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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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# ANNUAL REPORT OF UNIDO 1992

Industrial Development Board  
Eleventh session, 1993


Programme and Budget Committee  
Ninth session, 1993

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PBC.9/10

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## EXPLANATORY NOTE

The Annual Report, 1992, has been prepared on the basis of the new format of programme and budgets, in accordance with General Conference resolution GC.4/Res.2, which requested the Director-General "to fully incorporate in future annual reports the programme performance report according to Board decision IDB.7/Dec.11". In the same resolution, the Conference requested the Director-General to continue including therein the tabular presentation of significant performance indicators and the comparison of outputs implemented against outputs planned for the period covered by the annual report.

Consequently, the annual report provides, parallel to the description of the activities carried out in 1992, the significant performance indicators and the comparison of outputs implemented against outputs planned for the biennium 1992-1993 as described in the programme and budgets, 1992-1993 (GC.4/42) adopted by the General Conference at its fourth session. In the present report, cross references to paragraphs in the programme and budgets are indicated in square brackets.

## ABBREVIATIONS

ACC	Administrative Committee on Coordination	CHIS	Contract Management Information System
ACCT	Agency for Cultural and Technical Cooperation	CMMS	computerized maintenance management system
ADC	Andean Development Corporation	CNC	computer numerical control
AIDMO	Arab Industrial Development and Mining Organization	COMFAR	UNIDO Computer Model for Feasibility Analysis and Reporting
ALIDE	Latin American Association of Development Financing Institutions	COSERA	Consultative Group on Solar Energy Research and Application
AOS	administrative and operational services	DANIDA	Danish International Development Agency
ASEAN	Association of South-East Asian Nations	DIPP	Databank for Investment Promotion Programmes
BOT	build-operate-transfer	ECA	Economic Commission for Africa
CAD	computer-aided design	ECCAS	Economic Community of Central African States
CAM	computer-aided manufacturing	ECDC	economic cooperation among developing countries
CAMI	Conference of African Ministers of Industry	ECLAC	Economic Commission for Latin America and the Caribbean
CAPP	computer-aided process planning	ECOWAS	Economic Community of West African States
CASE	computer-aided software engineering	EDP	electronic data processing
CCAQ	Consultative Committee on Administrative Questions	EPZ	export processing zone
CFC	chlorofluorocarbon	ESCAP	Economic and Social Commission for Asia and the Pacific
CIM	computer-integrated manufacturing	ESCWA	Economic and Social Council for Western Asia
CIS	Commonwealth of Independent States		

**ABBREVIATIONS (continued)**

ESID	ecologically sustainable industrial development	IPS	Investment Promotion Service
FAO	Food and Agriculture Organization of the United Nations	ISO	International Organization for Standardization
GCC	Gulf Cooperation Council	ITC	International Trade Centre UNCTAD/GATT
GEF	Global Environmental Facility	JPO	UNIDO Junior Professional Officer
GTZ	German Agency for Technical Cooperation	LAS	League of Arab States
Habitat	United Nations Centre for Human Settlements	LDC	least developed country
IDB	Inter-American Development Bank	LES	Licensing Executive Society
IAEA	International Atomic Energy Agency	LFA/OOPP	logical framework approach/objectives-oriented project planning methods
ICA	International Cooperative Alliance	MERCOSUR	Common Market of the South
ICC	International Chambers of Commerce	MIS	Management Information Services
ICGEB	International Centre for Genetic Engineering and Biotechnology	NAFTA	North American Free Trade Agreement
ICSC	International Civil Service Commission	NGO	non-governmental organization
IDDA	Industrial Development Decade for Africa	NORAD	Norwegian Agency for International Development
IDF	Industrial Development Fund	OAU	Organization of African Unity
IE/PAC	Industry and Environment Programme Activity Centre of UNEP	ODA	official development assistance
IFAD	International Fund for Agricultural Development	OECD	Organisation for Economic Cooperation and Development
IFDC	International Fertilizer Development Center	PAD	project allotment document
IIASA	International Institute for Applied Systems Analysis	PPRC	Programme and Project Review Committee
ILAFA	Latin American Iron and Steel Institute	PROPSPIN	Project Profile Screening and Pre-appraisal Information System
ILO	International Labour Organisation	PTA	Preferential Trade Area for Eastern and Southern African States
INFOTERRA	International Environment Information System	RENAPAP	Regional Network for Pesticides for Asia and the Pacific
INTIB	Industrial and Technological Information Bank	RP	Regular Programme of Technical Cooperation
IPF	indicative planning figure	SADC	Southern African Development Community
		SELA	Latin American Economic System

ABBREVIATIONS (continued)

SIS	Special Industrial Services programme	UNCSTD	United Nations Centre for Science and Technology for Development
STAS	short-term advisory services	UNCTAD	United Nations Conference on Trade and Development
TCDC	technical cooperation among developing countries	UNDCP	United Nations Drug Control Programme
TIES	Technological Information Exchange System	UNDP	United Nations Development Programme
TSS-1	technical support services at the programme level	UNEP	United Nations Environment Programme
TSS-2	technical support services at the project level	UNESCO	United Nations Educational, Scientific and Cultural Organization
UCD	UNIDO Country Director	UNOV	United Nations Office at Vienna
UDEAC	Central African Customs and Economic Union	VIC	Vienna International Centre
UNCCS	United Nations Common Coding System	WHO	World Health Organization
UNCED	United Nations Conference on Environment and Development		

## CHAPTER I. POLICY ISSUES

1. During 1992 the Organization worked in the context of a world characterized by frustrated efforts to secure the benefits of economic reform and structural adjustment. In addition to political instability, those efforts were constrained by the sluggish performance of the developed market economies, high interest rates, particularly in Europe, and growing protectionism - factors that have clouded the short-term industrialization prospects of developing countries.

2. The high interest-rate policy is jeopardizing the nascent recovery process in many debt-burdened countries in Africa and Latin America and the Caribbean. Although the debt-service ratios of developing countries fell on average from 22 per cent in 1986 to 14 per cent in 1991, the 15 most indebted countries still bore the burden of a 31 per cent ratio in 1991. Furthermore, the continuously low value, and hence low international purchasing power, of the dollar adversely affected the debtor countries' exports to the North American market.

3. The protection of domestic industry and agriculture took on various forms in industrialized countries where the shift from tariff to non-tariff barriers continued unabated, as evidenced by the recent wave of wheat export subsidies and trade bloc formations. That factor stood in marked contrast to several developing countries which introduced measures to liberalize trade in 1992. Whereas the members of trade blocs may enjoy the effects of trade creation, non-members may be hurt by those of trade diversion. At present, some 45 per cent of world trade takes place within regional groupings. If a prolonged recession were to set in or if the Uruguay Round of multilateral trade negotiations were to remain stalled, trade blocs might easily turn inward and become hostile towards each other. Under the most extreme circumstances, the inevitable outcome would be trade wars that would work to everybody's disadvantage as demonstrated by the chain reaction of trade contractions during the great depression of the 1930s.

4. An equally bleak picture emerged in the countries of Central and Eastern Europe and the former Soviet Union. The collapse of central planning coupled with the absence of a substitute market mechanism reduced both income and productivity levels.

5. These immediate concerns had a direct bearing on the likelihood of a growing productivity gap between the developed and developing countries. UNIDO studies show that the gap has continued to widen as high technology development in industrialized countries reduces the demand for certain key primary commodities such as metals and minerals. Furthermore, technological changes

such as the adoption of computer-aided design and manufacturing pose a threat to industries relying on labour-intensive techniques, an area in which developing countries have hitherto enjoyed a comparative advantage. If they are to remain internationally competitive, the developing countries will have to sustain their efforts to improve productivity. In a world of rapid organizational and technological change, such efforts require the mastery of new production technologies and management techniques. Cooperation between developed and developing countries involves not merely the movement of investible resources, but also the transfer of technology and skills. Unless efforts are redoubled to bridge the technological gap, the prospects of even greater marginalization hold ominously true for many developing countries, particularly the least developed countries.

6. Adverse economic trends in the developed market economies also prompted a tendency towards reduced official development assistance (ODA) allocations by some of the major contributors to the multilateral development system. They occurred precisely at a time when the developing countries, especially those with the most fragile economic and technological base, would have required the greatest measure of assistance by the international community to bolster long-term economic growth.

7. The environmental sustainability of global development patterns was another issue of concern that assumed ever-increasing importance throughout the year. Viewed in its widest dimensions, that issue encompasses not only the aim of promoting industrial development to meet the needs of the present without compromising those of future generations but also the need to address the unequal and unsustainable patterns of production and consumption, as well as the dire environmental consequences of those patterns. The Organization had to deal with important policy issues emanating from those global developments and their associated international deliberations. Foremost among them was the issue of sustainable development, which was placed squarely on the international development agenda with the adoption of the Rio Declaration on Environment and Development and Agenda 21 by the United Nations Conference on Environment and Development (UNCED), held at Rio de Janeiro, Brazil, in June. At the same time, the collapse of the centrally planned economies in Central and Eastern Europe and the end of the East-West confrontation underscored the importance of shifting from state-run to market-oriented methods of development and converting military-related production capacities to civilian uses. These issues and the related role of UNIDO were discussed in various forums throughout 1992.

The conclusions drawn were tentative and will require further discussion by, and guidance from, Member States. UNIDO participated in the Preparatory Committee for UNCED and was able to introduce the conclusions of the Conference on Ecologically Sustainable Industrial Development (ESID) into the UNCED process. The conclusions of UNCED and ESID, which follow broadly similar lines, define a framework for the Organization in supporting sustainable development. In addition, the conclusions of UNCED, to the extent that they transcend environmental issues, could potentially influence the basic approach adopted by national and international development bodies to such concerns as poverty alleviation, and agricultural and industrial development.

8. In order to develop the response of UNIDO to Agenda 21 and define the role of UNIDO in its implementation, the Director-General set up an organization-wide Task Force on Environment. The Task Force undertook several initiatives. The first was to review and update the UNIDO environment programme (see IDB.10/17). The second was to delineate the Organization's potential response in terms of the broader implications of Agenda 21 for sustainable development (IDB.10/32). The aim of these initiatives was to provide the basis for a continuing dialogue among Member States of UNIDO concerning the Organization's role and to enable it to present its policy positions to the commission on sustainable development, the United Nations system-wide policy forum to be established in 1993 for follow-up to UNCED. The third initiative was to define the Organization's position for consideration by the Administrative Committee on Coordination (ACC) on the principles and responsibilities for system-wide coordination of the follow-up to UNCED. The discussions at ACC led to the creation of the Inter-Agency Committee on Sustainable Development, a coordinative body under the aegis of ACC. The Organization will contribute to the deliberations of that body on matters falling within its mandate.

9. The question of additional resources is germane to the issue of environment and sustainable development. To that end, UNIDO undertook considerable efforts to secure additional extrabudgetary contributions. Throughout the year, the Organization closely followed the deliberations of the executive bodies associated with such international initiatives as the Interim Multilateral Fund for the Implementation of the Montreal Protocol, the Basel Convention and the Global Environment Facility. UNIDO was able to secure the status of fourth executing agency for the Interim Multilateral Fund for the Implementation of the Montreal Protocol, thus enabling the Organization to engage itself more fully in global efforts to protect the ozone layer. Furthermore, the environment programme of UNIDO attracted programmable resources under the Industrial Development Fund. While those resources were largely devoted to enhancing staff capacities and increasing awareness of environ-

mental issues, future funding of the environment programme will be increasingly devoted to policy advice and operational activities in the field of environment and industry. A considerable amount of the activities programmed during the year under the United Nations Development Programme (UNDP)-funded technical support services at the programme level (TSS-1) were also devoted to environment-related issues. Those activities, identified and defined in the field, provide a strong indication that national initiatives by Member States are responding to global concerns.

10. The issue of the Organization increasing its assistance to private sector development has been a matter of concern to some Member States. In the course of the year, with the decline of central planning and the shift in emphasis from public to private entities as the main agents of change, the issue once again came to the fore in policy discussions. It is generally agreed that UNIDO must provide policy advice to Governments concerning the development of the private sector, with a view to creating enabling environments for both domestic and international investment, particularly for small- and medium-scale industries. The bone of contention, however, has been the question of the Organization's role in providing direct support to individual or groups of enterprises in the private sector in developing countries.

11. That issue was touched upon by both the policy-making organs at their various sessions and the Special Advisory Group to the Director-General on specific activities of the Organization at its sixth session in May 1992. In the ultimate analysis, it seems to be agreed that, in addition to policy advice, the Organization should, in the first instance, emphasize the provision of support to the institutional infrastructure for the private sector on a sector-wide or subsectoral basis. In keeping with that line of thinking, the Secretariat is developing internal policy guidelines designed to ensure that the assistance it provides to the private sector is in conformity with its constitutionally defined goals and objectives and with its legislated mandates. The issue will need constant re-examination in the light of the Organization's experience and its clients' needs. Furthermore, whatever the level of its involvement with the development of the private sector, UNIDO will need to decentralize authority and enhance its field presence so as to ensure greater flexibility and provide the rapid response required by that sector of industry. Thus far, the prospects for enhanced and improved field representation of UNIDO remain bleak on account of the Organization's constrained financial resources.

12. Another area of concern is the extent to which UNIDO should engage in efforts to convert military-related production capacities to civilian production - an issue also taken up by the Special Advisory Group. The Group did not consider it advisable for



UNIDO to mount a special programme. Its conclusions stemmed from the fact that UNDP was already providing conversion-related assistance and that UNIDO disposed only of scant financial and human resources. The Group also pointed to difficulties such as the lack of full information on military production facilities for security reasons, the different management concepts prevailing in military and civilian manufacturing, the assessment of the market potential of products from converted industries and the risk of unfair competition for developing countries. It was suggested that it might be more appropriate for UNIDO to launch a pilot conversion project, and the Director-General stressed the need for UNIDO to build up a response capability (rather than a new programme) to furnish advice related to specific problems at the plant level.

13. The above trends and policy discussions bear clear implications for UNIDO as they do for the rest of the United Nations system in terms of the drive towards improved governance, the provision of adequate financial resources, economy, efficiency and relevance. The reform proposals for the United Nations system as a whole and for its component parts, whether internally generated by the secretariats concerned or proposed by Member States, shared these basic preoccupations. With regard to governance, the reform of the Economic and Social Council and the strengthening of its development policy coordination role have been debated extensively. Related to those issues is the need to strike a balance between the political and developmental role of the United Nations system, as well as a balance between the lengthy agenda of development issues inherited from the past and the growing list of emerging concerns such as those described above.

14. As for the role of specialized agencies themselves, the reform efforts focused inevitably on the need for improved economy and efficiency so that resources that were already constrained and perhaps diminishing could be used to the greatest possible effect. This, in turn, implies the need to improve organizational efficiency, responsiveness and flexibility to support developing countries in their efforts. Perhaps the most profound change advocated was the desire to reorient the basic role of agencies as evidenced by the adoption of the UNDP successor arrangements for agency support costs. Under those arrangements, the specialized agencies are required to shift away from mainly administering technical cooperation to provide "upstream" analytical support to operational activities for development, and thus would be transformed into knowledge-based international centres of excellence.

15. For its part, UNIDO was fully cognizant of the implications of the debate on institutional reform. It thus endeavoured to translate broader principles into practical measures for the Organization. These steps involved attempts at structural reform, the implementation of the Organization's role

in the UNDP successor arrangements, the improvement of programme and project quality and the development of new programme initiatives. In 1992, those efforts met only with partial success owing to a complex of factors largely outside the realm of influence of the Secretariat.

16. On the changing role of the agencies, UNIDO contributed actively to bringing to a fruitful conclusion the development and implementation of the successor arrangements. During early 1992, UNIDO took the initiative to train all operational and administrative staff at Headquarters in the workings of the new regime and alerted them to the expectations placed in the Organization in supporting the national execution of programmes and projects funded by UNDP. The intention was that Headquarters training be complemented by synchronous UNDP and agency field staff training in order to ensure a smooth transition to the new system. That intention was unfortunately not realized owing to an initial delay of some eight months in organizing the field training course. Nevertheless UNIDO contributed fully in the training held later in the year for field staff of the United Nations system. It is anticipated that, given the clarifications provided and operational understanding attained at the field level, a swifter change to the new regime can be attained.

17. The Director-General's proposals for the reform of the organizational and staff structure of UNIDO were designed to complement the changes envisaged in the tripartite system (of Governments, UNDP and UNIDO) as a means of better equipping the Organization to fulfil its mandate in a changing and more demanding world. The Director-General's views on the reform of the organizational and staff structure were presented to the policy-making organs on several occasions. The main features of the proposals were the need to reduce the number of departments and combine the programme instruments of the Organization so as to provide more holistic responses to the needs of Member States as well as the consequent need to stimulate teamwork within the context of country strategies. In keeping with decision GC.4/Dec.22, which required that the issue of structural reform be concluded by the General Conference of UNIDO at its fifth session, and in order to sustain its discussion by Member States, the Director-General sought the advice of the Special Advisory Group on the matter. As a result of the conclusions drawn by the Group and after consulting Member States and the staff of the Secretariat, the Director-General presented a revised proposal to the tenth session of the Industrial Development Board outlining the basic framework of a three-department organizational structure for the UNIDO Secretariat. The members of the Board considered the matter, but failed to reach a definitive conclusion. It was decided to adjourn consideration of the matter to the eleventh session of the Board. As a result, 1992 represented another year where political consensus could

not be reached on the question of the number of senior management staff and the related number of departments required by that senior management structure. In the meantime, a number of organizational changes were introduced in the Secretariat at the beginning of July 1992 with the objective of reducing duplication of functions and enhancing internal coordination (chap. II, para. 38). Attempts at improving efficiency were not limited to structural changes alone. A number of measures were taken to improve operational procedures and practices as well as administrative support services.

