil in markets and currencies, the Asia and Pacific region can still be recognized for its achievements in terms of economic growth and social progress. Nonetheless, the region still faces many obstacles and challenges. Unbalanced economic growth, the prevalence of poverty, an inadequate scientific and technological foundation and insufficient infrastructure are problems commonly shared by many developing countries in the region. Similarly, the region's economic success has not been shared by all countries, particularly the least developed, landlocked, Pacific island and transition economies. The problems of low economic growth, deteriorating terms of trade, insignificant investment inflows, shortfall in export earnings and the declining flows of concessional resources continues to impede the development efforts of many of these countries.

35. The ongoing processes of accelerated globalization with freer flows of trade, investment and capital, facilitated by major advances in production and information technologies, could provide opportunities for the developing countries in the region to strengthen their development efforts. Benefits could accrue from specialization in output and trade, and better access to markets, and enhanced private flows of finance and information. A number of developing countries in the region have indeed succeeded in increasing their share of world trade and flows of private finance, thus leading to greater integration into the global economy. The weaker economies, however, continue to suffer greater constraints in bringing about the necessary adjustments, and are yet to benefit fully, if at all, from globalization. Indeed, globalization may have exposed internal and international economic inequities and imbalances. There are legitimate concerns that these inequities and imbalances may be exacerbated, unless carefully designed remedial action is implemented speedily.

36. It is therefore necessary to harness the forces of globalization and liberalization so that they serve large and small, strong and weak economies alike. For that purpose, the forces of globalization and liberalization must be complemented with strengthened and more focused international development cooperation, bearing in mind that countries at different stages of development need time to prepare themselves to cope with the required adjustments.

37. In this context, although markets play the dominant role in allocating resources in a rapidly liberalizing world economy, areas of market failure continue to prevail, resulting in the inefficient use of scarce resources. Governments have an important role to play in ensuring transparent and fair "rules of the game" by micro-level

investment incentives and by policies that ensure macroeconomic stability, minimize investment uncertainty, promote a relatively distortion-free price structure, and generally support accelerated private sector development.

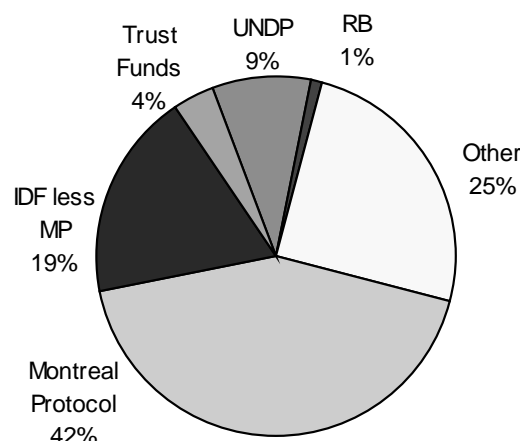
#### UNIDO support

38. To counteract the drastic decrease in UNIDO's share of UNDP resources for industry-related programmes and projects in the region, and in view of the difficulties faced in mobilizing resources from within the region (with the exception of substantial amounts contributed to IDF by China, India and Thailand), UNIDO intensified its efforts in 1997 to further mobilize funds from traditional sources of funding and explore new sources of funding. As a result, funds available for implementation for the region reached \$40.6 million against \$37.4 million in 1996. As an example of donor country financial support, the Governments of Austria, Denmark, Germany, Netherlands and Switzerland supported UNIDO's regional umbrella programme on assistance in pollution control in the tanning industry in South-East Asia. Despite an overall decrease in new approvals for UNIDO projects, the figure for approvals in the region increased from \$31.4 million in 1996 to \$35.2 million in 1997, primarily as a result of Montreal Protocol-funded activities.

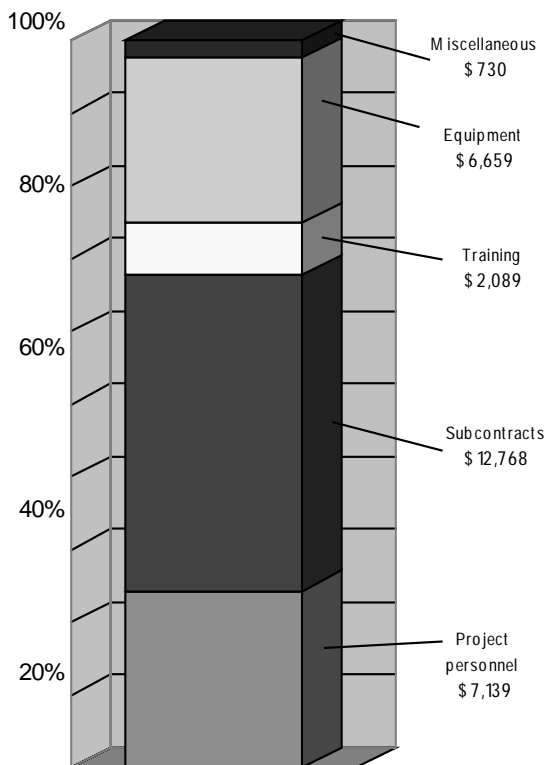
39. As shown in figure 18, a total of \$29.4 million was expended in the region in 1997, reflecting an increase from 1996 (\$24.8 million). Of that amount, \$12.5 million was from Montreal Protocol funds. In Asia and the Pacific, a significant amount (\$2.4 million) accounts for projects under national execution for which UNIDO is the implementing agency.

40. Least developed countries in the region include a wide variety of countries whose industrial bases range from fairly diversified manufacturing activities

**Figure 18. Technical cooperation expenditure in Asia and the Pacific in 1997, by source of funds**  
(Total of \$29.4 million)



**Figure 19. Technical cooperation expenditure in Asia and the Pacific in 1997, by project component**  
(In thousands of US dollars)



(Bangladesh) to simple cottage-level production (Lao People's Democratic Republic, Pacific island countries). While the urgent need is perceived in each country to accelerate industrial activities, the following constraints, *inter alia*, have been identified as common to most of them: (a) inadequate industrial policies and weak agriculture-industry links; (b) limited supply and inconsistent quality of raw materials; (c) inadequate human resources (managerial, entrepreneurial and technical skills); (d) poor food security systems and quality control facilities; (e) lack of support to applied R and D services and extension facilities resulting in weak links with commercial enterprises; and (f) limited access of women to raw materials, credit, technology, education and training. A number of initiatives in the region with LDCs as the primary targets, described in the following paragraphs, are discussed in greater detail in chapter V.G. In addition, the relevant high-impact programmes have been adapted to meet the special requirements of countries in the region, with special emphasis on LDCs.

41. Phase two of a project on promotion and development of agro-related metalworking industries in Asian and Pacific LDCs will support agricultural production and processing by improving effectiveness in the production of agricultural tools. Activities are designed to further strengthen focal points in each country as an effective source of information; to provide

access to technology and training for private sector entrepreneurs; to establish information databases for demand and supply of raw materials; to upgrade the skills of blacksmith trainers; to promote small-scale machinery for food-processing light industries; and to promote and develop commercial machinery prototypes.

42. A pollution control programme for the tanning industry in South-East Asia addresses the issue of containment of environmental pollution. Under this umbrella project, appropriate cleaner production methods include recycling of chemicals and chrome recovery. A full-fledged, industrial-scale pilot effluent treatment plant, a laboratory and demonstration facilities for safe sludge disposal will be installed, and a comprehensive training programme is envisaged.

43. Another regional project aims at increasing awareness and knowledge of energy-saving technologies in the rubber and iron-casting industries in China and the Republic of Korea. For the countries of the Association of Southeast Asian Nations (ASEAN), a project builds awareness through seminars, workshops and enterprise diagnosis on the implementation of standardization and total quality management. This project, which focuses on sharing the experience of Japan with managers from Government and private industry, is an extension of an ongoing exercise to introduce diagnostic surveys in Indonesia, the Philippines and Singapore.

44. A project is underway to assist the 13-member Asia and Pacific Coconut Community (APCC) in strengthening sustainability and global competitiveness of their coconut industries. This is being achieved through assistance to APCC members in the formulation of an implementation scheme of codes and standards for coconut-derived products.