18. Efforts were made to enhance programme and project quality through the improvement of project design, in response to the concerns expressed by major contributors to the Industrial Development Fund, and also as a reflection that, as far as UNDP-supported technical cooperation is concerned, programme and project design capacities will be one of the key services required of UNIDO under the new support cost regime. Improved project design capabilities were also a requirement identified in project evaluations. Analysis revealed that project design shortcomings were a major weakness in the technical cooperation activities of UNIDO, despite a continuing overall improvement in project effectiveness and efficiency. As a direct outcome of that finding, the Secretariat initiated a process to adopt the logical framework approach and objectives-oriented project planning methods (LFA/OOPP) for project design and continued its refinement of the integrated programme approach. The adoption of programmatic approaches has gained increasing currency throughout the multilateral development cooperation system. For its part, UNIDO has worked on developing a programme approach for the past two or three years. The concept underlying the approach is kept under constant review in the light of experience gained and the policy directives provided by Member States or funding agencies. In the experience of UNIDO, the approach usually works best when a specific sectoral development problem can only be resolved through a set of well-defined and complementary actions designed to overcome inter-related constraints. As such, the programme approach does not automatically offer a substitute for the project-based approach. The Organization has not only sought to clarify this point and the consequences for its operations, but it has also been actively involved with UNDP and other agencies of the United Nations system in the preparation of guidelines and operating procedures for the application of the programme approach.

19. At the same time, in responding to the priorities of the medium-term plan, the Organization introduced the concept of thematic programme frameworks as a new element in the medium-term planning process. Those programme frameworks, one for each of the priorities and common elements, are designed to fulfil a fourfold function: (a) to concentrate the Organization's efforts on salient issues that reflect

changing global conditions; (b) to mobilize extrabudgetary resources; (c) to translate priorities into operational activities; and (d) to provide a point of reference for reporting and evaluation purposes. While programme frameworks for environment, energy and the integration of women in industrial development have already been presented to the policy-making organs at various sessions, it is envisaged that the remaining frameworks will be presented to the legislative bodies of UNIDO prior to the biennium 1994-1995. The main thrust of the activities in each of the priority areas is outlined in the relevant chapters of the present report.

20. The initiatives outlined above were complemented by the issuance of a number of internal guidelines and policy papers that were designed to clarify procedures and streamline management systems. One such set of guidelines (UNIDO/DG/B.18/Rev.1) provided an updated, comprehensive and transparent regulatory framework for the implementation of Articles 16 and 17 of the UNIDO Constitution in so far as they relate to projects financed from trust funds, special-purpose contributions to the Industrial Development Fund, the general pool of the Industrial Development Fund or the regular budget. Another set of guidelines (UNIDO/DG/B.73/Rev.1) laid down administrative instructions for the development, appraisal, approval and implementation of special trust fund projects. A Director-General's Bulletin (UNIDO/DG/B.41/Rev.1) on the revised procedures for UNIDO-administered funds, including the establishment of a Programme and Project Review Committee, was issued, designed to provide internal review bodies with a more policy-oriented role. Finally, in order to enhance the internal audit function in the Secretariat, a Bulletin (UNIDO/DG/B.157) was issued setting out the policy, purpose and procedures with respect to the internal auditing of the Organization's activities (see chap. II, paras. 10-15).

21. In tandem with efforts to streamline and simplify internal procedures, staff training continued to receive high priority despite constrained resources. Training activities covered substantive matters as well as management-related and administrative training. At the substantive level, training was provided on: implementation of UNDP successor arrangements; objectives-oriented project planning methodology; programme and project design; and increased awareness of environment-related issues. On managerial and administrative issues, training was provided on: the upgrading of computer skills; development of inter-personal/intercultural dialogue; improved personal skills in such areas as negotiation and presentation; and linkages between leadership styles and effective management. As in the past, language training was offered in the official languages of the United Nations. Finally, several staff members participated in individual training programmes outside UNIDO. In order to consolidate and strengthen the staff training

and development function in the Secretariat, the former Human Resource Planning Unit in the Office of the Deputy Director-General, Department of Administration, was merged with the former Language Training Unit in the Personnel Services Division (see chap. VII, para. 2).

22. In the move to improve administrative support services steps were taken to implement the Organization's electronic data-processing programme (IDB.10/30). In the course of the year, a team of external consultants drew up phase two of the strategic automation plan that defined the overall scope and applications development methodology for the electronic data-processing programme over the medium term. Within that strategic plan, the Information Technology Steering Committee, as an organization-wide mechanism, established annual systems development plans for 1992 and 1993 in the light of the Organization's needs, taking into account the human and financial resources available for systems development. The Committee also proposed policies and guidelines for the acquisition of computer equipment and software. It also undertook the rationalization of the distribution of desktop equipment and software. It not only redeployed existing equipment from lower to higher priority areas, but also established criteria for future equipment distribution within the context of organizational priorities and the budgetary resources available in the biennium 1992-1993.

23. The aforementioned issues - be they the need for organizational reform, renewal and revitalization or the need to embark on new programme initiatives - require that UNIDO be provided resources commensurate with the expectations placed in it. Paradoxically though, not only was the Organization hamstrung by zero growth budgets, but even those constrained resources were not forthcoming. At the end of 1992, 113 of the 160 Member States had failed to pay their assessed contributions in full, resulting in some 37 Member States losing the right to vote. At the end of the same month, the total cumulative amount of outstanding contributions was more than 40 per cent of the 1992 regular budget.

24. In the operational budget, the slow-down in technical cooperation delivery was compounded by a serious delay in the implementation of the UNDP successor arrangements and fluctuations in the value of the dollar relative to the Austrian schilling. Under the new UNDP arrangements, some 60 proposals for the technical support services at the programme level (TSS-1) were approved under UNDP financing for the biennium 1992-1993. Under the technical support services at the project level (TSS-2) and for administrative and operational services (AOS) minimal activities were carried out (see chap. VIII, para. 31). In common with the other four major agencies, UNIDO was thus adversely affected in terms of under-utilization of its capacities in the first year of the fifth UNDP programming cycle (1992-1996).

As a result, the gap between support cost income and expenditures reached \$5.3 million at the end of 1992 and UNIDO ran the risk of its operational budget reserves being depleted by the end of 1993.

25. Faced with such a situation, the Secretariat had no choice but to restrict recruitment and hold back approved appropriations. By the end of December, the vacancy factor for Professional posts had risen to 14.5 per cent in the regular budget and 26.9 per cent in the operational budget. While offering some relief, the measures taken to cope with the financial crisis eroded the capacity of the Organization to carry out its approved programme of work. Delays in programme implementation became unavoidable while restrictive recruitment left serious gaps in the desirable mix of skills in the Secretariat.

26. The constraints on the operational budget were a direct outcome of reduced technical cooperation delivery. Total technical cooperation delivery in 1992 amounted to \$135.6 million; a decrease of 8 per cent over 1991. Project approvals dropped for the third year running from \$130.4 million in 1991 to \$113.6 million in 1992. The stock of projects scheduled for implementation at the end of 1992 was \$216.1 million as against \$238.5 million at the end of 1991. Whereas in 1991 UNDP funding accounted for 51.7 per cent of the total technical cooperation delivery of UNIDO, in 1992 it accounted for a mere 43.4 per cent. That shift, coupled with the changes in the tripartite system in the wake of the successor arrangements, raised once again the need to ensure organizational flexibility in funding and executing technical cooperation projects as well as to introduce a prioritization of activities. Increased flexibility was reflected in the continued growth of project delivery under IDF (up from \$27.7 million in 1991 to \$29.3 million in 1992) and under self-financed and third-party trust fund schemes (up from \$31.2 million in 1991 to \$34.8 million in 1992). Prioritization, however, had not encountered the same degree of acceptance or success. The informal consultations on relative priorities within the medium-term plan, 1994-1999, that had been the subject of debate among Member States throughout the second half of the year, were extended until the eleventh session of the Board.

27. While the delivery of resources under technical cooperation suffered an adverse trend, the results of investment-related activities were quite the opposite. The Organization successfully promoted 194 investment projects worth \$1,473 million in 1992, as compared to 166 projects worth \$890 million in 1991. Once again the Industrial Cooperation Centres in Beijing and Moscow played a significant role, accounting for the promotion of investment projects worth \$197 million and \$24.1 million, respectively.

## CHAPTER II. POLICY-MAKING ORGANS AND GENERAL MANAGEMENT (100; 200)

### A. POLICY-MAKING ORGANS (100)

1. As scheduled, the Industrial Development Board (programme 120) held two regular sessions - ninth and tenth - in May and November respectively, 1/ while the Programme and Budget Committee (PBC) (programme 130) held its eighth session in June-July. 2/ [1.11; 1.16]

2. In addition to reviewing the overall activities of the Organization on the basis of the Annual Report of UNIDO 1991, the Board focused its attention on UNIDO policies and on specific activities such as technical cooperation, economic and technical cooperation among developing countries, System of Consultations, development and transfer of technology, industrial investment promotion, energy, environment and regional programmes. The Board also took action on the recommendations of the PBC concerning, *inter alia*, a ceiling for the regular budget for the biennium 1994-1995, the Industrial Development Fund, the financial situation of UNIDO and the UNIDO Country Director programme.

3. In response to General Conference resolution GC.4/Res.30, the Board decided (IDB.9/Dec.16) to accept the offer of the Government of Cameroon to host the fifth session of the General Conference (programme 110) at Yaoundé, Cameroon, from 6 to 10 December 1993. It also adopted a tentative provisional agenda for that event. [1.6]

4. Decisions adopted by the Economic and Social Council of interest to UNIDO included decision 1992/203, in which it was decided to devote the high-level segment of the Council for 1992 to the theme of the role of the United Nations system in enhancing international cooperation for development. Decisions with particular significance for UNIDO adopted by the Governing Council of the United Nations Development Programme (UNDP) at its thirty-ninth session included decision 92/22 on national execution and agency support costs and decision 92/23 on the programme approach.

5. At its forty-seventh session, the General Assembly adopted two resolutions containing specific references to UNIDO, namely resolutions 47/153 and 47/177.

1/ For the reports of the Industrial Development Board on the work of its ninth and tenth regular sessions see documents GC.5/2 and GC.5/3, respectively.

2/ For the report of the Programme and Budget Committee on the work of its eighth session see document IDB.10/14.

Resolution 47/153 on industrial development cooperation, *inter alia*, recommended that UNIDO strengthen its cooperation with public- and private-sector organizations in developing countries, in particular with those working in human resource development, investment and export promotion, and technological capacity-building. The same resolution reiterated its call to UNIDO and other United Nations organizations to encourage and support technical co-operation among developing countries in the field of industrialization, and requested the Secretary-General to invite the Director-General of UNIDO to report to the General Assembly at its forty-ninth session on the implementation of the resolution.

6. In its resolution 47/177 on the Second Industrial Development Decade for Africa, 1991-2001, the General Assembly adopted the programme for the Second IDDA, adjusted the period for the Second Decade programme to cover the years 1993-2002, and urged the Director-General to integrate the relevant provisions of Agenda 21 (see para. 7 below) in the implementation of the Second Decade. The resolution also contained specific reporting requirements for UNIDO.

7. The United Nations Conference on Environment and Development (UNCED), together with Agenda 21 and the Rio Declaration on Environment and Development, was the focus of a number of General Assembly resolutions. In its resolution 47/190 the Assembly, *inter alia*, urged the Rio Declaration and Agenda 21, endorsed organizations of the United Nations system to take necessary follow-up action, and decided to include in the agenda of its forthcoming sessions a standing item covering the implementations of UNCED decisions and recommendations.

### B. GENERAL MANAGEMENT (200)

8. The general management of the Organization was carried out by the six subprogrammes mentioned below devoted to executive direction and management (programme 210).

#### Office of the Director-General (subprogramme 211)

9. In providing for the effective overall management, planning, policy guidance and coordination of the activities of UNIDO, the Director-General, with the assistance of his immediate staff, discharged functions entrusted to him under the Constitution of UNIDO and by the policy-making organs in their various resolutions and decisions. During the year, he also participated actively in the system-wide coordinating

bodies and attended the meetings convened by the Secretary-General of the United Nations within the context of the Administrative Committee on Coordination. In addition to the provision of policy direction, the Office of the Director-General also contributed direct inputs to such issues as the improvement of mission travel scheduling and other logistical operations. In these and other matters it was assisted throughout the year by the Executive Management Committee. Composed of the Director-General and Deputy Directors-General, the Committee now meets weekly to discuss policy and management issues. Enlarged meetings of the Executive Management Committee involving senior staff are held when necessary. The net result is a more effective decision-making process and a rational hierarchical structure. [2.11]

#### Executive Staff Coordination (subprogramme 212)

10. The Executive Management Committee is served by the staff attached to Executive Staff Coordination which acts as its secretariat [2.22]. In addition to coordinating the activities of the Internal Audit, Legal Service and Evaluation subprogrammes [2.22], the Executive Staff Coordinator also participated actively in the work of the Programme and Project Review Committee, Committee on Contracts and the Informal Working Group of Major Donors. Within that context, the subprogramme contributed to the improved functioning of both the Project Review Committee and the Committee on Contracts, which yielded better project proposals and more balanced contracts, while closer communications with major Industrial Development Fund donors through the Informal Working Group enhanced donors' confidence in the work of UNIDO. [2.21; 2.22]

11. The staff of Executive Staff Coordination also organized the meeting of the Special Advisory Group to the Director-General in May, which took up three subjects: the medium-term plan of UNIDO for 1994-1999; technical cooperation to support the conversion of military to civilian industry; and the structural reorganization of UNIDO (see chap. I). Subsequent to that meeting and following further discussions in the Project Review Committee, the Executive Staff Coordinator drafted a paper on assistance to the development of the private sector and individual enterprises to serve as an internal policy guideline. [2.23]

#### Internal Audit (subprogramme 213)

12. Throughout the year, the Internal Audit continued its efforts towards improving the quality of its work and expanding its scope of activities. A Director-General's Bulletin on internal auditing functions (UNIDO/DG/B.157) issued

in the middle of the year established a framework for internal auditing activities and set out the purpose, authority and responsibility of the Internal Auditors as well as the audit procedures to be adopted. It strengthened the independence, impartiality and effectiveness of the function, which is essential to improving accountability, transparency, economy and efficiency throughout the Organization.

13. Given the financial constraints under which the Organization had to operate, special attention was paid to streamlining cumbersome administrative procedures so as to enhance productivity in the Organization. The Internal Audit became increasingly responsive to senior management's concerns by adopting a management-oriented audit approach. Annual audit work plans were prepared and revised in consultation with senior managers and audit work focused on those areas that bore Organization-wide implications and entailed high risks. In carrying out audits, more attention was paid to determine whether activities were being carried out economically and efficiently, in contrast to the past when the emphasis had been on procedural compliance and financial aspects. So as to permit this shift in focus despite the limited staff resources, the scope of what are termed obligatory audits (Catering Service, Garage Operation, Common Fund for Major Repairs and Replacements, and Staff Welfare Fund) was reduced.

14. As a means of increasing audit efficiency and effectiveness, particular weight was placed on training and the use of technology. In June, the auditors participated in a workshop on electronic data processing (EDP) auditing sponsored by the United Nations and the International Organization of Supreme Audit Institutions. Four months later, the auditors participated in an inter-agency seminar on internal auditing. A computer-assisted audit technique has since been introduced and will be applied once staff training on relevant applications is completed.

15. In the course of the year, the Internal Audit prepared 10 audit reports as against five in 1991. These audits comprised: five obligatory audits required by agreements with other Vienna International Centre-based United Nations agencies; two operational audits on communication costs and the financial control of technical cooperation projects; and three special reports. The Internal Audit also reviewed a number of draft manuals of procedures and issued 10 review reports. This systematic review of systems and procedures prior to their implementation stems from a recommendation by the External Auditor (IDB.10/4, para. 185), and the Internal Audit now carries out such reviews on a routine basis. In addition to the audit reports and review reports, some 25 audit observations were issued during the year, the contents of which were reflected in the final audit reports. [2.30; 2.31]

16. Whereas it is essential that the Internal Audit remain independent of operational responsibilities, Internal Auditors should be kept informed of developments in the Organization and be able to provide impartial advice on a timely basis. With this in mind, the Internal Audit is represented as an observer on the Information Technology Steering Committee and the Committee on Contracts. In the latter part of the year, it also participated in and provided technical advice to an ad hoc committee on travel, while other ad hoc advice, comments and counsel were provided to management upon request. [2.30]

17. While the Internal Audit experienced demonstrable qualitative and quantitative improvement, its full benefits have yet to be realized for want of staff resources: the Internal Audit has only two auditors at the Professional level. Owing to that situation, no audits, for example, were carried out during the year in the field offices where the majority of UNIDO projects are implemented. This staffing problem was recognized by the External Auditor. Upon his recommendation, the Programme and Budget Committee urged in its conclusion 92/2, paragraph (e) that the internal audit functions be strengthened through the redeployment of posts. An additional General Service post was subsequently allocated to the Internal Audit in the latter part of the year.