45. An investment promotion project included Asian LDCs in a round-table (Manila, in June) of Investment Promotion Service (IPS) offices, Investment Promotion Agencies (IPAs) and Investment Promotion Units from participating countries, along with private sector industry. The round-table made a number of concrete recommendations on: (a) an effective promotion strategy to attract more foreign investment to the region, especially to LDCs; (b) a 'cleaner production centres' network inside IPS offices and IPAs; (c) promotion of infrastructure projects using the build-operate-transfer (BOT) scheme; and (d) modalities of improving coordination in the region between the network, IPS offices and IPAs.

46. Preparatory assistance on industrial cooperation between the greater Mekong subregion, LDCs and Asian investing countries covers Cambodia, Lao People's Democratic Republic and Myanmar. The project is a follow-up to discussions held during the Manila round-table and aims at defining the framework and context for developing investment, with special focus on LDCs, and preparing an integrated investment promotion

programme to attract foreign investment from other Asian countries.

47. As a follow-up to the UNIDO/International Labour Organization subregional small enterprise development programme for Pacific island countries completed in 1997, UNIDO formulated investment promotion and SMI support components for a new UNDP subregional programme on private sector development. UNIDO-related components cover promotion of foreign direct investment and SMI development through technical advice and training. A project on introduction of total quality management and standardization at the company level in ASEAN member countries provided those countries with information and experience on effective tools and methodologies for enhancing productivity, based on the experience of Japan.

48. Controlling and reducing aflatoxin levels in copra and copra cake is the objective of a project formulated for the Pacific island countries. The problem will be addressed at the exporter level as well as at the producer level. The UNIDO quality programme in the food-processing sector will be applied to a cluster of South-East Asian countries in a project that will demonstrate and institutionalize a practical approach for industry modernization. During the demonstration phase, the programme will improve the performance of up to 20 enterprises in each selected country through national support institutions.

49. In many Asian countries, artisanal and small-scale gold mining represents an enormous environmental threat because of the concomitant extensive mercury pollution associated with this type of mining. For the people involved in informal gold mining, however, these activities are the only source of income. Preparatory assistance in affected Asian countries is in line with the UNIDO high-impact programme developed for Africa to introduce new technologies for global abatement of mercury pollution. The project will provide reliable information about the environmental impact of informal gold mining and identify practical measures and policy approaches for a regional programme that will mitigate the negative environmental impact. In 1997, work progressed on national project documents for Indonesia, Lao People's Democratic Republic and the Philippines, with good prospects for funding in the coming year.

## E. Europe and the NIS

50. During 1997 the countries with economies in transition of Central and Eastern Europe and of the Newly Independent States of the former Soviet Union (NIS) taken as a whole continued to improve their industrial performance. Gross domestic product recovered to achieve or even exceed the level of 1989 in certain cases such as the Czech Republic, Hungary and Poland, and there is considerable promise for future growth in others (Bulgaria, Croatia, Romania). For countries in Central and Eastern Europe, the prospects of

a new political and economic relationship with their neighbours holds out the promise of consolidation of the economic progress already made and a long-term boost to their industrial and economic growth.

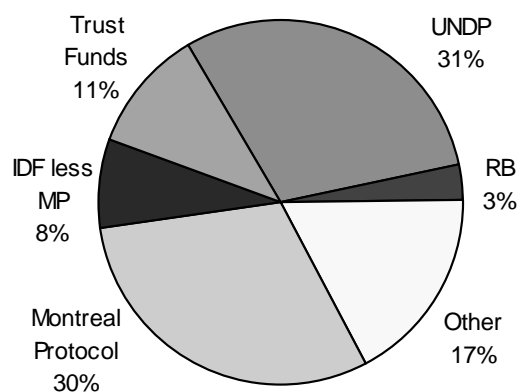
51. The heterogeneity in the rate of industrial growth in the transition countries—a marked characteristic of the region for several years—actually increased during 1997. Despite the wider achievement of positive growth rates in most countries, there is a continuation of negative industrial growth rates in the NIS. The necessary market-oriented reform measures may not, therefore, have been convincingly endorsed in all parts of the region, with ensuing negative results for growth. In other countries, an actual and/or lurking financial crisis threatens recovery.

52. Inflation, as a pervasive problem across most of the region, has generally been brought under control. At the same time, new threats to industrial development and long-term economic development are increasingly being posed by growing budgetary deficits and/or current account deficits. These deficits are caused by increased imports due to a consumption boom with only a modest increase of exports as a result of the low competitiveness of many enterprises.

### UNIDO support

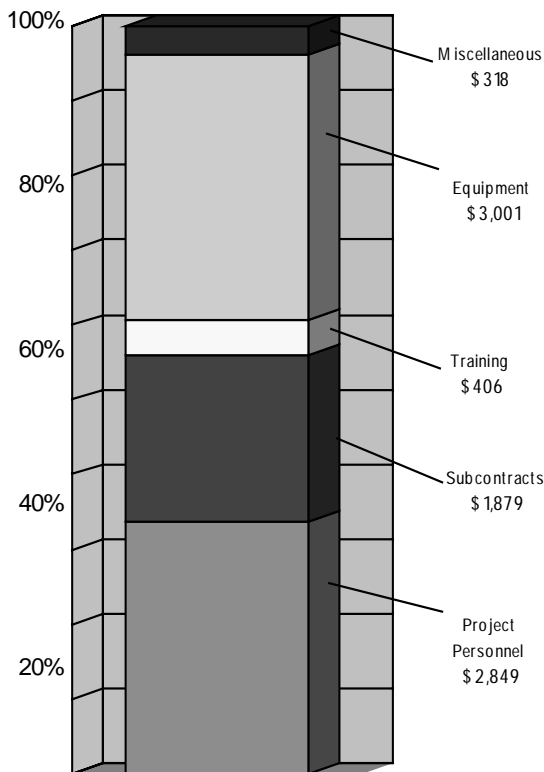
53. UNIDO technical cooperation delivery to the region reached \$8.5 million (10.4 per cent of total UNIDO delivery), representing a decrease from the previous record high in 1996 (\$9.2 million). Despite serious difficulties in financing programmes, new approvals (\$9.9 million) were higher than in any previous year except 1996. The highest priority for projects in the region was small and medium enterprises, followed by environment and energy, international competitiveness, investment promotion, and industrial strategies and policies.

**Figure 20. Technical cooperation expenditure in Europe and NIS in 1997, by source of funds**  
(Total of \$8.5 million)





**Figure 21. Technical cooperation expenditure in Europe and NIS in 1997, by project component**  
(In thousands of US dollars)



54. In its work on industrial strategy and policy advice, UNIDO recognized the importance of advising on the need for national economies to achieve synergy among all parties involved in industrial policy and decision-making. For example, UNIDO commenced assistance to Bulgaria in business education to adapt its secondary and higher education curricula to the requirements of a market economy as well as to produce positive attitudes towards private enterprise, either as employers or as employees. In recognition of the important role of local and regional development initiatives in the process of transition, a workshop was held on strategies and policies for regional development with an East-West exchange among selected regions in Eastern Europe.

55. Environmental concerns were addressed in Croatia, where a project was initiated to develop basic capacities in cleaner production by using existing professional capacities and expertise in the Czech Republic, created in part by previous UNIDO technical cooperation services. Georgia was assisted by an assessment of air pollution from the Tbilisi thermal power plant, where preparations were undertaken to reduce environment pollution at source and increase fuel efficiency. This project will increase net energy output and can serve as a model for other power plant refurbishing projects in

Georgia or other Commonwealth of Independent States (CIS) countries. A training programme in Gebze, Turkey, upgraded the knowledge of participants in industrial pollution assessment and control. In Romania, a new project aims at phasing out 10 metric tons of CFC-12 used to operate and service commercial refrigeration equipment by establishing a training centre for technicians. A regional project enabled authorities and managers from Belarus, the Russian Federation and Ukraine to get acquainted with modern planning methods for water management in large industrial plants. Within the framework of international efforts to address the important issue of climate change, the preparatory phase of a project for transnational cost effectiveness of air pollution reduction in Central and Eastern Europe formulated a major programme document.

56. Supporting implementation of the Montreal Protocol, a number of regional and country projects targeted ozone-depleting substances (ODS). A preparatory assistance project was designed to assist several NIS in the preparation of projects aiming at phasing out ODS. Country projects under implementation in Bosnia and Herzegovina, Croatia, Romania, the former Yugoslav Republic of Macedonia and Turkey covered a wide range of activities aimed at phasing out ODS.

57. To enhance the competitiveness of small and medium industries, a project financed by the European Union initiated an industrial subcontracting and partnership exchange in Prague to provide information and advisory services to SMIs in the Czech Republic and to promote agreements with foreign partners. UNIDO also provided support to Kyrgyzstan by assisting the start-up and initial operation of an independent small business development centre in Bishkek. This core centre will train and impart practical knowledge to consultants in various regions to ensure a multiplier effect at the national level. A network of small business support centres throughout the country will be promoted to share information and to develop complementary and joint activities. A new project in the Russian Federation will strengthen the capacity and capabilities of women managers and entrepreneurs to participate in market economy-oriented activities. UNIDO assistance aims at a full-fledged programme based on expertise accumulated through projects in other countries with economies in transition. Work continued under a large-scale, UNDP-financed umbrella programme for the establishment and support of national SMI projects in a minimum of 10 countries in the Balkans, the Caucasus and Central Asia. Programme services are demand-driven insofar as participating national SMI projects request services needed in any of the six areas covered. A further regional approach was undertaken to provide preparatory assistance to support sustainable development in Eastern Europe and CIS. The project promotes transitional reforms through accelerated growth of regions (within a country), based on competitive advantage.

58. Industrial restructuring and allied fields continued to be an area of focus for UNIDO activities in the region. For a UNDP-financed project in Bosnia and Herzegovina to enhance innovation, productivity and quality for international competitiveness, a bio-medical engineering centre will be established for the maintenance and repair of medical equipment. A project in Romania, also financed by UNDP, will enable an existing SMI centre to deal with the restructuring of privatized enterprises, train a core group of national business counselors in enterprise restructuring, and provide direct assistance to improve the effectiveness, profitability and viability of recently privatized SMIs.

59. In industrial information, investment and technology promotion, a project was initiated to set up three business development centres in Bosnia and Herzegovina which will assist SMIs and entrepreneurs to identify investment opportunities, appraise options, prepare business plans and apply available credit facilities. The project complements ongoing bilateral support by extending coverage to Banja Luka, Bihac and Travnik. In the former Yugoslav Republic of Macedonia, the development of institutional capacities to attract foreign investment features the establishment of an investment promotion unit at the Ministry of Development to be linked with the UNIDO World Investment Network Service (WINS). Staff training, dissemination of the UNIDO *Investor's Guide to the Former Yugoslav Republic of Macedonia* and an investment forum are also featured. Advisory services were provided to the Republic of Moldova for the establishment of an investment promotion agency. An integrated programme of preparatory assistance to Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan is designed to facilitate competitiveness by strengthening information, technology and investment promotion capacities. A project on business partnerships and investment opportunities in food-processing and agro-industries in selected regions of the Russian Federation is under implementation to identify and formulate proposals for promotion among potential foreign partners. Assistance was requested by the Islamic Development Bank for the evaluation of a techno-economic feasibility study to establish a new steel mill in Turkmenistan for export of steel billets to the Islamic Republic of Iran, Turkey and other neighbouring countries. An Intechmart in Ukraine supported entrepreneurs in acquiring appropriate technologies from Austria, Belgium, Greece, the United Kingdom and Central and Eastern European countries.

## F. Latin America and the Caribbean

60. In 1997, the economies of Latin America and the Caribbean consolidated the economic progress made since the crisis of 1994-1995. Gross domestic product growth is expected to reach 4.5 per cent in 1997 as compared to 3.5 per cent in 1996. Inflows of foreign capital are estimated to increase to \$70 billion in 1997—

a record level in the 1990s in the wake of the financial crises in Mexico and Argentina. These capital inflows will partly make up for the widening current account deficit. Inflation has slowed considerably since the early 1990s and is expected to drop to a regional average of 12 per cent in 1997.

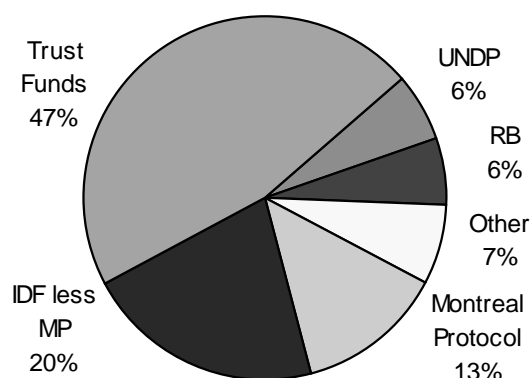
61. The positive growth trend in the region is still insufficient to substantially reduce pervasive poverty and inequality and to guarantee sustainable development. The labor market situation has worsened, with unemployment rates—which rose to 7.7 per cent in 1996—not expected to fall in 1997. Whereas the volume of imported goods continued to grow in 1997, exports showed a downward trend, mainly as a result of volatile product prices and a decline in oil prices. Economic data for the Mercosur countries indicate a consolidated growth process, increasing investment activities and a growing trade volume. However, this growth was slowed by financial constraints in Brazil—the largest Mercosur economy in terms of gross domestic product—resulting from spillover effects from the Asian crisis.

### UNIDO support

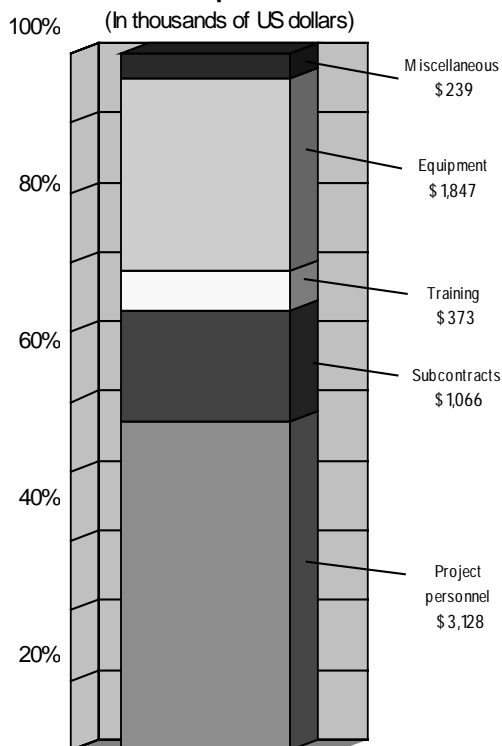
62. In 1997, UNIDO delivery of technical cooperation to Latin America and the Caribbean totaled \$6.6 million, representing a slight increase from \$6.4 million in 1996. Self-financed trust fund projects (\$3 million) accounted for 45 per cent of total technical cooperation delivery, followed by IDF and Montreal Protocol, at \$1.4 million and \$0.9 million (21 and 13 per cent) respectively.

63. The need for close interaction with industrial actors in the region continued to be a key factor in the design and formulation of the overall regional programme. A high-level ministerial meeting at Caracas, Venezuela, convened in cooperation with the Latin American Economic System (SELA) from 30 July to 1 August, reiterated the need for close coordination by international

**Figure 22. Technical cooperation expenditure in Latin America and the Caribbean in 1997, by source of funds**  
(Total of \$6.7 million)



**Figure 23. Technical cooperation expenditure in Latin America and the Caribbean in 1997, by project component**



and regional organizations to support industrial development in the region. The meeting also emphasized the importance of UNIDO programmes in support of Latin American and Caribbean industrialization.

64. Activities focusing on environmental considerations accounted for a large proportion of UNIDO support to Latin America and the Caribbean. Montreal Protocol objectives were reinforced by UNIDO activities for the elimination of methyl bromide, thereby yielding opportunities to reduce CFCs. A UNIDO/United Nations Environment Programme project that started in 1994 in the region with National Cleaner Production Centres (NCPCs) in Brazil and Mexico was expanded with a second phase in Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua). The project is based on a combined approach: ensuring the sustainable application of the concept to industry, taking into account national differences, and at the same time emphasizing the importance of regional cooperation. The NCPC programme is expected to expand to the Mercosur countries.

65. Considering the importance of small and medium enterprises, especially in smaller countries of the region and in traditionally predominant sectors such as food manufacturing, UNIDO promoted clusters of small-scale industries in Guatemala and Nicaragua to raise their competitiveness. The support of SMI networks in

cooperation with the Support Programme for Micro-Enterprises (PAMIC) in Nicaragua entered its second phase. General targets of programmes in the SMI sector are modernization, development of productive human resources and establishment of links with large industries. The Caribbean region also benefitted from UNIDO expertise in SMIs. In Jamaica, a large-scale programme for modernization of the manufacturing sector entered its second phase with an emphasis on clustering and networking of SMIs. Similar programmes were implemented in Bolivia, Costa Rica, Suriname and Mexico and a programme proposal was submitted to Venezuela.