#### Legal Service (subprogramme 214)

18. The work of the Legal Service of UNIDO falls into five distinct categories: legal support for the Organization's organs and programmes; international agreements; procurement and contracts; administrative rules and regulations; and legal support for the International Centre for Genetic Engineering and Biotechnology (ICGEB). In the first category, the subprogramme continued to provide comprehensive legal services throughout 1992 to the Director-General, the policy-making organs and units of the Secretariat and helped to avoid conflicting positions and unauthorized commitments of a legal, financial or policy nature, while maintaining and defending the legal claims and interests of the Organization. As in previous years, advice was provided on the rule of law within the Organization and in its relations with Governments, organizations, enterprises and individuals. For example, the Legal Service monitored the legal aspects of recent constitutional developments in parts of Europe, such as the effect on membership status in UNIDO of the countries and territories concerned, and provided advice, as appropriate, to the principal organs of UNIDO. [2.37; 2.39]

19. In the area of international agreements between UNIDO and Member States, the Legal Service continued the negotiation of a definitive headquarters agreement with the

Government of Austria and of standard basic cooperation agreements with Governments eligible to receive assistance from UNIDO. Agreements negotiated during the year (see appendix I for full list) included: the host agreement with the Government of Cameroon on arrangements for the fifth session of the General Conference at Yaoundé in December 1993; a host agreement with the Government of Tunisia for the first Consultation on the construction industry to be held in that country in May 1993; and formal agreements in connection with the establishment or the extension of Investment Promotion Services or Industrial Cooperation Offices of UNIDO. The Legal Service also reviewed and cleared the texts of relationship agreements, memoranda of understanding and working arrangements on cooperation with Governments, intergovernmental, governmental and non-governmental organizations negotiated on behalf of UNIDO by various organizational units of the Secretariat. Throughout the year, it discharged its function of depositary for international agreements of UNIDO. [2.39; 2.42]

20. As in previous years, the Legal Service reviewed and cleared special trust fund agreements, including the necessary legal arrangements with the Governments of the recipient countries. A Director-General's Bulletin entitled "Model agreements and related guidelines for projects financed from trust funds, special-purpose contributions to the Industrial Development Fund, the general pool of the Industrial Development Fund or the regular budget" (UNIDO/DG/B.18/Rev.1) was elaborated, thus consolidating the experience and practice gained in that field since the establishment of UNIDO as a specialized agency. As a follow-up to the successor arrangements for project support costs introduced by UNDP at the outset of the year, the Legal Service reviewed and cleared agreements between UNIDO and Governments receiving services funded under those arrangements. [2.39; 2.42]

21. In the field of procurement for technical cooperation and for the operation and maintenance of the Vienna International Centre and the Headquarters of UNIDO, the Legal Service advised organizational units on certain contractual clauses and assisted in the negotiation of formulations that deviated from model texts it had established. Particular attention was given to a review of purchase order forms used by the Purchase Section. As a result, new forms with a revised set of general conditions were drawn up which enhance the clarity of the contractual obligations, thus improving the operational position of UNIDO. With respect to contractual arrangements involving intellectual rights, the Legal Service advised on questions of copyright and established and cleared agreements with external publishers on the printing and distribution of UNIDO publications. Assistance was also given to units of the Secretariat concerned with the dissemination through license agreements of software systems developed by UNIDO, while the

project for the establishment of ICGEB received guidance on the preparation and filing of patent applications and on the negotiation of technology transfers in exchange for royalties and other income. [2.41]

22. Advice and assistance was provided on matters related to the implementation and further development of internal rules, such as the financial and staff regulations and rules. The terms of reference of the Committee on Contracts were revised and re-issued as a Director-General's Bulletin (UNIDO/DG/B.22/Rev.1), with due account being taken, *inter alia*, of the External Auditor's observations. Representatives of the Legal Service also provided advice to and participated in the meetings of the Committee on Contracts, the Property Survey Board and the Publications Board throughout the year. [2.42]

23. The Service represented the Organization before the International Labour Organisation Administrative Tribunal in two cases, while in other cases claims by experts were settled through negotiation. In matters relating to the implementation of the headquarters agreement, the Service continued to discharge the function of liaison with the Protocol Section of the Austrian Ministry for Foreign Affairs and intervened with local authorities, when appropriate, on matters pertaining to privileges, immunities and obligations. [2.40]

24. The Legal Service also played a central role in the preparations for the establishment as of 1 January 1993 of ICGEB as an independent international organization. In close cooperation with the substantive Division responsible, it prepared a number of legal instruments for consideration and approval either by the Plenipotentiary Meeting of Ratifying States called to notify the Depository of the entry into effect of the Statutes or by the Board of Governors once the Statutes have entered into effect. [2.41]

#### Evaluation (subprogramme 215)

25. Evaluation activities continue to play an important management support role in UNIDO. Particularly at the programme level, the findings of major evaluations of UNIDO activities are increasingly used by UNIDO management and the policy-making organs to facilitate decisions on measures needed to improve the efficiency, effectiveness and impact of the Organization's activities.

26. At the project level, evaluation staff are responsible for managing the in-depth project evaluation system. The unit schedules the evaluations and prepares the terms of reference, including the identification of issues to be addressed. It selects evaluation consultants, briefs and debriefs them, and monitors the implementation of the evaluation. The unit analyses the quality of the consultants' reports,

extracting and disseminating lessons learned as a contribution to improving the performance of UNIDO in project-related work. A total of 24 in-depth evaluations were undertaken in the course of the year. Evaluation staff participated directly in three of these evaluations. The fact that the number of evaluations has stabilized at this level seems to indicate that, given the size of the Organization's technical cooperation programme, some 25 in-depth project evaluations per year is an appropriate order of in-depth evaluation activity. [2.53]

27. Evaluation staff also administer and monitor the internal self-evaluation system of UNIDO as related to technical cooperation. This includes two major components: project performance evaluation reports (PPER) for all large-scale projects; and terminal project evaluation reports (TPER) for smaller projects where a more comprehensive project performance evaluation exercise would be too elaborate. In the course of the year, a total of 171 PPERs was processed as against 239 in 1991. Given the relative newness of the reporting system for smaller projects, only 81 TPERs were received. In the latter part of the year, management actions were taken to improve compliance with TPER reporting requirements. These included the use of a computer database to improve scheduling and follow-up; as a result, increased interest in and use of those reports by UNIDO Member States for monitoring purposes will doubtless contribute to a greater degree of compliance. [2.54]

28. Evaluation staff are undertaking a series of evaluations of headquarters-based programmes as requested by the Board in its decision IDB.5/Dec.12 (para. (c)). The first in this series of evaluations was completed in June 1989 and covered the System of Consultations followed by the activities of the Organization in the field of industrial investment promotion completed in January 1991. The evaluation of the Organization's economic and technical cooperation among developing countries activities was completed and published in May and a German-financed evaluation was conducted of the Organization's activities in the field of industrial human resource development. The report of the latter evaluation will be completed during the first half of 1993. Preparations were also made for the evaluation of the technology development and transfer activities of UNIDO that is scheduled for the biennium 1994-1995 subject to the availability of funds. [2.52]

29. Preparations also commenced during the year for the evaluation of the Organization's trust fund projects. In a tentative agreement with Japan, it was decided to evaluate eight projects and conduct an evaluation desk review of three others. One Nigerian trust fund project in the cement industry was evaluated in the course of the year and the terms of reference for the evaluation of a second

trust fund project in that country are under discussion. A total of 13 Danish-funded projects were identified for possible evaluation and the terms of reference are under negotiation, while discussions were held with the Government of Norway on an evaluation plan for projects it has financed. [2.51]

30. The totality of evaluations undertaken in the year is given in table 1 below.

31. As in the past, an analysis was undertaken of the project performance and in-depth evaluations carried out in the previous year. The qualitative findings of that analysis are provided in table 2 below. Figures for 1990 have been included for the purpose of comparison. [2.51]

32. The analysis revealed that the trends observed over the past six years had been maintained. In short, in those instances where direct comparison was possible, project performance and effectiveness had improved slightly, whereas project design left scope for further improvement. The Project and Programme Appraisal Section subsequently launched a new initiative to address that very problem, building on the extensive cooperation between that Section and Evaluation in the organization of project design and evaluation workshops (see chap. III).

33. Of the other major findings and conclusions, which are widely distributed to operational staff, certain pertinent issues emerged. In the case of project design, project planning needed to be improved in terms of specifying more precisely the problem to be addressed and identifying the needs of end-users. From the standpoint of project implementation, project subcontracting arrangements called for betterment: the rule pertaining to lowest technically acceptable bids had led to performance difficulties, and selection criteria based on quality should be developed. Government inputs to projects demanded closer attention as a high turnover of national staff was seen to impinge on project sustainability. During the project implementation, workplans should be frequently updated and project activities rephased, while in the field of project management, industry should be more extensively involved during both the design and implementation phase of projects related to industrial service institutions. Project monitoring was seen to be essential as a means of ensuring immediate remedial action, given the need to adjust to external factors in a rapidly changing developmental context. Analysis also revealed that the potential for commercialization of results obtained in research and pilot plant projects should be more thoroughly addressed during the project design and implementation phases.

Table 1  
Significant performance indicators: Evaluation  
(Subprogramme 215)

Outputs	Planned 1992-1993	Achieved 1992
In-depth evaluations of technical cooperation projects [2.53]	70	24 <sup>a/</sup>
In-depth evaluations of headquarters programmes [2.52]	3 <sup>b/</sup>	2
Training workshops on project design and evaluation [3.41]	12 <sup>c/</sup>	6
Analysis of in-depth evaluations carried out [2.51]	2	1
Project performance evaluation reports processed	- <sup>d/</sup>	171
Report on evaluation activities to the Board [2.54]	2	1

<sup>a/</sup> Thirty in-depth evaluations were jointly planned for 1992; however, seven were postponed to 1993 by UNDP and/or Government.

<sup>b/</sup> Includes one in-depth evaluation, on industrial human resource development, carried over from 1991 (see para. 28 above).

<sup>c/</sup> Carried out jointly with the Programme and Project Appraisal Section.

<sup>d/</sup> No quantitative target set in the programme and budgets document for 1992-1993. A total of 239 such reports were completed in 1991.



Table 2

Qualitative analysis of UNIDO technical cooperation  
(Based on project evaluations carried out in 1991)

Achievement	In-depth evaluation results a/				Internal evaluation results			
	(1) Outputs produced (efficiency)		(2) Objectives achieved (effectiveness)		(3) b/ Objectives achieved (effectiveness)		(4) c/ Objectives achieved (effectiveness)	
	(Percentage of all projects evaluated)							
	1991	1990	1991	1990	1991	1990	1991	1990
Expectations exceeded	3	0	3	0	2	3	6	9
Expectations met	36	40	33	36	50	40	52	30
Expectations nearly met	30	29	27	24	) )40	) )43	12	24
Less than planned	21	20	21	27	) )	) )	21	24
Considerable problems	3	6	9	6	1	2	0	4
Inconclusive	6	6	6	6	8	12	9	9

**Note:** Totals may not add precisely owing to rounding.

a/ Based on 36 in-depth evaluations in 1990 and 33 in 1991.

b/ Based on 242 internal evaluations in 1990 and 238 in 1991.

c/ Based on 24 internal evaluations of projects that underwent in-depth evaluations. This column has been prepared for purposes of comparison with column (2).

while feasibility studies should have the backing of viable project promoters before the studies are undertaken. It was also apparent that greater use could be made of national capabilities for technical co-operation among developing countries and capacities established by UNIDO-supported projects in developing countries, while the introduction of structural adjustment and privatization programmes in those countries demanded that greater attention be devoted to training and building up capabilities in such crucial areas as management, marketing and accounting. [2.51]

34. Together with the Government of Germany, UNIDO initiated a programme of ex-post evaluations of selected German-financed UNIDO projects. From the three evaluations carried out to date, the potential for learning lessons has been demonstrated. It was apparent, for example, that preparatory assistance is needed for projects with a high risk potential in order to verify the hypothesis, approach and feasibility of the intervention envisaged. Moreover, the reporting and evaluation

requirements laid down in a project document should be tailored to the particular characteristics and size of the project, while model projects need to determine at the outset how the experience gained can be replicated under varying geographic and socio-economic conditions.

35. Analyses were also carried out of two other important evaluations conducted during 1991: one related to an assessment of a large integrated programme of assistance in Eastern and Southern Africa, the other to assistance to a mixed private and public sector enterprise. The first evaluation concluded that a comprehensive programme of assistance is often the approach preferred for the establishment of close working relationships with industrial end-users, particularly when industry associations are used as intermediaries for such assistance. Moreover, upstream and downstream linkages, regional interests and new industry requirements can be addressed more flexibly and rapidly through a comprehensive programme. The enterprise in the second evaluation offered government-subsidized on-the-job

training in the manufacture of high-quality tools and moulds, while providing commercial services to industry. The project demonstrated that commercially oriented services to industry together with government-subsidized industrial training can indeed be combined in a sustainable and mutually beneficial fashion. [2.51]

36. As a matter of policy, evaluation staff worked in close cooperation with the relevant organizational units during the various evaluation phases. Furthermore, close links were maintained with the Central Evaluation Office of UNDP on preparing and conducting UNDP-financed evaluations, as well as with other United Nations agencies on general matters during the meetings of the Inter-Agency Evaluation Working Group. Requests to assist in developing evaluation systems in two other United Nations agencies were followed up. Furthermore, in the course of the year, extensive briefings on the UNIDO evaluation system were given to evaluation staff from the United Nations Educational, Scientific and Cultural Organization, a team of UNDP consultants, and staff members from two donor countries concerned with evaluation matters.

#### Strategy, Policy and Planning Office (subprogramme 216)

37. As part of its overall objective of contributing to the formulation of long- and medium-term strategies, the Strategy, Policy and Planning Office went about the task of initiating a deliberative and participatory process of reviewing and updating the main programmes of the Organization for the medium-term plan period for 1994-1999 and securing Organization-wide commitment to those programmes. This was achieved by means of a programme planning seminar held in February at which participants drawn from all parts of the Secretariat reviewed and assessed the content of programme frameworks prepared by designated working groups on the five priority themes and three common elements identified in the medium-term plan. The seminar also included a complementary exercise devoted to the enhancement of teamwork and consensus building. In the weeks following the seminar, the designated working groups continued to work on refining the programme frameworks which served as essential inputs into the revision of the medium-term plan and the establishment of a budgetary ceiling for the first biennium (1994-1995) in the plan period (see also chap. I). [2.62]

38. With the decision by the legislative bodies to adhere to a policy of zero real growth, the preparation of the programme and budgets for the biennium 1994-1995 that the Strategy, Policy and Planning Office undertook jointly with the Budget Section was overshadowed by the requirement to accommodate the needs of a rapidly changing external environment within a constrained budgetary ceiling. Following the issuance of the budget instructions and the programme guidance letter, the Strategy, Policy and

Planning Office and Budget Section prepared programmatic and budgetary analyses of the Departments' initial submissions. Those analyses constituted the basic tool for discussion at the meetings of the Programme Committee, comprising the Director-General and the five Deputy Directors-General, which eventually approved the draft programme and budgets at the level of the Secretariat. In addition to the budgetary constraints, the complexity of the exercise was compounded by the fact that the first draft of the programme and budget had to be finalized much earlier than usual so as to be available to Member States by 1 December. The request for this earlier submission, though motivated by a desire to provide ample time for discussion within the regional groups before the budgets were formally considered at meetings of the Programme and Budget Committee and Industrial Development Board in 1993, did lend a certain degree of uncertainty as the Secretariat was somewhat constrained in its attempts to anticipate events that much earlier than their occurrence. [2.63]

39. In addition to acting as secretariat to the Programme Committee and finalizing the texts of both the draft medium-term plan for 1994-1999 and the draft programme and budgets for 1994-1995, the Strategy, Policy and Planning Office was closely involved in the introduction of the new UNDP support cost regime. It played a prominent role in the negotiations with UNDP on finalizing the guidelines for the implementation of the new arrangements. Furthermore, the Office was not only involved in briefing Member States on the successor arrangements so as to facilitate comprehension and implementation of the new approach, but it also headed the training programme for the Secretariat. This latter function has since extended to UNIDO joining forces with UNDP in offering similar training to senior government, UNDP and agency staff in the field through various subregional workshops. The Strategy, Policy and Planning Office also provided continuous support to Secretariat staff in the application of the new system to projects and chaired the steering committee established at Headquarters to manage technical support services at the programme level (TSS-1) activities. [2.66]

40. The Office continued to carry out its work related to the strengthening and streamlining of the organizational and staff structure of the Secretariat. This effort took two foras. In the first instance, the Office proposed improvements to the present organizational structure of UNIDO. Thus, in line with ongoing efforts to improve the functioning of the UNIDO Secretariat through structural reform, a number of organizational changes aimed at reducing duplication of functions and enhancing internal coordination were introduced at the beginning of July 1992. Issued in the form of a Director-General's Bulletin (UNIDO/DG/B.156), those changes were aimed at further rationalizing the structure of the UNIDO Secretariat.

streamlining operations and improving internal coordination. The Bulletin established clearer terms of reference for the organizational units concerned minimizing, if not eliminating, functional duplication while emphasizing improved programme and project quality, greater teamwork, increased mobilization of financial resources, enhanced technology development and promotion capabilities, strengthened staff development and training functions and more cost-effective EDP support to the Organization's activities. In the second instance, the Office continued its efforts to draw up an organizational and staff structure most appropriate to the future of UNIDO. In addition to submitting a paper to the Special Advisory Group to the Director-General at its sixth session and making a presentation to that body on the subject, the Strategy, Policy and Planning Office drew up revised proposals for a new organizational framework that was submitted to the Board at its tenth session (IDB.10/24). Further details are given in chapter I. [2.65]

41. The Office continued to work on the monitoring and reporting of programme performance in keeping with the output and activities described in the programme and budget as reflected in tables used throughout the annual report for 1992 and its appendix J. It also focused on the

improvement of financial and programming, planning and management policies, contributing to the finalization of the relevant internal guidelines and Bulletins with the aim of ensuring consistency between policies and procedures. As in previous years, the Office was also responsible for the preparation of policy statements and speeches delivered by the Director-General and for the clearance of statements and speeches made on behalf of the Organization. [2.64]

42. As part of the Organization's endeavour to maintain consistency within the system-wide decision-making processes, the Strategy, Policy and Planning Office was closely involved in discussions on a broad range of issues within the framework of the Consultative Committee on Substantive Questions (Operational Activities), the Organizational Committee of the Administrative Committee on Coordination (ACC), and ACC itself. These ranged from the determination of the programme approach and decentralization to the implementation of the successor arrangements for support costs and of General Assembly resolution 44/211 on the comprehensive triennial policy review of operational activities for development of the United Nations system. The Office also contributed to the analysis of reports prepared by the Joint Inspection Unit on matters of relevance to the Secretariat. [2.66]

## CHAPTER III. PROGRAMME AND PROJECT DEVELOPMENT (300)

1. While the composition of the Department for Programme and Project Development and its overall functions (see GC.4/42, para. 3.1) were not affected by the organizational changes introduced in July 1992, the functions and responsibilities of the component programmes were modified (see Director-General's Bulletin UNIDO/DG/B.156). The reporting below is based on the modified structure. Reference is made however to the corresponding subprogrammes in document GC.4/42 to facilitate comparison with the programme and budgets adopted by the General Conference.