66. In line with Mercosur market integration, UNIDO continued its efforts to foster industrial development through the formulation of SMI programmes in the subregion. A project to enhance agro-industrial SMI competitiveness in Mercosur's Common Market Group was approved. SMIs play a key role in the southern cone countries, particularly in Uruguay. A new programme on internationalization of technological innovation mechanisms supports the dissemination of technical innovation mechanisms in the subregion, following an assessment exercise in all four member countries. The focus is on dissemination of experience gathered from cleaner production and innovation, and also foresees the creation of an award scheme to recognize companies that pursue technological innovation.

67. Human resources training for industry was promoted both at the local level in cooperation with the United Nations Office for Project Services in Guatemala and at the national level in Cuba to strengthen industrial human resources development policies in priority subsectors. Preparatory assistance was initiated to apply the results of a UNIDO regional typology on the participation of women in the manufacturing sector. The typology aims to provide individual countries with a basis for designing integrated programmes of action to improve the level of women's participation in industry. Work was initiated to develop integrated national programmes for Argentina, Brazil and Chile based on the 1996 approach for Colombia.

68. UNIDO investment and technology promotion activities included Intechmarts in Brazil and Colombia. A national network for technological and investment promotion centres in Ecuador and Guatemala was established and an investment seminar, based on the objectives-oriented project planning (OOPP) methodology, was held in Nicaragua. These measures will reinforce investment by creating an enabling environment and institutional support for the entrepreneurial sector, mainly by developing human resource potential and stimulating discussion on industrial investment opportunities. Moreover, assistance is geared towards expanding industrial production in priority sectors by mobilizing resources required for investment and technology projects. UNIDO has implemented a project

for industrial decentralization with this objective in Guatemala. In general, projects are to enhance industrial policies by means of modernization, restructuring of institutions and infrastructure, and technical support. In Peru, a country support strategy was finalized providing recommendations on industrial development programmes which were presented to the Government.

69. An ongoing project in Argentina aiming to integrate the automotive sector into the global economy entered its second phase in 1997. The project features assistance to enable Government authorities to develop and enact legislation designed to increase exports in the sector. Programming undertaken in Suriname and Guyana yielded two approved projects (SMIs and abatement of mercury pollution in the artisanal gold mining process) and four pipeline projects. While financial support for the Guyana programme requires negotiation, trust funds from the Netherlands will be utilized for Suriname, and follow-up projects are under consideration for financing from the Netherlands Treaty Fund allocated to Suriname. UNIDO finalized negotiations for an Inter-American Development Bank-financed project for Suriname in enterprise statistics, which is scheduled to begin in early 1998.

## G. Least developed countries

70. The 1980s were a lost decade for many developing countries and particularly for the least developed countries. African LDCs continued to experience great difficulties during the period 1990-1994, although gross domestic product (GDP) grew at an annual average rate of 2.9 per cent. The economic situation for LDCs improved in the second half of the 1990s with the annual average growth rate of GDP in excess of 4 per cent for African and Asian LDCs during 1995 and 1996. The improved growth performance of African LDCs was, *inter alia*, due to a major upturn in commodity prices during 1995.

71. Despite the slight upturn in overall economic performance in 1995 and 1996, the LDCs' share of global MVA and the total MVA of developing countries has remained minuscule: a constant share (0.3 per cent) of global MVA since 1980, and a declining share of the MVA produced in developing countries (2.5 per cent in 1980 compared to 1.9 per cent in 1994). There is no evidence that this trend is changing. The LDCs for a decade and a half have, therefore, experienced relative de-industrialization. It will be a long time before the ground lost by LDCs during this period can be made up.

72. The industrial growth of LDCs is also significantly challenged by accelerated globalization and widespread liberalization of trade. UNIDO is therefore focusing increasingly on building national capacities and creating a favourable investment environment in LDCs as a means to offset the possible negative impacts of globalization and trade liberalization. In this context,

UNIDO provides support to such priority areas as institutional capacity-building, strengthening production capacity, investment promotion programmes and development of small- and medium-sized industries. This support will assist LDCs to promote their industrial competitiveness and facilitate access to international markets.

### *UNIDO support*

73. In response to the specific needs of LDCs, UNIDO has developed and implemented a number of national, regional and global priority programmes, which address either country-specific needs or focus mainly on LDCs within a regional or subregional programme. Support highlighted the following priority areas: strengthening production capability; institution-building and human resources development, including women's entrepreneurship; and investment promotion.

74. Total delivery of UNIDO services and technical cooperation to LDCs amounted to \$12 million in 1997, an increase of 17.5 per cent compared to 1996. Of this total, \$11.2 million, or 93 per cent went to African LDCs, including Arab LDCs in the region. These figures do not include regional, inter-regional and global projects from which LDCs have also benefitted together with other developing countries. The share of LDCs in these projects is estimated between \$10 and \$15 million.

### *Strengthening production capability*

75. Implementation of the high-impact programme on the application of quality principles to the food-processing sector commenced in five African LDCs. Through pilot programmes in selected enterprises and reinforcement of related support institutions, the programme will promote rapid and measurable improvement in food safety. The same programme was developed for selected LDCs in West Africa and Asia and submitted to potential donors for consideration.

76. As part of the UNIDO regional African leather and footwear industry programme, assistance was provided to four African LDCs, with a total value of \$2 million. These projects were designed to improve the quality of raw hides and skins, to strengthen the production capacity of the local tannery industry and the marketing performance of small-sized manufacturers. A further aim is to improve the efficiency of tannery effluent treatment plants.

77. Under a preparatory programme for the Alliance for Africa's Industrialization, UNIDO carried out a needs assessment project in African LDCs with a view to enhancing competitiveness based on potential comparative advantages in agro-related industries. The findings of this preparatory assistance will form the basis for a medium-term integrated technical cooperation programme designed to ensure food security, increase agricultural productivity and resource flows, and enhanced competitiveness.

78. Within the context of its Special Programme for the Industrial Development for Asia and the Pacific, UNIDO continued the implementation of the second phase of a project on promotion and development of agro-related metalworking industries in LDCs. This programme provides catalytic assistance to support agricultural production and processing by enabling the selected countries to become more effective in the production of agricultural tools used at all stages of food production and processing.

#### ***Institution-building and human resources development***

79. Taking into account the urgent need of LDCs for policy advice on industrial strategies, institution-building and private sector development, UNIDO continued support to 14 African and Asian LDCs ranging from direct advisory services in the formulation of industrial policies and competitiveness strategies to capacity-building initiatives. Institutions such as ministries of industry, national institutes of statistics, metrology and investment promotion centres benefitted from UNIDO initiatives. Two large-scale projects supported the ministries of industry in Lesotho and Uganda in implementing privatization programmes and in strengthening private sector development.

80. In response to the recommendations of the Third Ministerial Symposium on the Industrialization of the Least Developed Countries and mandates of the General Conference, UNIDO carried out a needs assessment project in 18 African and seven Asian LDCs to establish an effective industrial information network in these countries. This project will assess prospects for networking to support the needs of the business community, at national and international levels. The second phase of the project was formulated and is being submitted to potential donors for consideration.

81. Six LDCs are among 12 anglophone African countries assisted in carrying out investment, technology and information development. This continuing large-scale programme aims at (a) capacity-building in investment, technology and information access at the enterprise level, and (b) assisting the private sector by the promotion of foreign direct investment and technology transfer in the form of investment cooperation through joint venture and the construction of strategic business alliances.

82. In response to a recommendation of the Third Ministerial Symposium on the Industrialization of the Least Developed Countries, a needs assessment project was carried out addressing physical and institutional capacities in 10 African and five Asian LDCs in the field of quality, standardization, testing and metrology (QSTM). This project led to the formulation of three subregional programmes (one each for anglophone and francophone African LDCs—both of which have been approved within the Alliance for Africa's

Industrialization—and one for Asian LDCs) to increase competitiveness in food-processing enterprises.

83. Assistance continued for the establishment of a regional focal point (*tissuthèque*) for the promotion of the traditional textiles industry in West African LDCs. With Mali as the focal point, the project aims at training artisanal (primarily women) entrepreneurs and supporting quality improvement in traditional textile products, thereby enhancing competitiveness in regional markets.