2. The Office of the Deputy Director-General (programme 310) continued to be responsible for the overall management of the major programme, the setting of departmental policies and the monitoring and coordination of the activities of the various component programmes. In July, the Office was expanded to include the Programme and Project Appraisal Section (see below).

Programme and Project Appraisal  
(subprogramme 322)  
[formerly Project Appraisal]

3. The year saw the initial testing of the logical framework analysis/objectives-oriented project planning (LFA/OOPP) design methods (IDB.9/3, paras. 19-23). Since then, an Organization-wide effort was made to improve the quality of UNIDO technical cooperation projects in line with General Conference decision GC.4/Dec.11 and Board decisions ICB.9/Dec.7 (para. (i)) and IDB.10/Dec.9 (para. (d)). Member States were briefed on LFA/OOPP design methods on three occasions: major donors on 19 February and 22 October, and countries receiving UNIDO technical cooperation on 30 October. Some countries have actively supported the Secretariat - notably Germany through the German Agency for Technical Cooperation (GTZ), Italy and Norway through the Ministry of Foreign Affairs. Valuable advice on the practical application of LFA/OOPP was also provided by the Danish International Development Agency (DANIDA) and the Norwegian Agency for International Development (NORAD).

4. This Organization-wide effort resulted in a project planning matrix which will lead to: (a) revised UNIDO programme and project development processes; (b) redefined responsibilities within the programme and project development process, including those of UCDs and JPOs; (c) appropriate project design tools; (d) the establishment of a user-friendly information system for project development; and (e) regular training courses on LFA/OOPP. Several critical assumptions were made concerning the achievement of those results, namely: that

management decisions are taken on policies and procedures; that the project allotment document (PAD) system is rectified; that teamwork is effectively supported by management and supervisors; and that the staff performance evaluation system is reviewed. [3.39]

5. The Secretariat has initiated activities related to the proposed results (a), (b), (c) and (e) above. The following are specifically related to the project development process, including the appraisal function: (a) a categorization was undertaken of UNIDO technical cooperation programmes and projects to identify those to which LFA/OOPP can be best applied and the degree of methodological changes required (the findings of this categorization were also used by DANIDA in the preparation of a report, "A future UNIDO: a study on UNIDO's comparative advantages, areas of concentration, organization and resources", November 1992); (b) a preliminary analysis was carried out of the recipients of UNIDO technical cooperation (counterparts, direct recipients and target beneficiaries) in order to render UNIDO activities more client-oriented in the future; (c) in collaboration with project planners, a revised project development process was proposed; (d) five UNIDO staff were trained as moderators of LFA/OOPP workshops for the design of large complex programmes and projects in the field; (e) the LFA/OOPP methodology was tested by the UNIDO moderators at three appraisal workshops to design and formulate large complex projects dealing with shipbuilding, textiles and industrial planning in China, Bangladesh and Togo respectively; and (f) in order to facilitate the application of LFA/OOPP, special software was tested for adaptation in 1993 to UNIDO project categories (capacity-building, promotional and advisory). [3.39; 3.40]

6. The above work on project design methods resulted in a reorganization of the work envisaged for the 1992-1993 biennium. Thus, the planned expert group meeting will take place in 1993, since its preparation will depend on the above-mentioned activities; similarly the updating of the Project Design Reference File can only be done when the adaptation of LFA/OOPP design methods to UNIDO project categories is completed and when the project development process has been reviewed. [3.40]

7. In support of the formulation of UNIDO policy, increasing use has been made of the lessons learned from the projects appraised so far. Thus, results of the appraisal of projects dealing with small and medium industries were reviewed in order to support the preparation of a draft UNIDO policy paper on that subject in consultation with the organizational units

**Table 1**  
**Significant performance indicators: Programme and Project Appraisal**  
 (Subprogramme 22)

	Planned 1992-1993	Achieved 1992
<b>Appraisal</b>		
Advice on project proposals/appraisal memoranda [3.38]	1,000	372
Appraisal workshops [3.38]	a/	3 b/
<b>QOPP design methodology</b>		
Internal reports on IDF-financed technical cooperation [3.39]	4	2
Updated project design reference file [3.40]	1	c/
Expert group meeting on design and appraisal criteria [3.40]	1	c/
<b>Training</b>		
Workshops/briefing sessions on technical cooperation design: [3.41]		
(i) UNIDO staff	4	1
(ii) JPOs	8	4
(iii) UCDS	a/	1
Government and industry representatives briefed on project design methods [3.42]	15	58

a/ Amount not specified in programme and budgets, 1992-1993.

b/ See paragraph 5 (e).

c/ See paragraph 6.

concerned. The paper was presented to and discussed by the informal consultative group of major donors on 22 October and a decision was taken to further develop it, primarily through discussions with specialists from developing countries and from bilateral and multilateral cooperation agencies, to better define the UNIDO areas of comparative advantage in that field. In connection with the increasing work in support of formulation of UNIDO policy, the Programme and Project Appraisal Section was given new terms of reference (see Director-General's Bulletin UNIDO/DG/B.156) and, as mentioned above, was transferred to the Office of the Deputy Director-General, Programme and Project Development, as of 1 July.

8. In accordance with General Conference decision GC.4/Dec.11 and other related decisions and recommendations of the policy-making organs, appraisal advice was provided

at the request of project planners on 59 project concepts and/or ideas. In addition, 402 complete project documents were submitted for appraisal, and 313 Appraisal Memoranda were issued. Appraisal Memoranda were not issued for 89 projects generally due to lack of information on the central problem to be addressed (its causes and effects), the target beneficiaries and counterpart support capacity. Of the projects for which Appraisal Memoranda were issued, 21 per cent met, as submitted, established quality criteria in terms of relevance, cost-effectiveness and sustainability; 66 per cent required various degrees of reformulation in order to meet those criteria; and 13 per cent were cases of divergent views between appraisal and project planners. In 67 per cent of the latter cases, the results of appraisal were endorsed subsequently by the Project Review Committee. [3.38]

9. Project design workshops held in Vienna to raise awareness of LFA/OOPP methods included: a half-day session for 12 UNIDO Country Directors and a one-day session for 14 new secretariat staff members. Four training workshops on project design and evaluation were held in collaboration with the Evaluation staff for 45 Junior Professional Officers. A two-day workshop was held at Bratislava, the former Czechoslovakia, for the benefit of 58 government and industry representatives. [3.41; 3.42]

#### A. SPECIAL MEASURES AND ACTIVITIES (Programme 320)

10. As of 1 July, the Special Measures and Activities Division was restructured, with the aim of providing a focal point for the development, coordination and promotion of environment-related activities of UNIDO, for economic cooperation among developing countries, the integration of women in industrial development, as well as the development of integrated sectoral programmes (UNIDO Director-General's Bulletin UNIDO/DG/B.156).

11. Thus the programme currently deals with issues of cross-sectoral concern to UNIDO programming, fosters the programme approach for both technical cooperation and industrial investment and ensures that technical cooperation activities conform to programme criteria and policy decisions.

12. Under the new structure of the programme, the Office of the Director (subprogramme 325) is responsible for directing, coordinating and integrating the activities carried out under subprogrammes 323, 324, 336 and 352. [3.77]

#### Environment Coordination (subprogramme 324)

13. The Environment Coordination Unit continued to fulfil a vital function in coordinating UNIDO environment-related activities within the house, including implementation of the UNIDO environment programme and recommendations from the UNIDO Conference on Ecologically Sustainable Industrial Development (ESID). In particular, in-house training and awareness-raising were undertaken by, or in coordination with, the Unit, and a number of projects/programmes were developed within the Unit for implementation by other substantive parts of the house. In addition, the Unit served as the focal point on environment-related issues on behalf of UNIDO, in particular on the follow-up to the 1992 United Nations Conference on Environment and Development (UNCED). [3.63]

14. Early in the year, the Unit participated in UNCED-related meetings, in particular to ensure that the recommendations from the ESID conference were accepted by the UNCED Preparatory Committee.

A brochure was prepared, entitled "Serving development by saving the environment", linking ESID and UNCED and aimed primarily at developing countries. Updated entries were also compiled from various parts of the Organization to produce an overview of the environment-related activities of UNIDO for distribution at the UNCED Conference in Brazil. The UNIDO delegation to UNCED, headed by the Director-General, not only participated at the Conference itself; some members of the delegation also attended industry-related activities (including those related to women in industry) organized by non-governmental organizations, such as the International Chambers of Commerce (ICC) Industry Forum and the '92 Global Forum. As part of the public information efforts leading up to UNCED, arrangements were made for UNIDO to support a commercial film on industry and environment called "Greenbucks", which premiered at the ICC Industry Forum, and for ESID and other UNIDO documentation to be distributed at UNCED.

15. In July, the Unit was assigned as the secretariat to the newly-created UNIDO Task Force on Environment and served also on each of the ad hoc subgroups formed by the Chairman of the Task Force for special assignments such as preparation of proposals for the October donors' meeting and preparation of a programme for UNIDO on the phase-out of ozone-depleting substances. In that function, the Unit was a major contributor to the preparation of "The response of UNIDO to Agenda 21", a document submitted to the Industrial Development Board at its tenth session (IDB.10/32). [3.64]

16. Together with the Legal Service and the Industrial Cooperation and Management Services Branch, the Unit helped in drafting the agreement of UNIDO as fourth implementing agency to the Interim Multilateral Fund for the Implementation of the Montreal Protocol. It also initiated UNIDO involvement with the Basel Convention by assisting the Convention's interim secretariat in preparing technical guidelines on waste minimization, treatment and disposal, an effort which will also be coordinated in future through the UNIDO Task Force.

17. Regarding work in project development, training and fund-raising, an additional contribution by Norway to the Industrial Development Fund (IDF) of about \$800,000 reflected the Unit's success in coordinating the UNIDO environment programme in cooperation with other units concerned. The following environment-related programmes and projects, developed by or with substantial inputs from the Unit (e.g. by demonstrating the cost-effectiveness and environmental benefits of cleaner production) were a reflection of the continuing in-house collaboration: (a) a large-scale cleaner production project to provide technical cooperation to the textile and brewing industries in Sri Lanka, due to be approved by the United Nations Development Programme (UNDP); (b) an expert group meeting on

hydrogen as an energy alternative for developing countries, developed jointly with the Technology Promotion Branch, and held at Kathmandu, Nepal, in July; and (c) a pre-feasibility study for coal briquettes production developed jointly with the Feasibility Studies Branch. Other projects still in the pipeline include: an environmental workshop on ecologically sustainable industrial development for women in Eastern Europe, developed in collaboration with the Unit for the Integration of Women in Industrial Development; two workshops to promote investment in industrial energy efficiency in Central and Eastern Europe developed with the Arab Countries, Europe and the Mediterranean Unit; and a workshop for developing countries on the environment and safety issues of chlorine production and use, under preparation with the Chemical Industries Branch. Several proposals on strengthening UNIDO activities in the management of hazardous waste were developed, including two workshops on hazardous waste management for Africa and Asia, held in coordination with the Least Developed Countries Coordination Unit. Efforts to better incorporate cleaner production in the textile and other industries were reflected in a number of other projects, e.g. in Brazil and Viet Nam. [3.64]

18. In addition to contributing to project and programme development, the Unit was also expected to be involved in the implementation of several projects funded by UNDP under the technical support services at the programme level (TSS-1), e.g. in India to study cleaner production techniques and technologies covering clusters of small-scale industries in selected areas (the project was forwarded for consideration to the UNIDO TSS-1 Steering Committee); in Thailand concerning industrial pollution reduction and the preparation of a national industrial pollution control management programme; in Pakistan to conduct an industrial pollution survey (the project was in the initial stage); and also in India to prepare a master plan for environmental quality management for Dhanbad-Bokaro (the project was forwarded for consideration to the Steering Committee).

19. Among ongoing activities, collaboration continued with the World Bank to revise and update the World Bank environmental guidelines. With funds from the United Nations Environment Programme (UNEP), under an inter-agency programme, UNIDO sent an expert to Kuwait to assess the situation regarding industrial safety in the aftermath of the Gulf war. The mission generated four concrete areas for potential UNIDO assistance to Kuwait, which have been submitted for inclusion in the United Nations rehabilitation plan for the region that is coordinated by UNEP. As a follow-up to that project, a draft project document was developed by the Unit for the creation of a modern industrial safety policy structure in Kuwait. Development began on a programme

to support national cleaner production centres in 20 developing countries to be launched with the full cooperation of the Industry and Environment Programme Activity Centre of UNEP (IE/PAC). The programme is based on a recommendation made at an IE/PAC meeting and a seminar on cleaner production held in Paris in October. A learning kit on industrial environmental management, prepared by UNIDO in conjunction with UNEP IE/PAC, was nearly completed. [3.67; 3.68]

20. The UNIDO environmental training programme (module 2), expected to begin in early 1993, is the result of repeated encouragement by many donor countries for UNIDO to give priority to activities under subprogramme I of its updated environment programme (cf. IDB.10/17) as a basis for further environmental work. The project will enhance the Organization's capacity for rendering industry-related assistance with regard to the environment and for incorporating environmental aspects into all its activities. [3.66]

21. Technical in-depth seminars continued to be organized which examine the potential for cleaner production techniques and technologies for the agro-based, chemical, engineering and metallurgical branches and which review the fundamentals of pollution mitigation. Similarly, the successful series of monthly environmental awareness seminars, in the form of lectures and discussions, continued to take place at Headquarters. During the year, an in-depth environmental training course was conducted on pollution control and monitoring (February), and lectures were provided during a mid-assignment review meeting for Junior Professional Officers (May) on the role of UNIDO in promoting ESID. The following environmental awareness seminars also took place: the work of UNEP in the industry and environment area (January); scientific and statistical background for current thinking on climate change (February); pressurized fluid bed combustion (February); utilization of low-rank coal for low-cost power generation (February); cleaner production issues, based on a consultant's long experience in the chemical industry (March); risk assessment and management (March); the challenge to economic thought and practice posed by the concern with sustainable development (March); presentation and demonstration of CLAIR - an environmental decision support system (June); environment and the world of work (September); the Montreal Protocol and the phase-out of chlorofluorocarbons and other ozone-depleting substances - the role of UNIDO (October); and the Norwegian programme on transfer to Eastern Europe of know-how in waste minimization (October). In addition, extensive contributions were made to the Environmental Awareness Bulletin prepared by the Industrial and Technological Information Section, which is published monthly and provides information on missions, meetings, training courses and conferences related to industry and the environment. The Bulletin also lists internal and external sources of environ-

mental information and recent publications such as technical reports. [3.66; 3.68]

Economic Cooperation among Developing Countries

(subprogramme 336)

22. Following the approval by the General Conference (resolution GC.4/Res.11) of a framework for a UNIDO-wide programme in the 1990s, whose 12 objectives reflect programming and project development for technical cooperation among developing countries (TCDC) in the priorities of the medium-term plan, 1992 saw the preparation of a coherent and dynamic approach for the next years.

23. In cooperation with UNDP efforts have been made to update the TCDC/INRES (information referral system) database. To do so, information was collected within the Organization to supplement the database and more than 200 institutions were contacted to obtain updated information on their training programmes and expert services. The TCDC/INRES database was also demonstrated to the potential users at UNIDO in order to promote its use in project and programme development. During the year, inventories on TCDC capacities for Argentina and Saudi Arabia were initiated for completion in 1993. However, due to financial and staff constraints, some outputs such as development of specialized TCDC networks and database, regional workshops and newsletters were not carried out. [3.157]

24. Activities with regional and sub-regional groupings focused on programmes for the development of industrial co-operation in the Arab Maghreb Union in areas such as textiles and leather, agro-industries, agricultural machinery, pharmaceuticals, electronics and informatics, and in the Gulf Cooperation Council (GCC) in areas such as small- and medium-scale industries. Regarding the promotion of joint ventures among member States of the Organization of the Islamic Conference, follow-up activities were ensured with concerned enterprises and financial institutions as well as industrial sponsors for implementing the 104 industrial projects identified at the meeting for the promotion of joint ventures among Islamic countries held at Karachi, Pakistan in November 1991, 1/ resulting in total investments amounting to \$727 million. Following the establishment in December 1991, with the assistance of UNIDO, of the African Iron and Steel Association formulation began of a cooperation programme in human resource development in iron and steel involving 13 African countries in co-operation with the French Government. Discussions were also held with the Economic Community of West African States concerning

assistance to the 16 West African countries in the implementation of an industrialization master plan of the region through a regional seminar to be held in 1993.

25. Similarly, under the Regional Co-operation Programme for the Industrial Recovery of Latin America and the Caribbean, work continued on the promotion of TCDC potentials in areas such as industrial subcontracting, which involves 13 Latin American countries, automation of the capital goods industry, and computerized maintenance management in iron and steel industry with the Latin American Iron and Steel Institute. Preparations were made for a regional meeting on medicinal plants to be held in Guatemala in July 1993, which will involve 20 Latin American countries. The ECDC Section also implemented regional and interregional meetings in industrial cooperation for the Asia and Pacific region in areas such as man-made fibre technology, iron and steel, production and application of advanced machine tools, metalworking industry and processing of mineral resources. Chinese technical expertise was provided to Fiji in the installation of time and frequency standards of a national measurement laboratory. [3.158]

26. Preparatory activities were completed with the host Government for the organization of the solidarity meeting scheduled to be held in 1993 in Uganda. Follow-up activities were also pursued in connection with the previous solidarity meeting (held in Botswana in October 1991), for the implementation of 34 projects submitted by 19 industrial African promoters. These projects involved transfer of technology, know-how, supply of equipment, training, technical expertise, consultancy, etc. As a follow-up to the Cape Verde Solidarity Ministerial Meeting (1988) a study tour to Argentina and Brazil was undertaken in June by two Cape Verdean specialists to conduct a survey of the potential for developing the leather industry in that country. [3.159]

27. Of the five workshops planned for the biennium 1992-1993, three were completed in 1992 through enterprise-to-enterprise cooperation meetings on machine tools (New Delhi, India, in March), man-made fibre technology (Beijing, China, in September) and metalworking industry (Bandung, Indonesia, in October). Further operational projects were implemented as follow-up to promotional meetings and at the request of the Governments concerned. These included a seminar-cum-workshop on petrochemical technology transfer and cooperation among nine developing countries (Pitesti, Romania, in October), a meeting on cooperation between Asian and African fisheries specialists (Singapore, October) and a meeting among 20 developing countries in research and development of mineral resources (Hyderabad, India, in December). [3.160]

28. Owing to financial constraints, a number of meetings were postponed to 1993,

1/ IDB.8/10, chap. IV, para. 18.



although preparations for them were completed during the year. The meetings were related to: direct reduction process of iron ore between Arab countries (Cairo, Egypt); cooperation on know-how, licensing and patents of petrochemical industries between the Middle East and North Africa (Saudi Arabia); industrial cooperation on small- and medium-scale industries among Gulf Cooperation Council States (Saudi Arabia); and food-processing industries in Africa (Arusha, United Republic of Tanzania). A training programme of cooperation for upgrading skills in the footwear industry by which India's experience would be placed at the disposal of African countries (New Delhi, India) was approved for implementation in 1993.

29. A number of ECDC/TCDC activities carried out in collaboration with other units included a workshop for Asia and the Pacific region on the telecommunications industry (New Delhi, India, in September) with the Technology Promotion Branch, and a meeting on industrial applications of expert systems in developing countries (Hyderabad, India, in November) with the Industrial Strategies and Policies Branch. Other activities in the fields of iron and steel, machine tools industry, small- and medium-scale industries and petrochemical industries were carried out in close cooperation with the relevant UNIDO units. [3.161]

#### Integration of Women in Industrial Development (subprogramme 352)

30. The implementation of the 1990-1995 UNIDO programme for the integration of women in industrial development concentrated both on measures to ensure the consideration of women in programme/project design and implementation, and on the design and implementation of projects specifically targeting women. This approach was applied in technical cooperation programmes/projects and in research and study activities.

31. Consideration of women was included in the terms of reference of many country programming and sectoral programming exercises to ensure that women would be targeted in resulting policy and project recommendations. In some cases, experts on women in development were attached for that purpose to programming missions (Botswana, Cameroon, Nigeria, Yemen and Zimbabwe). Within the framework of a regional programme for the development of agro-industries in the least developed countries of Asia and the Pacific, women-in-development experts took part in the field work in three countries and also participated in a workshop at Bangkok, Thailand, to develop a programme for the region on that subject. A study on human resources and industrial development in Africa looked at gender-specific participation patterns in industry and addressed gender issues in the context of training and human resource development for industry. [3.257; 3.258]

32. The attachment of a women-in-development expert to an improvement scheme in the African region for hides and skins, leather and leather products effectively analysed the situation of women and highlighted their needs within the sector both as workers and as entrepreneurs. As a result, a component in the second phase of the project will address women's specific needs to ensure that the full potential of their contribution to the industry is realized and that their participation is placed on an equal basis with men. [3.258]

33. Projects targeting women had a strong focus on the development of female entrepreneurship and on the dissemination to women of environmentally sound technologies. Projects were formulated for the introduction of the UNIDO training programme for women entrepreneurs in the food-processing industry to Gambia, the United Republic of Tanzania and to countries in Central America. A project proposal for the establishment of a women's unit within the Entrepreneurial Centre of the Jamaican Promotion Corporation was formulated as well as a programme to promote entrepreneurial and managerial skills of women in China's "township" industries. The project formulations were preceded by field missions which, together with the respective counterpart organizations, undertook a careful analysis of women's needs in terms of training and support services. A project was developed for the introduction and dissemination of improved cooking-stoves for rural women in Madagascar, under which the socio-cultural aspects of accepting new and improved cooking-stoves would be examined. [3.259; 3.261]

34. An example of ongoing projects specifically targeting women that successfully completed their first phase was a project providing business advisory services for women in Malawi. Others started implementation, including a project to assist a women's production and marketing cooperative in Nepal and a project for the development and dissemination of appropriate food-processing equipment for rural women in sub-Saharan Africa implemented in cooperation with the International Fund for Agricultural Development (IFAD). [3.262; 3.264]

35. A study applying statistical clustering techniques was undertaken to assess women's economic and industrial participation. As a result, countries sharing similar patterns of participation of women in industry were identified as were major issues affecting their participation in industry in the 1990s. [3.257; 3.258]

36. Close cooperation with organizations and bodies of the United Nations system continued: consultancy services were provided to the International Maritime Organization for the development of that organization's action plan for women in the maritime sector. UNIDO participated in the following meetings organized in Vienna by the United Nations Division for the

Advancement of Women of the Centre for Social Development and Humanitarian Affairs: thirty-sixth session of the Commission on the Status of Women, Administrative Committee on Coordination: sixteenth Ad hoc Inter-agency Meeting on Women, Seminar on Women in Development, and Seminar on Women in Extreme Poverty. UNIDO also participated in the Summit on the Economic Advancement of Rural Women organized by IFAD in Geneva; the Interregional Workshop on the Role of Women in Environmentally Sound and Sustainable Development organized by the United Nations Department of Economic and Social Development and the International Research and Training Institute for the Advancement of Women held in China; the Regional Workshop on Promoting Diversified Skill Development for Women in Industry held in Thailand by the Economic and Social Commission for Asia and the Pacific; and the Meeting of the International Network for Research and Action on the Role of Women in the Informal Sector held in Indonesia by the United Nations Educational, Scientific and Cultural Organization. [3.263]

37. Cooperation with intergovernmental and non-governmental organizations (NGOs) was expanded through active participation in the following events: a seminar on mainstreaming women in development, organized by the Expert Group on Women in Development of the Organisation for Economic Cooperation and Development/Development Assistance Committee; a First Round Table for Women in Business in the Preferential Trade Area for Eastern and Southern African States held in the United Republic of Tanzania; and a workshop on business and professional women and environment organized by the International Federation of Business and Professional Women within the framework of the NGO Global Forum held at Rio de Janeiro, Brazil, at which UNIDO introduced the theme of "industry, environment and women". Cooperation with the Korean Women's Development Institute was intensified. A staff member from the Institute was hosted by UNIDO as an intern in order to obtain first-hand experience with the efforts to integrate women into industrial development. [3.263]

Integrated Programme Support  
(subprogramme 323)  
[formerly Programme Development Support]

38. Much of the work undertaken in 1992 was related to methodological support, e.g. the drafting of a Director-General's Bulletin on guidelines for applying the integrated programme approach in UNIDO to be issued in 1993. The role of the Unit is essentially to support the development and implementation of integrated programmes. This includes the extensive analytical and coordination activities with regard to the design and development of such programmes within the Organization. An internal policy information note on the integrated programme approach was prepared. Parallel to those activities, the Unit cooperated

with UNDP regarding the preparation of their guidelines and instructions on the application of the integrated programme approach. [3.54]

39. Work continued on follow-up activities related to integrated programmes designed in earlier years. With regard to the fisheries industrial system in West Africa, training was provided to three Guinean national counterparts in the application of software to support policy decisions in order to manage, update and monitor the integrated programme. A computer was acquired and a mission fielded to install the computer and the software and to provide additional training to the local team. The Government of Ghana confirmed its acceptance of the programme proposal for the integrated development of the Fisheries Industrial System 2/ and requested UNDP to earmark funds for the technical cooperation component under the indicative planning figure resources. According to a list of priority projects, the feasibility study project for the Ghana Fish Industries Investment Programme was considered to have the highest priority. The project relates to 14 investment proposals, of which six to eight are industrial investment projects. This project document was accepted by the Government of Ghana and approved by UNDP for financing under IPF. Updated integrated programmes on fertilizers and agricultural machinery were presented to the Government of Ethiopia, while a proposal for a workshop was submitted to the Government of Egypt to discuss the previously submitted integrated programme for agricultural machinery. 2/ [3.52; 3.53]

40. Programme concepts were developed for manufacturing medical inputs in Africa and for wood-based industries in Africa, Asia and Latin America and the Caribbean. To supplement the proposal for wood-based industries, a background paper was prepared on trends and perspectives in that industry in the developing world. The Department of Industrial Operations, Area Programmes Division and Industrial Investment Division are expected to be involved in preparing those generic proposals, which will be submitted to the Programme and Project Review Committee. [3.51; 3.55]

41. Owing to insufficient funding, the proposed establishment of a subsectoral database on agro-related industries and other industries in 50 African countries was not undertaken. [3.55]

42. Work continued on improving the user-friendly aspect of the system modelling and decision support software. A translation into French was completed, and already transferred to the Government of Guinea within the framework of the

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2/ IOB.9/10, chap. II, para. 45.

Integrated Programme for the Development of the Fisheries Industry mentioned above. [3.53; 3.54]

#### B. AREA PROGRAMMES (Programme 330)

43. The Area Programmes Division continued to develop, implement and monitor operational programmes at the country, sub-regional and regional levels. The programming activities were related to all sources of funds, with special attention given to UNIDO's resources as in the case of the Industrial Development Decade for Africa (IDDA). The unprecedented delay in the United Nations Development Programme (UNDP) country programming process for the fifth cycle (1992-1996), mainly caused by the introduction of a "programme approach", led to a slow-down not only in programme development but most notably also in project development work. The latter was also aggravated by the slow start of the successor arrangements for support costs. Consequently, project approvals from the UNDP indicative planning figure (IPF), cost-sharing, cash counterpart and special measures in 1992 amounted to \$9.6 million. Chapter VIII, part A, and table 3A of the statistical annex provide additional details of project approvals under all sources of funds. The highlights of programme and project development in the individual regions are described in paragraphs 74 to 107 below under the respective subprogrammes, while significant performance indicators of each area programme are provided in table 4 below and in appendix J.

44. From the numerous proposals prepared in late 1991 and early 1992, the UNDP Governing Council at its thirty-ninth session approved a list containing 59 TSS-1 (technical support services at the programme level) proposals with a global ceiling of \$4.9 million for implementation by UNIDO in the biennium 1992-1993. Despite the late approval by UNDP, 26 TSS-1 projects commenced their activities in 1992, delivering close to half of the global ceiling for the biennium in the same year.

45. During the year, 150 country programme reviews and five regional programme reviews were undertaken. For all areas and for all sources of funds, a total of 916 project ideas and concepts were identified (3,000 projects forecast for the biennium), and 407 projects were further developed and formulated for appraisal and approval (1,250 projects forecast for the biennium).

46. The Office of the Director (sub-programme 337) ensured the overall management of the resources and activities of the subprogrammes mentioned below. Furthermore, following the organizational changes in July (see UNIDO/DG/B.156), three units were directly attached to the Office of the Director: the Industrial Development Decade for Africa Coordination Unit; the Least Developed Countries Coordination Unit; and

the Field Representation and Coordination Unit (previously under programme 320). [3.171; 3.172; 3.173; 3.174]

#### Industrial Development Decade for Africa (programme 620)

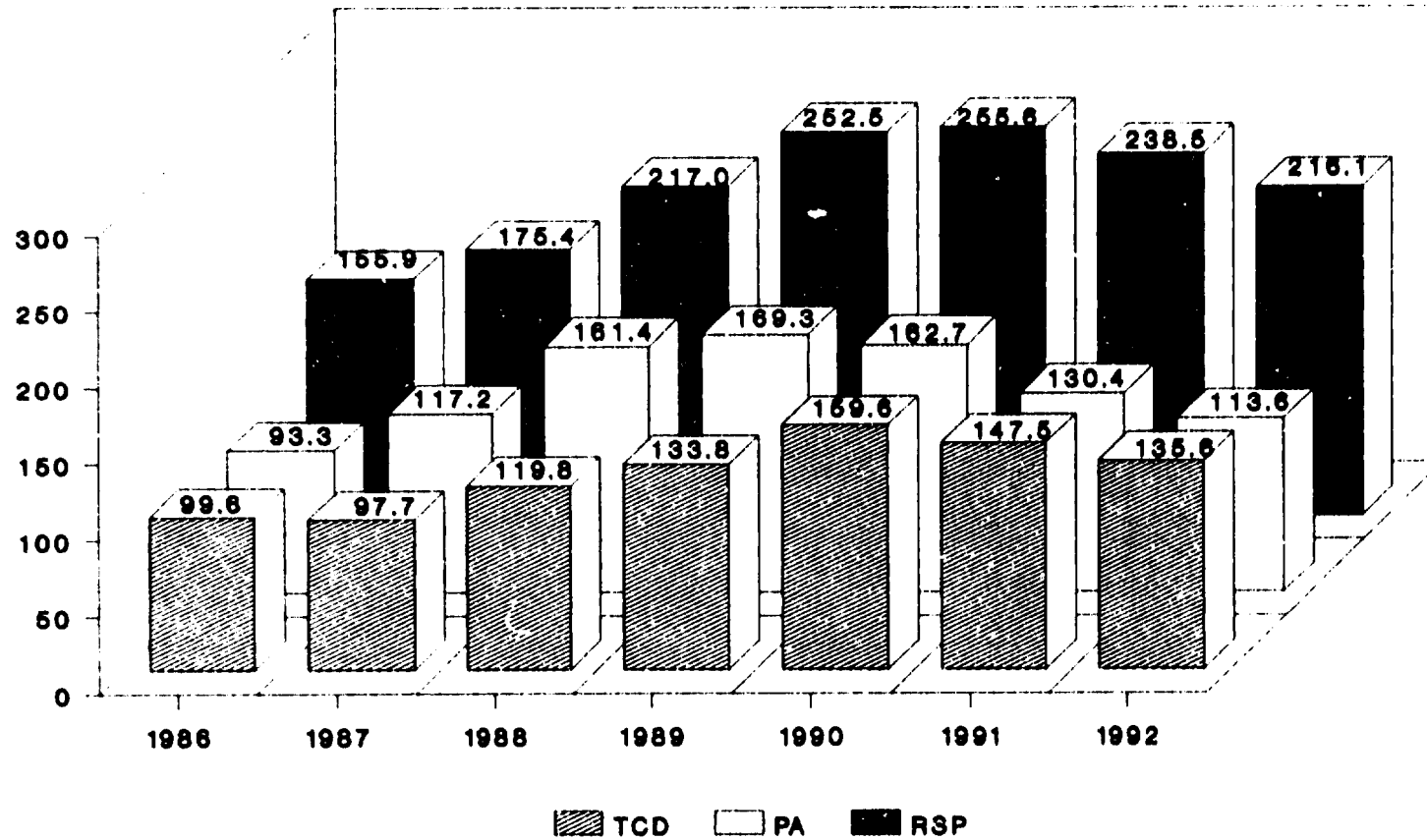
47. The General Conference, in adopting the programme for the Second IDDA with its national, subregional and regional components as a top priority programme of UNIDO (resolution GC.4/Res.8), requested the Director-General to assist African countries and organizations to ensure the successful implementation of the programme. Funds for IDDA were allocated under programmes 610 and 620 (see chap. VIII, paras. 3-4)