84. The high-impact programme for women's entrepreneurship development was under active implementation in three West African countries, including one LDC. The project aims at maximizing the contribution of women entrepreneurs to the industrialization process through interrelated activities, including training programmes.

85. The implementation of the large-scale multi-funded project for rural women entrepreneurs continued in Burkina Faso and Mali. Approved in 1996 under UNIDO/International Fund for Agricultural Development/UNDP resources, the project aims to establish local food-processing capacities through further training of women artisans with the involvement of non-governmental organizations (NGOs). This project will ensure the sustainability of 26 platforms already installed in both countries under the first phase. The platforms, consisting of a diesel engine for power generation as well as other equipment, allow the communities to make more rational use of energy. Furthermore, they provide employment opportunities for the rural population, particularly women.

86. In the United Republic of Tanzania, the second phase of UNIDO's training programme for women entrepreneurs in the food-processing industry was launched. The aim is to ensure the sustainability of the ongoing project (first phase) through the development and strengthening of institutional arrangements, new training programmes and quality control standards. Under the first phase, an institutional and regulatory framework was established for increasing the participation of women in small-scale food-processing industries.

87. Assistance was provided to the Solomon Islands through a UNDP-funded project that aims at creating some 1,500 job opportunities. The project will strengthen the capability of the Ministry of Commerce, Industries and Employment to promote small-scale and cottage industries nationwide, with effective linkages to other national organizations.

88. A UNIDO subregional NGO forum on the role of NGOs in private enterprise development, convened at Dakar, Senegal, in November, focused on the important role that NGOs can play in the development of rural, micro and small-scale industries in West African LDCs.

The forum recognized that NGOs can enhance the contribution of small entrepreneurs to industrial development in rural areas through the provision of information and services in technology and skills upgrading, access to local credit and energy sources, and the promotion of informal sector enterprises and their transition to the formal sector.

### *Investment promotion*

89. To support LDCs in mobilizing national and foreign investment, a round-table meeting of IPS offices and national investment promotion agencies in the Asia and Pacific region held at Manila in May analyzed trends and possibilities for mobilizing foreign direct investment, with special emphasis on selected LDCs. As a follow-up, a preparatory assistance project is being launched to assess the prospects for industrial cooperation between LDCs in the Greater Mekong subregion and other Asian developing countries.

90. In cooperation with the United Nations Conference on Trade and Development, UNIDO co-sponsored a pilot seminar on the mobilization of portfolio investment flows to LDCs. In preparing the seminar, which was convened in Geneva in June, UNIDO carried out six country studies in African LDCs (Madagascar, Mozambique, Togo, Uganda, United Republic of Tanzania and Zambia) and one in Bangladesh. The studies examined the economic and financial environment required for attracting private investment funds to these countries. Two investment opportunity studies were carried out assessing LDC needs in agro-industries and infrastructure. The studies showed that channeling of investment funds to the industrial sector in LDCs may succeed if pre-conditions are improved at both the policy and institutional level.

91. UNIDO plays an important catalytic role in mobilizing resources from other multilateral, bilateral and funding agencies. To facilitate the formulation of large-scale projects for consideration by potential donors, UNIDO adopted a more flexible approach in consideration of preparatory projects for LDCs, using its own limited seed money programmes. In the 1996-1997 biennium, a total of \$5.7 million was earmarked for African LDCs under IDDA support programme resources. This represented 50 per cent of total IDDA resources for all African countries. Furthermore, the technical cooperation component of the regular budget (Regular Programme of Technical Cooperation) was allocated, on a priority basis, to LDC programmes and projects.

### *Environmental programmes*

92. Under a trust fund contribution from Japan, the first stage of the high-impact programme on new technologies for abatement of global mercury pollution was launched in the United Republic of Tanzania. Designed for four countries, including three LDCs (Ethiopia, Mozambique,

United Republic of Tanzania), the objective is to increase awareness of the dangers of mercury pollution, replace mercury amalgamation with new technology, training, and better equipment, thereby improving the income of miners through more efficient recovery. The programme also includes policy advice on the regulation of artisanal gold mining with due consideration of gender issues.

93. Six projects that address specific environment issues were carried out in Ethiopia, Mozambique, Sudan and the United Republic of Tanzania. These projects focus mainly on pollution control, sustainability and cleaner technology. Under a regional project UNIDO provided policy advice to eight African countries, including five LDCs (Guinea, Niger, Uganda, United Republic of Tanzania, Zambia) on the development of ecologically sustainable industrial development programmes. The project will enable the Governments to rationally exploit natural resources, combat industrial pollution and gain access to information on clean technologies.

### *Fourth Ministerial Symposium on the Industrialization of the Least Developed Countries*

94. A ministerial symposium is convened every two years to identify the specific needs of LDCs and develop tailor-made, demand-oriented technical cooperation activities. Ministers of Industry are invited from all 48 LDCs to discuss specific topics common to LDCs, share experiences and make concrete recommendations for guiding UNIDO's LDC programme. Decisions and recommendations of the Ministers are submitted for consideration and endorsement by the General Conference. The Symposium recommendations then constitute the framework for the development of the UNIDO LDC action programme for the next two years.

95. The Fourth Ministerial Symposium on the Industrialization of the Least Developed Countries was held in Vienna from 26 November to 5 December in conjunction with the seventh session of the General Conference. It provided a forum for Ministers to discuss industrial capacity-building and competitiveness in LDCs in light of increasing globalization. In dealing with these issues, the Ministers focused on two fundamental aspects that receive highest priority in LDCs: promoting competitiveness, particularly in agro-related industries, and establishing an enabling environment through local capacity-building and entrepreneurship development. In this context, the Symposium reviewed and discussed mechanisms, structures and policies facilitating technological, human and financial capacity-building, as well as steps to be taken to promote entrepreneurship development and investment flows. The Ministers also discussed the role and scope for UNIDO in enhancing the industrial competitiveness of LDCs, through technological and institutional capacity-building, training and entrepreneurship development, and promoting domestic

and foreign investments, especially through South-South cooperation.

96. The recommendations adopted by the Symposium included a request for UNIDO to undertake in the next two years, *inter alia*, a specific programme to elaborate and update the industrial visions and strategic policies of least developed countries. The Ministers also recommended an action programme for LDCs for 1998-1999, in partnership with UNIDO, covering six specific areas:

- Technological, institutional and financial capacity-building in agro-industrial branches;
- Increasing regional-level awareness of investment opportunities in agro-related industries;
- Capacity-building in quality, testing, standardization and metrology;
- Capacity-building in industrial information services;
- Strengthening industrial infrastructure;
- Capacity-building for investment promotion in LDCs

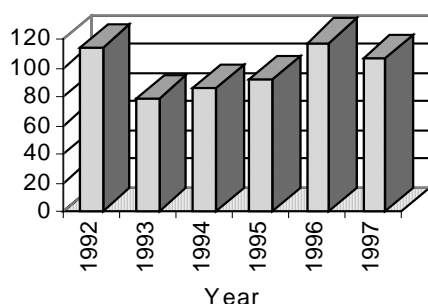
## CHAPTER VI

### MOBILIZING FUNDS FOR UNIDO SERVICES

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1. Political uncertainty compounded by national budgetary constraints throughout 1997 led to a freeze in new approvals by several major donors, thereby resulting in a decrease in total funds mobilized for technical cooperation activities. Including net changes to ongoing projects, UNIDO mobilized \$106.1 million, compared with \$118 million reported in 1996. Even in these difficult circumstances, this figure was above the performance in previous years (see figure 24).<sup>1</sup> New approvals—that is, the total volume of new projects only—amounted to \$92.9 million, down from \$100.8 million in 1996, but also well above the 1995 level (\$74.7 million)

**Figure 24. Net approvals 1992-1997**



2. Significantly, approvals exceeded (for the second consecutive year) the level of delivery. This means that the portfolio of projects under implementation increased again, which should allow a continuation of the positive trend in delivery levels started in 1997.

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<sup>1</sup> If in 1996 figures the final adjustments related to the completion of UNIDO involvement in the establishment of the International Centre for Genetic Engineering are included, the approval level has actually increased by some 5 per cent over 1996.

3. The distribution of approvals by region and thematic priority is given in appendix C, table 2, addendum 1 to the present report. As has been the case in previous years, external funds continue to be mainly given for special purposes, with donor selection of projects for financing. Hence, the geographical and thematic distribution of approvals are not directly within the control of the Organization.