48. Under technical cooperation activities, an allotment of \$1,446,200 available for 1992 was fully programmed. Eighteen projects were approved totalling \$2,687,220 and consisting of six national projects with a value of \$768,485 and 12 regional projects costing at \$1,918,735. Of these, seven projects amounting to \$775,600 were planned for joint financing with the Agency for Cultural and Technical Cooperation (ACCT) and UNIDO execution under subcontracting arrangements with ACCT. The projects approved were based on priorities of national and subregional programmes for the Second IDDA. In the agro-industrial subsector, food processing - including fruit and vegetable preservation - and the leather industry were emphasized. High priority was given to human resource development with special reference to local entrepreneurship, integration of women in industrial development, promotion of the private sector, training of trainers in the area of agro-food packaging, agricultural machinery manufacturing as well as training of staff of banks in the appraising and financing of industrial projects with a view to facilitating funds mobilization for industry. Particular emphasis was also placed on regional cooperation, technology acquisition and development, energy and environment. Most projects approved for implementation were in the least developed countries which form the vast majority of the African countries. As at 31 December, \$549,000 worth of projects were implemented. Steady efforts were made to ensure high quality delivery and sustainable impact mainly by applying appropriate project selection criteria, providing the necessary coordination with other relevant projects and activities, and seeking to ensure active participation and involvement of local economic agents and beneficiaries in project implementation. [6.15 (i)(a), (c), (d); (iii)]

49. The amount of \$4.75 million budgeted for supplementary activities for 1992-1993 was entirely programmed. The allotment for 1992 amounting to \$2,023,200 was allocated to support activities designed to strengthen the technical cooperation component of the Decade, mainly in the fields of technology development and acquisition, mobilization

# Technical cooperation delivery (TCD), project approvals (PA), and residual stock of projects (RSP)

(In millions of US dollars)



of financial resources and support for the implementation of national and subregional programmes for the Second IDDA. Also as part of the supplementary activities, \$606,300 worth of short-term advisory services (STAS) were provided to African countries, mainly least developed countries, in the areas of industrial policies and strategies, techno-economic studies on agro-industrial projects, institution building, development of drugs from medicinal plants, industrial rehabilitation, market studies, transfer and application of solar energy technologies, maintenance and repair, and production of automotive components. Of particular relevance to the special needs of African least developed countries were the activities related to the enhancement of industrial production of cheap and enriched foods in those countries and the organization of a workshop on privatization scheduled to be held in the United Republic of Tanzania in June 1993. As at 31 December, \$814,135 worth of supplementary activities were implemented. Due attention was paid to the need to aim at high efficiency and visible results by ensuring strong linkages of those activities with the technical cooperation projects, linking technical assistance with investment and encouraging full involvement of local economic agents in the implementation. [6.15 (i)(a), (c), (d); (ii)]

50. In support of private sector development, assistance was provided in the preparation of a programme presented at a meeting on economic integration in Central Africa held by UNIDO at Libreville, Gabon, in September in cooperation with the Economic Community of Central African States and with the active participation of private industrialists, entrepreneurs and representatives of the business community. At the meeting, it was agreed that the first priority for subregional cooperation investment and technical cooperation resource mobilization was small-scale agricultural machinery, followed by wood, iron and steel, and petrochemical industries. It was also agreed that, in the development, promotion and implementation of subregional projects, instead of the traditional approach which emphasized the role of Governments, a new approach should be adopted focusing on the full and active involvement of the private sector. [6.15 (i)(c); (ii)(e)]

51. Support was provided to the Organization of African Unity (OAU) through the organization of two meetings during the sixth All-Africa Trade Fair held at Bulawayo, Zimbabwe, in September: Techmart Africa 1992 on technology acquisition and negotiation and a meeting of national investment promotion centres, held in cooperation with the UNIDO Investment Promotion Services (see chap. IV, paras. 10 and 67). As a contribution to the establishment of the African Economic Community, a protocol on industry and a study on regional economic integration were prepared by UNIDO and submitted to OAU at its request. [6.15 (ii) (d),(e); (iv)]

52. In following up on General Conference resolution GC.4/Res.8, assistance was provided to the African Group in New York, in consultation with the Economic Commission for Africa (ECA) and OAU, for the submission of the programme for the Second IDDA to the Economic and Social Council and subsequently to the General Assembly at its forty-seventh session for adoption (see chap. II, para. 7). In response to the General Conference request that the activities of the Second IDDA be harmonized with those of the Second Transport and Communications Decade, consultations were initiated with ECA on the preparation of an action plan called for by the Dakar Declaration on Industrialization and Economic Integration in Africa for the 1990s. The first draft plan of action was to be completed in time for submission to the eleventh meeting of the Conference of African Ministers of Industry (CAMI) in May 1993. [6.15 (i)(b); (ii)]

53. Assistance was also given to the member Ministers of the bureau of the tenth CAMI at their first and second meetings held at Dakar, Senegal, in May and October at which the adoption took place of specific policy and other practical measures for the acceleration of the implementation of the programme for the Second IDDA at the national and subregional levels. Those measures included: the establishment of national coordinating committees for IDDA; the integration of the national programme for the Second IDDA of each member State into its national economic development plan; coordination and harmonization of the national programmes for the Second IDDA with relevant programmes such as the structural adjustment programme, the fifth UNDP country programming cycle, the United Nations New Agenda for the Development of Africa in the 1990s and the United Nations System-wide Plan of Action for African Economic Recovery and Development; the mobilization of domestic and external financial resources; and the coordination of IDDA-related policies, projects and activities at the national and subregional levels particularly within the context of the work of the Committee of Ten.<sup>3/</sup> The meetings of the bureau of CAMI as well as the meeting of the Committee of Ten were serviced by the Joint Committee of the OAU, ECA and UNIDO secretariats on the implementation of IDDA. How to further strengthen cooperation among the three secretariats in support of the implementation of the programme for the Second Decade was one of the main subjects discussed at the fourteenth meeting of the Joint Committee, which was hosted by UNIDO in Vienna in November. Concrete proposals

<sup>3/</sup> Set up by the Conference of African Ministers of Industry at their tenth meeting to monitor the follow-up to the implementation of the programme for the Second IDDA at the regional level. Current membership: Algeria, Cape Verde, Congo, Egypt, Gabon, Kenya, Malawi, Senegal, United Republic of Tanzania, Zimbabwe.

and specific modalities for their implementation were formulated and agreed upon at that meeting. [6.15 (i)(b); (ii)(e)]

54. Other activities undertaken included: preparatory work for the organization and servicing of the eleventh CAMI meeting (31 May - 4 June 1993) and the preceding meetings of the Intergovernmental Committee of Experts of the Whole on Industrialization in Africa to be held from 23 to 29 May 1993 at Port Louis, Mauritius; preparations for the subregional industrial cooperation meetings on the programmes for the Second IDDA for West Africa and Central Africa, which were rescheduled to take place in 1993 and will thus be linked with the investment forums planned for that year for those subregions; advisory services provided for the strengthening of the Africa Business Development Centre in Atlanta, Georgia, United States of America, in order to ensure greater efficiency of the activities of the Industrial Partners Programme for Africa; 4/ continued consultations with leading international financial institutions on the organization of the UNIDO-sponsored coordinating meeting on the Second IDDA to be held in 1993 in Vienna; and a consultant study on the financing of the Second IDDA for submission to that meeting. The latter study put forward specific recommendations for mobilizing investment and technical cooperation resources at the national, regional and international levels for the programme of the Second IDDA including the need in that respect for an efficient coordination of the resources and activities of the international financial institutions related to the industrial sector in Africa. [6.15 (i)(a), (b), (c); (ii)(c)]

55. Support was also provided for the commemoration of the third time of the Africa Industrialization Day on 20 November, held in 1992 under the agreed theme of building materials industry and economic integration in Africa. The particular problems confronting African countries in the area of housing and human settlements and the solutions suggested based on the utilization of local building materials and unsophisticated technologies suitable to local conditions were highlighted in a film produced by UNIDO in the context of the Second IDDA entitled "Building the future", as well as in illustrative posters. The film and the posters were given wide distribution in the African countries and in selected sectors of the international community. [6.15 (iv)]

Least Developed Countries  
(subprogramme 337)

56. Following the adoption of the Paris Declaration and the Programme of Action of

the Second United Nations Conference on the Least Developed Countries 5/ in May 1990 and the subsequent adoption of the UNIDO industrial action programme for the least developed countries (LDCs) at the fourth session of the General Conference (GC.4/Res.11) in November 1991, a concerted effort has been launched to programme and utilize available funds allocated to LDCs in accordance with the priorities set out in the UNIDO programme of action. Accordingly, a number of programmes and projects were prepared in cooperation with the substantive units concerned, for consideration under various sources of finance. [3.174]

57. A "seed" programme on the promotion of traditional wood industries in Central and West African LDCs was under implementation; financing for that programme was secured from the contribution of Italy to the industrial action programme for LDCs and the LDC component of the Regular Programme of Technical Cooperation. Similarly, a support programme to mobilize financial resources for industrial development in Asian LDCs was approved, while approval was pending for the programmes for LDCs in the South Pacific, in French-speaking and English-speaking African countries. Other programmes developed and submitted for approval addressed the issue of mobilization of financial resources for industrial development, environment, rehabilitation and small-scale and micro-industries. Projects on food production, privatization and transfer of technology were approved from the IDDA supplementary activities (see para. 49 above). [3.174]

58. A highlight in the implementation of the "seed" programme for the promotion of the traditional textile industry in West Africa 6/ was the organization of a workshop on the promotion of the traditional textiles industry in West African least developed countries held at Ségou, Mali in May. At the workshop, a programme of action was approved for the promotion of the traditional textiles industry in West Africa that formed the basis for the formulation of two large-scale projects as follow-up to the first phase: one on the promotion of the traditional textile industry through the creation of a regional tissuthèque in West African LDCs and the other on the promotion of the traditional textile industry through the training of artisans, improvement of products, and marketing for West African LDCs. At the end of the year, both projects were under consideration for financing under UNIDO sources of funds. As follow-up to the Ségou Workshop, UNIDO organized a "mini show" on traditional textiles within the Third International African Arts and Crafts Show (SIAO) held at

4/ IDB.9/10, chap. IV, para. 5.

5/ A/CONF. 147/18.

6/ IDB.9/10, chap. I', para. 12.

Ouagadougou, Burkina Faso, in October/November upon the invitation of the SIAO secretariat, and moderated a workshop on the promotion of African traditional textiles. These activities were widely appreciated.

59. Pursuant to the industrial action programme for LDCs, emphasis was placed in the operational activities of UNIDO on human resource and private sector development, privatization programmes, promotion of small- and medium-scale industries, technology transfer and development, rural industrial development, mobilization of financial resources for industrial development, development of industrial service, scientific and technological base, environment and energy, and food self-sufficiency. Thus the following activities were being developed: a programme on manpower development and planning for industry in Botswana; an integrated programme of privatization policies in Burundi and Sudan; human resource development related to private sector development in Chad, Equatorial Guinea, Mali and Zaire; industrial rehabilitation in the Central African Republic, Uganda and Yemen; and small and medium enterprise development in Djibouti, Lesotho and Madagascar. [3.174]

60. More concrete examples can be quoted in the case of ongoing projects. Thus in Guinea, a project on integrated assistance in small-scale industries succeeded in creating 38 micro-enterprises in the four main regions of the country during the first phase of the project. The creation of about 100 micro-enterprises was expected during the second phase, which extends over a period of three years. In Madagascar, UNIDO assistance was mainly in areas of support to the structural adjustment programme of the Government. In Mali, a project was providing technical support (including training) to local promoters in the preparation of projects for submission to financial institutions when applying for loans, and in the identification and evaluation of appropriate technologies. In Rwanda, a programme was under way for the mobilization of investment resources through the development of enterprises in the construction sector using local building materials. In Zambia, a project was providing assistance in the establishment of a one-stop investment centre. A project to complement the Centre by developing the legal framework necessary to facilitate the management of the Government's liberalization and the private sector development process was at an advanced stage of development. Programmes to promote the integration of women in rural industrialization with special focus on food processing were carried out in the Gambia and Zambia. [3.174]

61. Under the Special Programme for the Industrial Development of Asia and the Pacific, diagnostic missions were carried out to most LDCs to analyse the constraints hampering the development of the agro-

industries, particularly food processing (see para. 89 below). This work culminated in a UNIDO/ESCAP (Economic and Social Commission for Asia and the Pacific) regional workshop on agro- and food-processing industries in Asia and Pacific LDCs, including Yemen (Bangkok, November). Programmes under implementation or completed during the year in the region included a comprehensive industry sector needs assessment mission to Cambodia, a review of investment promotion potential in the Maldives and Vanuatu, an investment forum in Nepal, and a large-scale programme for strategic management of industrial development in Bangladesh. [3.174]

62. New approvals generated for LDCs amounted to \$14.46 million (1991: \$11.02 million) representing 100 projects, while net approvals amounted to \$15.73 million (1991: \$19.03 million). Delivery reached a level of \$23.73 million (1991: \$22.29 million). A TSS-1 mission on a small-enterprise development programme was sent to Lesotho, while industrial sector review, programme review and programming missions were sent to Guinea, Sierra Leone and Togo, respectively.

#### Field Representation and Coordination (subprogramme 321)

63. The financial situation of the UNIDO Country Director (UCD) programme continued to be the subject of deliberations at the policy-making organs and of consultations between UNIDO and UNDP. In July, the Programme and Budget Committee at its eighth session drew the attention of the Board to the need for additional financing to increase the number of UCD posts to reach the target of 50 or at least to maintain the number at the 1992 level. The UCD programme in 1992 had maintained its level of posts at 39, with 26 posts financed under the UNDP sectoral support funds, 10 posts under the UNIDO operational budget and three posts from voluntary contributions - one from Germany and two from Italy. [3.22; 3.25]

64. In its decision 91/34, paragraph 2, the UNDP Governing Council decided on an annual allocation of \$3.8 million of sectoral support funds for the UCD programme, amounting to an indicative funding level of \$19 million for the fifth programming cycle (1992-1996). As anticipated by the Director-General, <sup>7/</sup> a careful analysis carried out in 1992 showed that, owing to substantially higher international and local support costs, expenditures were expected to exceed the annual funding from UNDP sectoral support by approximately \$1.5 million for 1992, the first year of the fifth UNDP programming cycle. The shortfall in 1992 would entail a significant reduction in the number of posts financed from that source of funds

<sup>7/</sup> IDB.9/10, chap. VI, para. 11.

for the remainder of the cycle. In addition, as a result of the new successor arrangements to UNDP support costs, UNIDO income from UNDP was expected to drop drastically, thereby affecting the operational budget of UNIDO and its ability to continue financing the UCD programme to the same extent as in 1992. Furthermore, the voluntary contributions to the programme would be depleted by the end of 1992 and no additional contributions had been announced so far. [3.22]

65. The Director-General decided to bring the matter to the attention of the Board at its tenth session (IDB.10/34). The Board, in its decision IDB.10/Dec.11, invited the Governing Council of UNDP at its February 1993 session to consider, if possible, the need for and possibility of increasing the annual allocation for the UCD programme as of 1993 to permit at least the maintenance of the current number of UCD posts, and preferably to increase the number to reach the target established. To that effect, the Administrator of UNDP agreed to request the Governing Council to include an item on the subject at its February session.

66. Following the issuance in July 1991 of administrative circular UNIDO/DA/PS/AC.84 on the procedures for applications by staff members for technical cooperation project personnel and UCD posts, several staff members were assigned to the field as UCDs (to Uganda and, on an interim basis, Nigeria and the Philippines). Furthermore, one Regional Adviser in Latin America (Chile) combined his duties with those of a UCD, and two duty stations were covered by project staff. At the end of 1992 two posts remained unfilled (Argentina and Fiji). [3.22]

67. The careful preparation, monitoring and control of UCD budgets for the local office costs of 39 posts and their international travel have proved to be vital for the best use of available funds. On the occasion of their visits to Headquarters, all UCDs and Junior Professional Officers (JPOs) located in UCD duty stations were briefed on the procedures and control of the UCD budgets. In March, a mission was undertaken to Bolivia, Colombia and Honduras for consultations with the respective Governments and UNDP Resident Representatives to review budgetary requirements of the UCD offices. Missions to the UCD offices, in general, have been instrumental in improving the overall operations, especially in relation to budget, local staffing, office facilities and equipment requirements, and in accelerating the informal clearance by the concerned authorities of the candidates for UCD or JPO posts. Meetings were also held in UNDP New York, in March and June, concerning candidates for UCD posts and administrative procedures to implement the UNIDO programme. [3.22; 3.23]

68. The Field Representation and Co-ordination Unit continued to coordinate activities related to the initial

recruitment, extension of contracts, and transfer of UCDs, as well as the evaluation of the UCDs' performance within UNIDO and from the field. An internal working group on administrative procedures of the UCD programme specifically discussed the performance appraisal report system in UNIDO and came to the conclusion that the system needed to be modified. An agreed innovation was a splitting of the report so that it would be completed simultaneously in two parts, one by the UNDP Resident Representative, and the other by UNIDO Headquarters, in order to produce a fair evaluation. [3.22]

69. The Unit coordinated the visits to Vienna of 20 UNDP Resident Representatives as well as 50 UCD visits. At the request of UNIDO Headquarters, 25 UCDs represented the Organization at some 80 meetings. Three UCDs attended two workshops on management of field coordination for senior United Nations system representatives that was organized by the International Labour Organisation, International Turin Centre, Turin, Italy, in May and June for teams from the Middle East and Arab States, as well as from some French-speaking countries. A similar workshop for Latin American countries, held at San José, Costa Rica, in February/March, was attended by one UCD. For the second time, 8/ a workshop on environmental issues and a training workshop on women in development were held in Vienna in January and attended by 21 UCDs. Field training workshops on support costs organized by UNDP in Africa, Arab States, Latin America and Asia were attended by 28 UCDs. [3.23]

70. A handbook containing comprehensive guidelines for UNIDO field staff was in the first stages of preparation, and was expected to be finalized and issued in 1993. [3.24]

71. In view of the complexities concerning the working arrangements between the UNDP Resident Representatives and UCDs and the new UNDP policies concerning support costs, programming functions and UNDP field office work, it was agreed between UNDP and UNIDO that a revision of the Memorandum of Understanding 9/ should be further postponed to 1993. [3.26]

72. The UNIDO JPO programme, which was established in 1972, has seen a total of 394 JPOs under contract varying from one to four years, sponsored by 12 donor Governments (see table 3 below). In 1992, 10 Governments cooperated in the programme, with the Government of the Netherlands financing seven JPOs from developing countries in addition to its own nationals. A total of 64 JPOs were on board during 1992; 33 were based in a country with a UCD, 28 were in countries

8/ IDB.9/10, chap. VI, para. 14.