4. As in 1996, the Montreal Protocol was the single most important source, with \$44.6 million of net approvals, which exceeded the figure for 1996 (\$40.6 million). Industrial Development Fund (IDF) and trust funds, mainly used by governmental donors, registered considerable decreases for the reasons described above. The decrease in IDF and trust funds was also exacerbated by the delayed approval of several large-scale projects, now anticipated for early 1998. IDF and trust funds nonetheless registered net approvals of \$19.6 million and \$15.5 million respectively. Funding from UNDP increased to \$22 million, up from \$18.3 million in 1996.

5. The main areas for which donor support could be mobilized under IDF and trust funds included environment-related activities, small and medium industry development, investment promotion and activities related to agro- and food industries.

6. Under environment-related activities, a major expansion of the network of National Cleaner Production Centres was realized with projects approved for new centres to be opened in Nicaragua (funded by Austria), Costa Rica, Guatemala and El Salvador (all funded by Switzerland) and further support mobilized from Austria and Norway for some existing centres. Further expansion of the programme is foreseen for 1998. Also, Switzerland approved a \$2 million capacity-building project on management systems, technical standards, treatment and disposal of municipal waste. This project had been identified and developed under China's



response to Agenda 21. In addition, projects covering several countries were approved for cleaner production in the leather sector.

7. In support of small- and medium-scale industry development, important projects were approved for Nicaragua and Zimbabwe (funded by Austria), and additional funds were made available by Italy in support of the global UNIDO/Italy joint programme and by the Netherlands for the continuation of a project in Honduras.

8. Investment promotion activities were supported by continuing funding of the Investment Promotion Services network by various donors. Other investment-related activities included projects financed by China and India, both for promotion of investment into their respective countries (including under the build-operate-transfer modality) but also in the context of economic cooperation among developing countries for the benefit of other countries. This self-financing demonstrates the value placed on these UNIDO activities by recipient countries.

9. In agro-related activities—specifically investment and partnership promotion—a major project (value \$1.8 million) was approved and financed by France. Japan funded a project in Ethiopia related to reduction of post-harvest losses through training of women, and Belgium continued to support a project in Mali, also focusing on

women entrepreneurs in the agro-food sector. Other donors funded preparatory assistance aimed at developing further activities in this priority area, highlighted in both the Business Plan and the Alliance for Africa's Industrialization.

10. A major positive development occurred during the seventh session of the General Conference in December. Denmark, formerly a major donor that had frozen new contributions in recent years, announced "a substantial voluntary contribution to the general-purpose segment of the Industrial Development Fund in 1998 and the years to come". For the first time, UNIDO will have considerable funds that can be programmed without time-consuming and unpredictable consultations with potential donors after project preparation activities have been undertaken. Besides enabling the Organization to take more programming initiative, this strengthens UNIDO's position to mobilize other complementary funds. The Secretariat is consulting with several other Member States with a view to expanding further the programmable funds available for high-priority programmes and projects.

11. Another innovative project providing UNIDO with additional flexibility was approved by Belgium. Under this project UNIDO can rapidly mobilize expertise required to develop high-priority projects within the Business Plan as well as provide trouble-shooting support to ongoing projects.

## CHAPTER VII

### QUALITY ASSURANCE, EVALUATION AND INTERNAL AUDIT

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#### A. Quality assurance

1. The decision was taken in 1996 to carry out a self-assessment of UNIDO's organizational performance based on the model developed by the European Foundation for Quality Management. During 1997, cross-organizational teams prepared a position paper providing baseline data on how UNIDO works and what it achieves. This paper, when endorsed by the Director-General, will be independently assessed and enable management to decide on priority areas for improvement over the next biennium. Considerable interest has been expressed in this exercise both inside and outside the United Nations system and UNIDO was invited to present its experience with self-assessment to private sector audiences in Europe and to public sector participants at the Commonwealth Convention on Restructuring Government for Organizational Excellence held in South Africa.

2. The quality management principles for development cooperation (GC.6/8/Add.1) were built into the guidelines for the management of UNIDO services—programme and project development and programme and project approval—and issued as Director-General's bulletins in April 1996. Application of the quality criteria to project proposals submitted to the Programme and Project Review Committee (PPRC) was monitored during the year using the established UNIDO quality indicators. The focus of monitoring has been primarily on the "relevance" criterion as the first essential characteristic of quality indicating a continuous improvement of project proposals as they are submitted to PPRC and reflecting increased adherence to the quality management principles. The unapproved projects normally required reformulation to better meet the quality criteria. Potential impact and sustainability can only be assessed if relevance is first established. Actual impact at the purpose and development

objective levels is measured at the evaluation stage (see part B below).

3. The three volumes of the *Quality Management of Development Cooperation* series were finalized and published (*I. Principles and concepts; II. The Methods; III. How to assess the quality of service proposals*). This, together with a number of other activities related to quality assurance, was made possible with financial support provided by Germany. Given the critical importance of moderation and communication in ensuring that a common understanding is secured during objectives-oriented project planning (OOPP) workshops, two additions to the quality management series are under preparation (*IV. How to organize participatory workshops* and *V. Techniques for effective moderation and training*). These volumes draw to a considerable extent on systems thinking and communications techniques (neuro-linguistic programming) to improve leadership and management.

4. Three OOPP workshops were organized and moderated by UNIDO to identify and formulate technical cooperation projects. A similar workshop was conducted for the UNDP Regional Office in Fiji to finalize its private sector and sustainable livelihood programme for the Pacific Islands.

5. Training and advice on quality management of development cooperation were also provided on request to the International Atomic Energy Agency in preparation of its guidelines on project design and formulation. Similar services were provided to the Technical Assistance Secretariat of the International Monetary Fund and the International Centre for Science and High Technology in Trieste.

6. Three additional staff members received outside training in OOPP moderation techniques, thereby

strengthening the Organization's capacity to moderate OOPP workshops in French and Spanish.

## B. Evaluation of UNIDO services

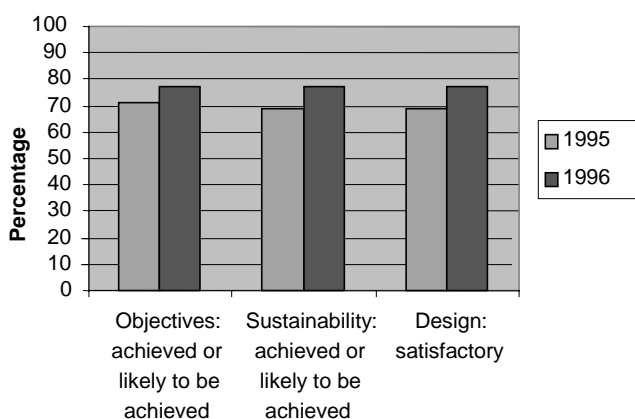
7. Evaluation is an independent and objective tool used for accountability to stakeholders and management, as well as for learning lessons for use in ongoing and future services. It covers technical cooperation programmes and projects and related services at Headquarters and in the field. Of importance is the continuing improvement of evaluation methodologies to make them simpler and increase feedback. In this connection new guidelines for the evaluation of technical cooperation (self-evaluation and independent evaluation) were prepared and issued under Director-General's Bulletin DGB(P)72, as well as new standard forms for independent evaluation reports, progress reports, terminal reports and self-evaluation group training programmes.

### *Annual analysis of technical cooperation*

8. On an annual basis, UNIDO analyses the results of all in-depth evaluation and self-evaluation reports completed during the previous year, which provides the foundation for an assessment of project performance. A total of 13 in-depth evaluations and 229 self-evaluation reports (54 project progress reports and 175 terminal reports) were completed in 1996, forming the basis for the analysis conducted at the end of 1997. This contains structured information on project management, funding sources, attainment of objectives, issues related to design and implementation and lessons learned for future use.

9. On average, project performance continued to show a positive trend as indicated in figure 25. Achievement or likely achievement of immediate objectives stood at 77 per cent in 1996, compared to 71 per cent in 1995 and 65 per cent in 1994.

**Figure 25. Evaluation of Projects**



10. Sustainability continues to be a problem with some projects. The reasons are multiple, including lack of adaptability of counterparts to market economy conditions, consequent problems in marketing services and earning income, and sometimes insufficient attention to financial sustainability of counterpart institutions.