9/ Ibid., para. 15.



**Table 2**  
**Distribution of UCD established posts**  
**(by region and source of funds)**

	Source of funds					Total
	Africa	Arab States *	Asia/Pacific	Europe	Latin America/ Caribbean	
<b>UNDP</b>						
1987	5	1	6	-	7	19
1988	7	2	8	-	7	24
1989	8	2	8	-	7	25
1990	11	2	8	-	8	29
1991	11	2	8*	-	8	29
1992	10	2	8*	-	8	28
<b>Operational budget</b>						
1987	7	-	2	-	2	11
1988	5	-	2	-	2	9
1989	5	-	2	-	2	9
1990	5	-	2	-	2	9
1991	5	-	2	-	2	9
1992	5	1	2	-	2	10
<b>Voluntary contributions</b>						
1987	1	-	1	1	-	3
1988	1	-	1	1	-	3
1989	1	-	1	1	-	3
1990	-	-	-	1	-	1
1991	-	-	-	1	-	1
1992	1	-	-	1	1	3

\* One additional post funded on a part-time basis is not included in the present table.

**Table 3**  
**JPOs financed 1972-1991 and in 1992**

Donor Government	1972-1991	1992
Austria	1	3
Belgium	62	6
Denmark	32	8
Finland	16	7
France	2	0
Germany	76	15
Italy	19	0
Japan	15	2
Netherlands	91	13
Norway	14	5
Sweden	31	3
Switzerland	10	2
<b>TOTAL</b>	<b>369</b>	<b>64*</b>

\* The figure of 64 JPOs for 1992 includes 39 who were on board in 1991. A total of 25 JPOs were recruited in 1992.

covered by a non-resident UCD, and three were in countries which were covered by Headquarters. [3.22; 3.25]

73. Two training meetings were held at Vienna in 1992 for 25 new JPOs and two mid-assignment review meetings were organized to brief 22 JPOs on special programmes of UNIDO. During the course of the year, a further 28 JPOs visited Headquarters for consultations or debriefing at the end of their contracts. [3.22; 3.24]

#### Africa (subprogramme 331)

74. The economic difficulties foreseen for the African region in the medium-term plan and the programme and budgets, 1992-1993 (GC.4/42, para. 3.87) were compounded by a new wave of serious famine and drought that once again exposed the region's weak economic structure and brought about suffering of an unprecedented nature to the continent as a whole and the countries of Eastern and Southern Africa in particular. While short-term emergency relief measures were necessary, it was recognized more than ever before that a long-term solution to those problems lies in the fundamental restructuring of the African economies, with the development of the industrial sector playing a key role, especially through its linkages to the agricultural and other sectors. Industry in many African countries, however, continued to be heavily dependent on imported inputs. Capacity utilization of 30 per cent or even less was a common feature of industry in much of the region.

75. As reported under many other programmes and subprogrammes, the industrialization of sub-Saharan Africa continued to receive high priority in the technical cooperation and other activities of UNIDO for the region, in compliance with the objectives of the Second IDDA and the UNIDO industrial action programme for the least developed countries for the 1990s. Coordination was maintained with the activities of other organizations of the United Nations system as well as with the programmes of bilateral and multilateral organizations and funding agencies. Increased efforts were made towards the mobilization of international technical and financial assistance in support of the industrial revitalization efforts of the region. In that connection, cooperation was intensified with the World Bank, the African Development Bank, African subregional development banks and other development finance institutions. The challenge posed to UNIDO with respect to sub-Saharan Africa was, in particular, to help effectively the countries and organizations in: mobilizing financial resources for industrial development; developing the required industrial skills, both in quality and in quantity; and building up local capacities for the development, acquisition and transfer of technology and the solution of industry-related environmental and energy problems.

76. A critical factor in that challenge was the development of the private sector, which was given increasing priority in African countries and organizations. Therefore, the focus put since 1990 by the Organization on the enhancement of the private sector received greater emphasis in 1992 in the form of support to industrial enterprises, notably small- and medium-scale enterprises, in areas such as: acquisition and transfer of technology; promotion of quality and standardization; rehabilitation, maintenance and spare parts production; restructuring and privatization. The assistance provided by UNIDO also included enhancement of the policy and institutional environment in which industries operate. Thus, priority was also accorded to projects related to strategic management of the industrialization process, human resource development - including integration of women in industrial development - investment promotion and the setting up of industrial free zones.

77. Following the signature by African Heads of State and Government of the Treaty establishing the African Economic Community and the priority given to production in the objectives of the Treaty, industrial co-operation and integration in Africa took on renewed emphasis. Thus, assistance to the main subregional organizations in Africa, notably the Economic Community of West African States (ECOWAS), the Economic Community of Central African States (ECCAS), the Preferential Trade Area for Eastern and Southern African States (PTA), the Central African Customs and Economic Union (UDEAC) and the Indian Ocean Commission, was intensified, focusing on the identification of selected subsectors offering potential for economic cooperation and integration such as agro-industries, agricultural machinery, metallurgical, chemical and pharmaceutical industries. The elaboration of industrial strategies along with appropriate measures to enhance regional cooperation constituted another area of UNIDO assistance to those organizations.

78. Net approvals from all sources of funds amounted to \$26.8 million (1991: \$31.9 million) of which \$2.9 million was from IPF (1991: \$21.2); \$4.0 million from the Regular Programme of Technical Cooperation (RP), including IDDA (1991: \$1.1 million); \$11.0 million from IDF (Industrial Development Fund) (1991: \$3.0 million); \$5.4 million from trust funds (1991: \$3.8 million); and \$3.5 million from other sources (1991: \$2.8 million) [3.91]

79. The sharp decline in approvals under IPF, which followed the trend already noticed in 1991, was due mainly to the postponement of country programmes in Africa for the fifth programming cycle and the progressive introduction of the new UNDP successor arrangements. With the approval of more country programmes in 1992, it was expected that the situation would improve somewhat starting in 1993. UNIDO continued to cooperate with African countries and organizations in the

preparation of integrated industrial sector programmes that also provided inputs, as appropriate, to the formulation of programmes for the fifth UNDP programming cycle. Thus, industrial sector reviews, programming and/or programme formulation missions were sent to the following countries: Gambia, Ghana, Guinea, Senegal, Sierra Leone and Togo. At the request of the national authorities and UNDP, most of those missions focused on the promotion of the private sector. [3.90; 3.92; 3.93]

80. The UNDP TSS-1 programme offered a unique opportunity for inter- and intra-departmental cooperation in providing policy advice to African countries and organizations on a broad range of areas critical to the industrialization of the countries and organizations concerned. It also provided an opportunity for greater co-operation with other organizations of the United Nations system and for the use of national experts. A total of 24 UNIDO projects were included in the TSS-1 work plan approved by UNDP for Africa, amounting to about \$2.0 million. The terms of reference for most of those projects were finalized and some of the studies undertaken and successfully concluded in 1992. The results of the studies lay solid ground for the development and formulation of technical cooperation programmes and projects. The preparation of proposals for 1994-1995 was also initiated. [3.90; 3.92; 3.93]

8i. An industrial technology plan for Nigeria and a human resource development programme for Botswana were completed, while an industrial policy statement providing broad guidelines for an industrial technology plan was prepared for Ghana. Furthermore, human resource development programmes for Ethiopia and Nigeria, a science and technology programme for Zambia and a technology plan/programme for Ethiopia were initiated for completion in 1993. [3.94]

#### Arab Countries (subprogramme 332)

82. The structural, economic and political issues besetting Arab economies before the Gulf crisis, such as chronic dependence on foreign goods and services, indebtedness, low productivity and management efficiency, migration flows, and socio-political instability, were still affecting economic development in 1992. The Gulf war resulted in further deterioration of the economic conditions of the region. Debt registered a significant increase in 1991 and 1992, and multilateral and bilateral aid flows from the Organisation for Economic Cooperation and Development (OECD) and Arab aid funds continued their recent downwards trends, even if some positive signs could be registered from private flows, including direct investment. The post-war efforts were directed towards easing constraints on the industrialization process and fostering new investment and rehabilitation of existing production units, taking into

account the predominance of the oil and energy sector in the region's economy and the comparative advantages of each individual country. The priorities of the Arab countries focused on: economic restructuring to facilitate investment inflows; economic liberalization reforms and efforts to increase economic efficiency; the enhancement of local capabilities through more effective human resource development programmes; and the response to growing concerns for environmental issues and energy conservation. UNIDO adapted its actions and programmes to the prevailing needs generated by the socio-economic environment in the area, while specific activities were undertaken to respond to the distinctive requirements of the least developed Arab countries. [3.104]

83. Net approvals from all sources of funds amounted to \$9.2 million (1991: \$13.5 million) of which \$0.3 million from IPF (1991: \$2.5 million), \$0.4 million from the Regular Programme of Technical Cooperation (1991: \$0.1 million), \$0.6 million from IDF (1991: \$1.8 million), \$7.3 million from trust funds (1991: \$8.4 million), and \$0.6 million from other sources (1991: \$0.7 million). The overall level of project approvals had still suffered from the slow pace of new industry-related activities in the countries caused by the Gulf war, by the persisting political and economic uncertainties in the whole region, as well as by both the delay in the approval and start of the implementation of the UNDP fifth programming cycle and the problems in the application of the new UNDP successor arrangements. Projects approved in 1992 concentrated mainly on the following areas: upgrading of capabilities in management and quality control including energy and environment; regional cooperation and integration; small- and medium-scale industries; industrial policies and strategies including privatization, rehabilitation and industrial export promotion; and transfer and acquisition of high technologies. Cement and chemicals were the key manufacturing sectors. [3.104; 3.105]

84. Guided by General Conference resolution GC.4/Res.5, the Secretariat initiated efforts to elaborate the components of the Special Programme for Industrial Development in the Arab Countries and to undertake various industrial activities aimed at promoting industrial cooperation among the Arab States and meeting the needs of the Arab LDCs. In cooperation with regional organizations, particularly the Arab Industrial Development and Mining Organization (AIDMO), the Economic and Social Commission for Western Asia (ESCWA) and the League of Arab States (LAS), UNIDO convened an inter-agency meeting in February in Vienna in which representatives of Arab States to UNIDO took part. The main outcome of the meeting was the formulation of a plan of action for 1992-1993, under which a number of industrial projects were identified for development and implementation. [3.107]

85. The funding of projects under trust funds proved to be the most effective means to catalyse financial resources in the Arab countries and the expectations for the future in that respect seemed promising in view of the increasing role and interest of the private sector. Nevertheless, the involvement of UNIDO in executing and implementing technical cooperation projects in Arab countries was expected to continue within the fifth UNDP programming cycle. In that context, UNIDO assisted in the elaboration of country programmes through industrial sector reviews and analyses, advisory services and programming missions in a number of Arab countries. [3.103; 3.104; 3.106]

86. Following a mission mounted to carry out consultations with UNDP Jerusalem as regards technical assistance to the Palestinian people, UNIDO approved a "seed" project under IDF to facilitate interaction with UNDP and to support their programme, and a training project for small-scale enterprises under a trust fund from Japan. Both were scheduled to commence implementation in 1993. [3.103; 3.108]

87. The potential for UNIDO involvement in the Arab countries was still underutilized, but in view of the availability of the required financial resources and the recognition by Arab countries of the need to achieve sustainable industrial development, the Organization could play a crucial role in facilitating the development process.

#### Asia and the Pacific (subprogramme 333)

88. Net project approvals from all funding sources amounted to \$21.9 million as compared to \$33.2 million in 1991. IPF approvals were particularly affected by problems arising from the intensified application in the region of the UNDP mandates on programme approach and national execution along with the introduction of the successor arrangements. Mention has to be made also of the close scrutiny given to industry's role in the achievement of the priority objectives set by the UNDP Governing Council for the 1992-1996 programming cycle. The year therefore saw a remarkable slow-down and reduction in IPF approvals - \$5.3 million compared to \$20.6 million in 1991. With the growing experience in the application of the new policies and mandates, there were indications that UNIDO involvement in the implementation of nationally-executed UNDP projects was likely to increase in 1993. The breakthroughs achieved by UNIDO in becoming associated with major programmes dealing with machine tool development in China and leather development in India have led to greater impetus in working with UNDP in the preparation of coherent programme frameworks. A new instrument that could facilitate the preparation of programme frameworks is the TSS-1 facility for which UNDP allocated some \$1.0 million for

24 projects to be implemented by UNIDO in the region in 1992-1993. [3.116; 3.117; 3.118; 3.119]

89. Project approvals under UNIDO-managed resources show that under IDF projects worth \$4.5 million were approved as compared to \$3.5 million in 1991. Those projects were predominantly of a regional character. The intent was to maximize the benefits from scarce resources, allowing as many participants as possible to exchange views and to lay the groundwork for future intercountry cooperation in areas such as industrial statistics, agro-related metalworking industries, environment management, standardization and quality control, and energy conservation. Groundwork was prepared for a major IDF-financed regional undertaking to introduce and apply modern technologies for the treatment of effluents from the tanning industry. [3.117; 3.118]

90. There were seven new projects worth \$0.4 million approved in 1992 (\$0.03 million in 1991) under the SIS programme. Five countries in the region made recourse to SIS in search of solutions to short-term, urgent needs. Projects approved under the Regular Programme of Technical Cooperation included: the preparatory phase for developing a programme of agro-industries in LDCs in the region; skills development for women in the garment-making industry; a workshop on women's participation in industrial policy and decision-making; a meeting on electronic packaging and ergonomic design; and participation of Asian fisheries specialists in an international conference on processing of sea products. [3.117; 3.118]

91. As previously mentioned (para. 87), activities approved under IDF were predominantly regional in character; the same can be said of those approved under the Regular Programme of Technical Cooperation. This was in conformity with the intent of the Special Programme for the Industrial Development of Asia and the Pacific (resolution GC.3/Res.18), which calls for strengthening existing regional programmes and initiating special programmes for LDCs in the region. In connection with the LDC aspect, the second phase of the Special Programme was launched covering the agro-food processing and fisheries industries, in accordance with General Conference resolutions GC.4/Res.9 and GC.4/Res.10 and decision GC.4/Dec.12. The cost of three consultants and the holding of a regional workshop on agro- and food-processing industries in Asia and Pacific least developed countries held at Bangkok, Thailand, in November, was approved under the Regular Programme of Technical Cooperation. The regional project for the promotion and development of agro-related metalworking industries was also followed up by a project approved under a special-purpose contribution to IDF to help LDCs in the region use more fully the existing regional network for agricultural machinery through technology exchange and economic and technical cooperation among developing countries (ECDC/TCDC). [3.120]

92. In sum, the outlook for UNIDO cooperation with countries in the region was one of continuous challenge and adaptation. Programme management called for greater integration of efforts that would take fully into account the fact that the steady economic growth taking place in most countries of the region was largely attributable to sound macroeconomic management and trade policy reforms, based on market-oriented outward-looking policies. An essential element in those efforts is a thorough understanding and pragmatic application of the role that Governments and intergovernmental bodies, like UNIDO, can play to ensure an appropriate environment for industry to grow.

Europe, Mediterranean, Global and Interregional  
(subprogramme 334)

(a) Europe, Mediterranean

93. Net approvals in Europe and the Mediterranean region amounted to \$4.5 million (1991: \$4.9 million), of which \$1.0 million were from IPF resources (1991: \$1.1 million) and \$1.3 million (1991: \$2.3 million) from trust funds. Within the fifth UNDP programming cycle (1992-1996), the country programmes of the former Czechoslovakia, Hungary and Poland, as well as the Regional Programme, were approved by the UNDP Governing Council in May. Country programmes of the other IPF-recipient European countries (Albania, Bulgaria, Malta and Romania) were extended by one year, while for Turkey an extension was approved for two years, to December 1994. Approval of the remaining fifth cycle IPFs was expected for mid-1993, with Yugoslavia's programme being suspended until further notice. [3.131; 3.132; 3.133]

94. The UNDP Governing Council also approved fifth cycle IPFs for 13 of the 15 newly independent states of the former Soviet Union, including the Russian Federation. These IPFs are available for use as "seed" money in the transition of those countries from centrally planned to market economies. Five of those countries (Armenia, Belarus, Lithuania, the Russian Federation and Ukraine) already requested UNIDO assistance in their industrial restructuring. Three UNIDO missions were fielded to Lithuania for policy-level discussions to develop a technical cooperation programme for which 15 requests were already received, while Armenia requested UNIDO assistance to examine seven fields in its industrial sector.