11. The analysis found an improvement in the quality of project design (project formulation). The continuing design shortcomings are attributed to unclear definition of purpose, unrealistic time frame, lack of clarity with respect to purpose and outputs and underestimation of risks involved. Further improvement in project design should concentrate on applying quantitative performance indicators to assess effectiveness and development impact. The quality of project monitoring and backstopping was assessed as satisfactory in 77 per cent of project evaluations, compared to 63 per cent in 1995.

### *Selected lessons from in-depth evaluations*

12. **Direct support and capacity-building:** In general, direct support to industrial enterprises generates visible impact in the short term. Building up local capability to provide such support takes much longer and is usually less successful. That notwithstanding, strengthening local capability should be the ultimate goal of development cooperation.

13. **Sustainability:** Project sustainability depends mainly on ownership of the project by the local development partners and on a suitable capacity-building component. Key determinants are:

- Host country/client commitment;
- Concrete demand for services;
- Management and professional capabilities;
- Degree of autonomy from government interventions and salary scales.

14. Capacity-building is a precondition to sustainability. It should not only be seen as the capacity for a specific institution to reproduce the results attained with external assistance, but more importantly as enhancement of the capacity of the institution to further its own capacity for managing change beyond the project's duration. For assistance to servicing institutions, a prior assessment should be made of existing staff capabilities and their ability to absorb the new knowledge.

15. **Programme approach:** A programme, consisting of a set of interrelated projects supporting different development partners and target beneficiaries in various subsectors, has the potential advantage of achieving synergy effects among the partners and target beneficiaries supported. The scope of the synergy effects depends on the existence of business linkages among the programme partners and target

beneficiaries. Synergy effects can be influenced by judicious programme management through selection of target beneficiaries with established linkages.

**16. Regional programmes:** Regional technical cooperation projects present some economies of scale in relation to national projects at the preparatory phase as well as to support networking. However, for the operational phase of institution-building or capacity-building projects, national projects are preferable since they are better able to concentrate on the particularities of the countries concerned.

**17. Private sector versus public sector:** While it is today accepted that industrial assets are better managed by the private sector, many supporting services—particularly those related to research, demonstration and training—are still in the public sector. Even in developed countries, these supporting services cannot survive on a self-financing basis alone and require public support.

**18. Equipment input:** Equipment should be part of a balanced package of services, including advice on the organization of the processes in which the equipment is to be used, and training. The selection of equipment must be done in consultation with target beneficiaries and with due consideration of technical and infrastructural needs as well as availability of qualified manpower.

**19. Software development:** In some cases, software has been disseminated before sufficient field testing. As is the case with commercial software, potential users may be discouraged from using the product if it is flawed or is not sufficiently user-friendly. However, UNIDO, with its world-wide array of business-oriented end users, cannot afford to disseminate software that does not fully meet the requirements of end users. Where appropriate, the software distributed should be clearly identified as experimental or under development.

**20. Demonstration function:** A pilot plant hardly functions as a model for others unless its demonstration function is supported by specific activities. Sometimes, instead of building a new pilot plant/structure, an existing plant may perform the same function if sufficient attention is paid to the dissemination of information and experience.

**21. Project implementation monitoring:** In some cases, detailed work plans are not prepared or updated. Work plans should be prepared and regularly reviewed and updated during the course of implementation. Review meetings should be held with the involvement of all partners, including target beneficiaries, to determine implementation progress or problems and to initiate the necessary corrective action as well as update project work plans.

**22. Rural development:** UNIDO's comparative advantage (and cost effectiveness) should be examined

where interventions are directed at target beneficiaries with low-level development such as artisanal activities or rural groups, in which social and cultural activities may outweigh the profit-making nature of normal industrial activities.

#### *Client feedback*

23. In 1996, UNIDO initiated questionnaires to gain feedback from clients on satisfaction with UNIDO services. Table 2 provides statistics on answers received in 1997.

#### *Investment promotion activities and the Investment Promotion Service (IPS) system*

24. The evaluation of this programme was conducted in 1997. Although the report was issued in 1998, its conclusions and recommendations were made available during 1997.

25. UNIDO promotion of partnerships between enterprises in developing countries has been differentiated according to type of business contacts undertaken under different modalities such as transfer of technology, direct foreign investment, subcontracting and industrial cooperation in general. In practice this differentiation is blurred and all types of promotional activities should come under the same umbrella of international partnerships.

26. The evaluation established the relevance of promotion of partnerships and their support, particularly involving small and medium enterprises in developing countries and countries with economies in transition. While many actors are active in this field, UNIDO has some clear advantages.

27. The promotion of information technology has made big strides, but the evaluation found that this technology should not be considered a substitute for the different tools used by UNIDO—such as meetings, IPS offices and delegates—but a support to such instruments.

28. Despite the different names given in UNIDO to promotion meetings, the evaluation found that they have the same goal, with an emphasis on investment or transfer of technology. The evaluation therefore recommends that a strategy paper be prepared to develop a common approach to the variety of promotion meetings. An integrated calendar of meetings for greater focus and to avoid duplication should be prepared with the inclusion of meetings in the calendar decided by only one manager, in consultation with IPS managers.

29. Furthermore, increased attention should be given to promotion meetings organized in developed countries focused on particular countries or industrial subsectors. Proposal forms for partnership projects used at forums should be short and totally reliable. Where applicable, a longer form of 4 to 7 pages can be prepared. In general, however, longer and too elaborate forms should be avoided.

**Table 2. Client feedback****(Reflects responses received through December 1997)****Questionnaires sent out = 138****Responses received = 39**

<u>A. Client overall assessment</u>			<u>B. UNIDO's responsiveness</u>			<u>C. Use of outputs</u>		
More than expected	8	21%	Highly satisfactory	13	35%	Yes	27	75%
As expected	26	67%	Satisfactory	21	57%	No	9	25%
Less than expected	5	13%	Unsatisfactory	3	8%			

	<u>D. Timeliness</u>		<u>E. Quality</u>	
	<b>As scheduled</b>	<b>Delayed</b>	<b>Satisfactory</b>	<b>Unsatisfactory</b>
Experts	94%	6%	94%	6%
Subcontracts	90%	10%	73%	27%
Training	95%	5%	95%	5%
Equipment	89%	11%	100%	-
Software	74%	26%	95%	5%
HQs technical support	95%	5%	95%	5%
UNIDO administrative performance			96%	4%

30. While it is difficult to give an accurate picture of the effectiveness of partnerships actually implemented by UNIDO promotional actions and even more difficult to assess impact (jobs created, exports, and manufacturing value added generated), the evaluators were able to establish a number of successes. Among these were investment promotion meetings in Asia that resulted in four operational projects in diverse industrial sectors (industrial filters, shoe soles and heels, tomato paste). With a combined investment of over \$8 million, the projects feature export manufacture. In the case of one IPS, 105 industrial projects were generated representing investments of \$624 million and the creation of 17,500 jobs.

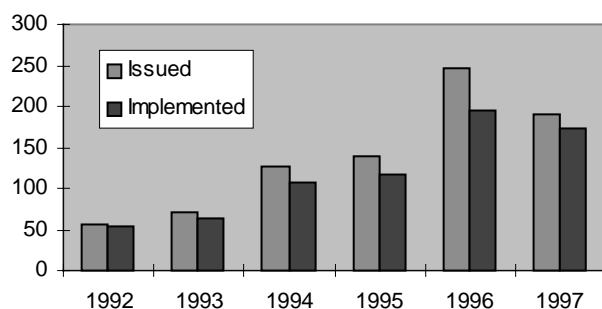
31. The IPS network and delegates therein continue to be a useful component of the programme. However, their involvement in Headquarters-led activities as well as their management and monitoring by Headquarters needs improvement. The evaluation indicates that involvement of UNIDO Country Directors in specific efforts could enhance programme support.

### **C. Internal Audit**

32. Internal Audit assists the Director-General to discharge his accountability to Member States by assessing the adequacy and effectiveness of the Organization's management control systems. The management control systems are designed to ensure the efficient use of resources, accuracy of financial information, compliance with rules and regulations and safeguarding of assets.

#### ***Audit and investigation***

33. Audit activities are documented in various exercises, including observations or comments that are sometimes used as inputs to more comprehensive audit reports. Reports and observations contain recommendations that are followed up regularly. In 1997, Internal Audit issued 16 formal reports (5 project audits, 4 financial audits, 6 management audits and 1 investigation), 41 audit observations and 86 audit comments, which contain about 190 audit recommendations. The decline in outputs from 1996 was due to the reduction in staff resources (see figure 26). Audits were focused on general management control rather than isolated issues.

**Figure 26. Number of recommendations**

34. Project audits focused on IPS offices with a view to improving decentralized financial management systems and procedures. Resulting improvements in locally funded activities include a reduction in support costs and streamlined reporting. Procedures for authorization of local travel were also streamlined. A project audit of the joint UNIDO committees covering cooperation with specific countries resulted in a fundamental change in the management of those committees. Financial audits led to the restructuring of the funds of the Staff Welfare Board and improvement in the management of the Industrial Development Fund.

#### *Studies and advisory services*

35. A major initiative to improve the management control framework was the definition and improvement of major processes of the Organization (core, support

and management processes). This led to the establishment of the Committee for the Rationalization of Processes and Procedures in September, and the rationalization of some 30 procedures.

36. Another initiative concerned the establishment of organizational performance indicators, in line with Board decision IDB.17/Dec.2. A discussion paper was prepared to provide a conceptual framework as well as possible performance indicators. This paper will be an input to the intersessional working group on the future role and functions of UNIDO for its deliberations in 1998.

37. In preparation for the first global meeting of the UNIDO Country Directors held in January 1998, a discussion paper was elaborated on the decentralization of functions to field offices. Decentralization entails considerable risks, and new management control mechanisms have to be installed based on “post-facto control” and “trust, but verify” modes of control, where field offices will have considerable flexibility in making decisions within the established guidelines, with headquarters monitoring the results. In this context, audits have focused on the need to maintain a balance between empowerment and accountability, flexibility and discipline.

38. Coordination with the External Auditor continued as an important internal audit function. In that connection, a new Director-General’s bulletin on procedures for external auditing was issued.



## ABBREVIATIONS

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<b>A</b>			
ACC	Administrative Committee on Coordination	GEPLACEA	Latin American and Caribbean Sugar Exporting countries
ADB	Asian Development Bank	GLOBE-IN	Global Learning Opportunities for Business Education cum Industrial Networking
AIDMO	Arab Industrial Development and Mining Organization	GNP	gross national product
AISU	Arab Iron and Steel Union	GRIP	Graduate Resources Integration Programme
APCC	Asia and Pacific Coconut Community	<b>H</b>	
ARCEDEM	African Regional Centre for Engineering, Design and Manufacturing	HABITAT II	Second United Nations Conference on Human Settlements
ARSO	African Regional Organization for Standardization	HACCP	hazard analysis and critical control points
ASEAN	Association of Southeast Asian Nations	HCFCs	hydrochlorofluorocarbons
<b>B</b>		HFCs	hydrofluorocarbons
BINAS	Biosafety Information Network and Advisory Service	HIC	Hangzhou International Centre for Small Hydro Power
BOT	build-operate-transfer	<b>I</b>	
<b>C</b>		IAEA	International Atomic Energy Agency
CAD	computer-aided design	IAF	International Accreditation Forum
CAF	Andean Development Corporation	IASP	International Association of Science Parks
CAM	computer-aided manufacturing	IBAC	International Business Advisory Council
CAMI	Conference of African Ministers of Industry	ICGEB	International Centre for Genetic Engineering and Biotechnology
CASE	International Centre for Application of Solar Energy	ICHET	International Centre for Hydrogen Energy Technologies
CCT	clean coal technology	ICMET	International Centre for Materials Evaluation Technology
CEI	Central European Initiative	ICS	International Centre for Science and High Technology
CFC	Common Fund for Commodities	ICT	information and communication technologies
CFCs	chlorofluorocarbons	IDB	Inter-American Development Bank
CIS	Commonwealth of Independent States	IDDA	Industrial Development Decade for Africa
COMESA	Common Market for Eastern and Southern Africa	IDENTIFY	UNIDO Industrial Development Energy Technology Investment Framework
COMFAR	Computer Model for Feasibility Analysis and Reporting	IDF	Industrial Development Fund
<b>E</b>		IFAD	International Fund for Agricultural Development
ECA	United Nations Economic Commission for Africa	IGO	intergovernmental organization
ECDC	economic cooperation among developing countries	IHRD	industrial human resources development
ECE	Economic Commission for Europe	IHRD-ROM	Industrial Human Resources Diagnosis and Reorientation Map
ECLAC	United Nations Economic Commission for Latin America and the Caribbean	ILO	International Labour Organization
EFQM	European Foundation for Quality Management	IMF	International Monetary Fund
EPZ	export processing zone	INTIB	Information Networking for Technology, Investment and Business
ESCAP	Economic and Social Commission for Asia and the Pacific	IPA	Investment Promotion Agency
ESID	environmentally sustainable industrial development	IPS	Investment Promotion Service
<b>F</b>		IRS	UNIDO International Referral System
FAO	Food and Agriculture Organization of the United Nations	ISI	International Statistical Institute
FARM	Farmer-Centered Agricultural Resource Management Programme	ISIC	International Standard Industrial Classification
FDI	foreign direct investment	ISO	International Organization for Standardization
<b>G</b>		ITC	International Trade Centre
GDP	gross domestic product	ITMIN	Industrial Technology and Market Information Network
GEF	Global Environment Facility	ITU	International Telecommunication Union
		<b>J</b>	
		JIU	Joint Inspection Unit
		JPO	Junior Professional Officer



<b>L</b>		SADC	Southern African Development Community
LAS	League of Arab States	SBA	strategic business alliance
LDC	least developed country	SELA	Latin American Economic System
<b>M</b>		SEZ	special economic zone
MERCOSUR	Common Market of the Southern Cone	SME	small and medium enterprise
MIGA	Multilateral Investment Guarantee Agency	SMI	small and medium industry
MLA	Multilateral Recognition Agreement	SPPD	support services for policy and programme development (formerly TSS-1)
MP	Montreal Protocol	SPX	subcontracting and partnership exchange
MVA	manufacturing value added	SWOT	strengths, weaknesses, opportunities and threats
<b>N</b>		<b>T</b>	
NAFTA	North American Free Trade Association	TC	technical cooperation
NALFIS	national Africa leather and footwear industry scheme	TCDC	technical cooperation among developing countries
NCPC	national cleaner production centre	TQM	total quality management
NGLS	United Nations Non-Governmental Liaison Service	TRAC	target for resource assignments from core
NGO	non-governmental organization	TSS-1	technical support services at the programme level
NIC	newly industrializing country	TSS-2	technical support services at the project level
NIS	Newly Independent States of the former Soviet Union	<b>U</b>	
NISP	National Industrial Statistics Programme	UCD	UNIDO Country Director
<b>O</b>		UEMOA	Union Economique et Monétaire Ouest Africaine/West African Economic and Monetary Union
OAS	Organization for American States	UNCTAD	United Nations Conference on Trade and Development
OAU	Organization of African Unity	UNDCP	United Nations International Drug Control Programme
ODA	official development assistance	UNDP	United Nations Development Programme
ODS	ozone-depleting substance	UNEP	United Nations Environment Programme
OECD	Organisation for Economic Cooperation and Development	UNESCO	United Nations Educational, Scientific and Cultural Organization
OOPP	objectives-oriented project planning	UNFCCC	United Nations Framework Convention on Climate Change
<b>P</b>		UN IACWGE	United Nations Inter-Agency Committee on the Advancement of Women and Gender Equality
PHARE	Assistance for Economic Restructuring in the Countries of Central and Eastern Europe	UNICEF	United Nations Children's Fund
PPRC	Programme and Project Review Committee	UNIDOSS	United Industrial Subcontracting System
PROPSPIN	Project Profile Screening and Pre-appraisal Information System	UNIFEM	United Nations Development Fund for Women
<b>Q</b>		UNOPS	United Nations Office for Project Services
QSAR	Quality System Assurance Recognition	USAID	United States Agency for International Development
QSTM	quality, standardization, testing and metrology	<b>V</b>	
<b>R</b>		VAMAS	Versailles Project on Advanced Materials and Standards
R and D	research and development	<b>W</b>	
RALFIS	regional Africa leather and footwear industry scheme	WHO	World Health Organization
RB	regular budget	WINS	UNIDO World Investment Network Service
RENAP	Regional Network on Pesticides for Asia and the Pacific		
RIDA	regional industrial development agency		
<b>S</b>			
S&T	science and technology		