95. Based on an official request a UNIDO mission was sent to Kaliningrad, Russian Federation, to examine the possibility of establishing an economic free zone in the area. A memorandum of understanding was signed in April with the Ministry of Industry of the Russian Federation for cooperation, under trust fund arrangements, in such fields as privatization, conversion

of military into civilian production, the development of small- and medium-scale industries and entrepreneurship development, feasibility studies, rehabilitation of enterprises and industrial training. At UNDP's invitation, UNIDO participated in a mission to Uzbekistan to look into the areas of investment promotion and privatization, while Kyrgyzstan requested emergency assistance following an earthquake. UNIDO was also involved in the United Nations inter-agency task force on the follow-up to the Washington Coordinating Conference on Assistance to the Newly Independent States and provided inputs based on its past and present activities in the former Soviet Union. While at the current stage emergency assistance was receiving priority, UNIDO's involvement in the region was expected to become more important in the short and long term. The eligibility of the newly independent States of Bosnia and Herzegovina, Croatia and Slovenia for technical cooperation programmes was to be considered by the United Nations Governing Council in 1993. In the meantime, UNIDO was involved in emergency assistance to Croatia in constructing wooden houses for displaced persons and refugees, and the processing and distribution of food products, and a request for a review of several sectors of industry was under consideration.

96. An increasing number of requests for technical cooperation was received from both the CIS and the Central and Eastern European (CEE) countries. The assistance sought was mainly in the fields of: industrial management; privatization; small- and medium-scale enterprises and entrepreneurship development; investment promotion; environmental protection and industrial pollution abatement; conversion of defence industries into production of consumable goods; regional industrial development; and quality control. More than 100 project proposals were included in the pipeline management plan for which funding was still to be identified. For this demand-driven programme to sustain itself, an active role is required to mobilize financial resources from potential beneficiary countries. One possibility would be the use of bilateral resources as was the case with the assistance provided by UNIDO to some of the CIS/CEE countries with financing from the Governments of France, Japan and the United Kingdom under trust fund arrangements (see paras. 138-146 below). The resources of multilateral funding institutions such as the European Bank for Reconstruction and Development, the World Bank and the European Community-Poland-Hungary Action for Restructuring of the Economy would also have to be tapped.

(b) Global and Interregional

97. Activities carried out at the global and interregional levels were in line with the medium-term plan priorities. Human resource development, industrial training, identification of investment promotion projects, investment studies, preparation

of bankable projects and their promotion, small and medium enterprises and environmental cooperation. Programmes and concepts were developed for upgrading, transforming and revitalizing technology and environmental institutions in developing countries (e.g. the programme for the establishment of national cleaner production centres in 20 developing countries - see para. 19); for enhancing the effectiveness of industrial research in developing countries (e.g. direct and institutional assistance and establishment of research and development networks); and for disseminating technologies in developing countries.

98. In the field of investment promotion, Japanese contributions for the identification, preparation and promotion of industrial investment projects reached important scales. Projects on industrial cooperation for the promotion of investment projects in developing countries to be undertaken by the Japanese private sector had been extended or renewed several times. Investment projects elaborated relate, for example, to copper fabrication, regional cement plants and high alumina refractories. Interregional training in investment analysis was further strengthened by the organization of two workshops at the Entrepreneurship Development Institute of India, where 50 experts from 21 countries were trained. Several requests were received and were being processed for the establishment of additional investment promotion offices in Europe as well as in the Islamic Republic of Iran and an investment promotion service (IPS) office was established in Greece.

99. While human resource development and group training programmes continued, those organized previously on a regular basis in several Eastern European countries were reduced. 10/ The Joint UNIDO/Czechoslovakia Programme for International Cooperation in the field of Ceramics, Building Material and Non-metallic and Minerals-based Industries continued to meet and new projects were approved. Negotiations were underway with the Russian Federation for the holding of one group training programme and two seminars, one on ecologically clean technologies for automated industrial crop production in artificial climate using indigenous sources of energy and another on interregional awareness and demonstration of titanium powder metallurgy.

100. A proposal was developed for the holding of an expert group meeting at Jakarta, Indonesia, in July 1993, composed of leading scientists and industrialists engaged in hydrocarbon technologies to discuss the scope of beneficial applications of modern biotechnology in microbiological enhancement of oil recovery and bioremediation, and explore the initiation of regional and international training

programmes and cooperation in the application of those technologies. Another proposal was approved for a workshop to be held in Japan on safety in chemical production. The workshop is expected to prepare the ground for the establishment of a safety network among industrialized and developing countries.

101. Approvals by UNDP were substantially reduced in 1992 as compared with previous years. Preliminary discussions were held with UNDP concerning a proposed global project for the development of various vaccines. As expected, no group training programmes could be proposed for UNDP trust funds 11/ because of the political and economic changes in the former Soviet Union. [3.132; 3.133]

102. Net approvals for global and interregional projects amounted to \$39.8 million (1991: \$38.8 million). Of this amount \$11.6 million was from IDB (1991: \$15.7 million), \$27.5 million from trust funds (1991: \$22.6 million), \$1.2 million from the Regular Programme of Technical Cooperation (1991: \$0.5 million) and \$0.5 million from other sources. The number of projects processed in 1992 were 390 compared to 353 in 1991. [3.133]

#### Latin America and the Caribbean (subprogramme 335)

103. The countries of Latin America and the Caribbean continued to adjust their economies with emphasis being placed on external debt reduction, privatization of public sector enterprises and strengthening of subregional cooperation. In 1992, the gross domestic product of the region grew by 2.4 per cent, supported by heavy capital inflows amounting to \$57,000 million, while the trade deficit reached \$6,000 million and the external debt of the public sector increased by \$8,400 million. These developments led to tightening monetary and fiscal policies in the region while political and economic problems were affecting several Latin American countries. The preliminary decision of Peru to leave the Andean Group and Mexico's entry into the North American Free Trade Agreement (NAFTA) might generate a major restructuring of the subregional landscape in the medium term. Excluding Mexico, an expanded Common Market of the South (MERCOSUR) would account for about 80 per cent of regional output. During the year MERCOSUR undertook major studies to upgrade and expand its physical infrastructure - in particular transportation - with an estimated total investment of \$10 billion.

104. During the year, macroeconomic policies focused on the private sector as the main engine of economic development, the liberalization of trade and support for poverty alleviation and other social needs.

10/ IDB.9/10, chap. II, para. 41.

11/ Ibid., para. 42.

Furthermore, improved industrial performance was considered necessary to redress the significant structural problems that resulted from reduced levels of investment in training and plant and equipment, dated industrial organization and the debt constraints of the 1980s. Against this background and at the request of Member States, the UNIDO programme of technical cooperation focused on the industrial recovery of the region, in particular in priority sectors selected within the framework of the UNIDO Regional Cooperation Programme for the Industrial Recovery of Latin America and the Caribbean, the Regional Conference on Industrialization of the Latin American Economic System (SELA) and the United Nations Conference on Environment and Development (UNCED).

105. UNDP programmes concentrated on the streamlining of public administration and social and environmental matters, while low priority was given to technology-related projects. Given the limited resources available under IPF, UNDP's limited support to the manufacturing sector and the policy difficulties faced in completing UNDP/UNIDO co-financing schemes, special efforts were required to identify and promote alternative funding sources for the benefit of the countries of the region. Efforts were also made to identify services that UNIDO could provide to nationally executed projects. The existing pipeline projects, in particular co-financed projects, were reconsidered in the light of the above factors. New approaches had to be developed for subregional and regional projects - for instance in the case of investment promotion by linking technical assistance with actual investment and in the case of agro-industries by basing technical cooperation on inductive methods, the integrated programme approach and the field experience gained in ongoing regional projects. [3.143; 3.146]

106. Taking the above considerations into account, special attention was given to key areas such as: investment promotion (Argentina, Bolivia, Ecuador, Uruguay, Venezuela, Andean Group, Caribbean), industrial restructuring/diagnosis (Colombia, Costa Rica, Honduras, Paraguay, Central America), agro-industries (Argentina, Belize, Caribbean, Central America), cleaner production technologies (Argentina, Brazil, Chile, regional Latin America), medicinal and aromatic plants (Costa Rica, Guatemala, regional Latin America), handicrafts (Bolivia, Peru, Central America), leather and footwear (Brazil, Ecuador, Central America), co-operation with the United Nations Fund for Drug Abuse Control (Brazil, Ecuador, Jamaica), textiles and garments (Brazil), and regional programmes on biotechnology, software and micro-electronics, as well as the wood industry. Special efforts were also made to support the smaller subregions: the Caribbean (investment promotion, fisheries, human resource development) and Central America (handicrafts, industrial diagnosis, medicinal plants, food industries, footwear).

Under the aegis of the Memorandum of Understanding between Brazil and UNIDO (1988), several projects were negotiated and approved for financing under trust fund agreements and other sources, covering: computer-aided design for textile schools, application of modern technologies and management systems to improve the textile and apparel industry, assistance to the regional centre of technology for the leather and footwear industry in Campina Grande, establishment of a new textile and garment technology centre, and the modernization of the marble and granite industry of Espirito Santo State. [3.144]

107. Net approvals from all sources of funds amounted to \$12.0 million (1991: \$8.1 million) of which \$0.1 million was from IPF (1991: \$2.1 million), \$0.6 million from the Regular Programme of Technical Cooperation (1991: \$0.6 million), \$3.7 million from IDF (1991: \$3.5 million), \$1.8 million from trust funds (1991: \$1.8 million), \$4.0 million from the United Nations International Drug Control Programme (UNDCP) and \$1.8 million from other sources (1991: \$0.1 million). [3.145]

108. The Regional Consultation on the Restructuring of the Capital Goods Industry in Latin America and the Caribbean (see chap. IV, para. 40) was held in Caracas, Venezuela, from 9 to 12 November in cooperation with SELA within the framework of the UNIDO/SELA Third Inter-Agency Cooperation Programme. This Consultation and a training project on computer-aided design/computer-aided manufacturing (CAD/CAM) for the capital goods industry were organized and coordinated with the ongoing regional programme for industrial modernization of the capital goods sector in Latin America, in order to enable feedback and synergies between those activities.

109. A number of activities took place within the framework of the Regional Cooperation Programme for the Industrial Recovery of Latin America and the Caribbean. Under the industrial subcontracting programme, exchanges covering products and services were set up in 13 countries. <sup>12/</sup> Following the reduced financing and scaling-down of the programme for the automation of the capital goods industry, <sup>13/</sup> an in-depth survey of end beneficiaries and further discussions with both recipient and donor countries resulted in the recasting of this programme under the new name of Regional Programme for Industrial Modernization of the Capital Goods Sector in Latin America. The investment promotion programme concentrated on the formulation of phase II of the joint UNIDO/Andean Development Corporation (ADC) regional project, which was informally presented by ADC to donor countries in

<sup>12/</sup> For more details, see IDB.10/18, para. 5.

<sup>13/</sup> Ibid., para. 4.

Table 4  
Significant performance indicators: Area Programmes  
 (Programme 330)

	Planned 1992-1993	Achieved 1992
<u>Africa (subprogramme 331)</u>		
Programme reviews [3.90]	86	43
Identification and management of project ideas and concepts [3.91]	900	248
Further development and formulation of projects for appraisal and approval [3.92]	350	105
Formulation and promotion of integrated programmes in selected industrial branches [3.93]	6	3
Elaboration of subregional industrial master plans [3.94]	3	1
Formulation of industrial technology plans and manpower development programmes [3.94]	8	6
<u>Arab Countries (subprogramme 332)</u>		
Programme reviews [3.103]	38	19
Identification and management of project ideas and concepts [3.104]	400	85
Further development and formulation of projects for appraisal and approval [3.105]	140	30
Reports on Special Programme for Industrial Development in the Arab Countries [3.107]	a/	1
Reports on technical assistance to Palestinian people [3.108]	a/	1
<u>Asia and the Pacific (subprogramme 333)</u>		
Programme reviews [3.116]	72	36
Identification and management of project ideas and concepts [3.117]	800	198
Further development and formulation of projects for appraisal and approval [3.118]	300	91
Reports on Special Programme for Industrial Development in Asia and the Pacific [3.120]	a/	1
<u>Europe, Mediterranean, Global and Interregional (subprogramme 334)</u>		
Programme reviews [3.131]	20	10
Identification and management of project ideas and concepts [3.132]	500	253
Europe and the Mediterranean	(150)	(141)
Global and Interregional	(350)	(112)
Further development and formulation of projects for appraisal and approval [3.133]	330	117



	Planned 1992-1993	Achieved 1992
<b>Latin America and the Caribbean (subprogramme 335)</b>		
Programme reviews [3.143]	84	42
Identification and management of project ideas and concepts [3.144]	400	132
Further development and formulation of projects for appraisal and approval [3.145]	130	64
Development of specific regional cooperation programmes/projects for Regional Cooperation Programme for the Industrial Recovery of Latin America and the Caribbean [3.147]	10	-
<b>Office of the Director (subprogramme 337)</b>		
In-depth study on industrialization of the least developed countries [3.174]	1	-
Workshops/mini-shows focusing on least developed countries [3.174]	a/	3

a/ Amount not specified in programme and budgets, 1992-1993.

October, and aims at linking technical cooperation (identified portfolio of 84 projects) with effective investment (based on the mobilization and use of credit lines granted to ADC, amounting to about \$300 million). The experience gained will be communicated to the other subregions in the future. The agro-industries programme was reformulated <sup>14/</sup> and preparatory assistance based on a new methodology was completed in November for two projects: fruits and vegetables for Central America and fisheries for the Caribbean. Work on the biotechnology and software and microelectronics programmes concentrated on securing UNDP regional funding support <sup>15/</sup> to maintain the regional networks created by the respective phase I projects, and to follow up on production-oriented activities. A biotechnology project was approved in September, and an extension was secured until December of the microelectronics programme to complete negotiations for phase II. Work on the remaining programmes (new materials, training) and the new programmes (small- and medium-scale industries) was postponed to 1993. [3.147]

#### C. INDUSTRIAL POLICY AND PERSPECTIVES (Programme 340)

110. Under the programme, the Industrial Policy and Perspectives Division carried out

<sup>14/</sup> Ibid., para. 9.

<sup>15/</sup> Ibid., para. 8.

a series of economic studies, industrial data services and programming-related research reports. These activities were partly geared directly to policy makers as specific advisory and research services and partly conceived as analytical bases for technical cooperation programming. The studies covered work at the global, regional, country as well as sectoral levels. The work of the programme was carried out by the subprogrammes mentioned below under the guidance and supervision of the Office of the Director (subprogramme 344). [3.225]

#### Global Issues and Policy Analysis (subprogramme 341)

111. The work of the Global Issues and Policy Analysis Branch continued to focus on assessing the rapidly changing and uncertain world industrial economy, with the main research and policy findings incorporated in the Industry and Development: Global Report 1992/93 (ID/382). The Report, which has received considerable attention since its first appearance in 1985, was made available to Member States immediately prior to the tenth session of the Industrial Development Board. Chapter I presents UNIDO growth projections for gross domestic product and manufacturing value added for all regions in 1992 and 1993. The findings show that, for the first time in this half century, global output declined because of the recession and the collapse of the socialist economies; although world growth is expected to become more expansive in 1993, the sluggishness of recovery in developed countries has serious implications for the world as a whole. A

detailed analysis of the industrial performance of major economies around the world is given in chapter II. In this context, an analysis is presented of interregional differences in labour productivity that provides the basis for policy signals on investment in human capital. The Report contains in chapter III a structural analysis of eight Asian economies that demonstrates the symbiotic relationships between manufacturing and agriculture and manufacturing and services; the fruits of rapid industrialization are reflected as much in extra employment - in other sectors of the economy - as they are in manufacturing. Chapter IV reviews the recent privatization experiments in some 50 countries. Although privatization has been seen as a panacea by many countries, the opportunities presented by this policy, the pressures that led to its adoption, and the serious obstacles that continue to impede rapid privatization are found to be not at all similar. Chapter V provides surveys and reviews of: three primary processing industries - aluminium, sugar-processing, and paper and paper board; five intermediate goods industries - agrochemicals, investment casting, power metallurgy, synthetic fabrics, and iron and steel; three capital goods industries - machine tools, food-processing machinery and mineral-processing equipment; and one consumer goods industry - footwear. The statistical annex to the Report gives the latest available information on output, employment and profit in each of the 28 industrial branches in 137 countries. [3.186; 3.187]

112. Policy-oriented documents were prepared for the ninth and tenth sessions of the Industrial Development Board: a report on the proposed study on the structure of world industrialization from a long-term perspective (IDB.9/5), as a contribution to the overall assessment of and requirements for industrial development in developing countries; a report on external debt and industrial development and on mobilization of financial resources for industrial development (IDB.10/20); and a report on the evaluation of the objectives and functions of UNIDO in view of recent changes and developments in the world (IDB.10/21). Furthermore, in response to United Nations General Assembly resolutions 45/196 of December 1990 and 46/146 of December 1991, both on industrial development cooperation and the diversification and modernization of productive activities in developing countries, a progress report was prepared on that issue for submission in March 1992 to the Organizational Committee of the Administrative Committee on Coordination, and a note on the same subject (A/47/535) was submitted to the forty-seventh session of the General Assembly. [3.186; 3.187]

113. Two issues of the journal Industry and Development were prepared. Issue No. 30 appeared in January 1992 and contained articles on: key branches of agro-industries in sub-Saharan Africa; measurement and policy implications of effective

protection of industry; industrial efficiency and policy reform in the Central African Customs and Economic Union; inward- and outward-looking development in Indonesia; and economic integration in developing countries and South-South trade. Issue No. 31 appeared in July 1992 and contained articles on computers for industrial management in Africa; industrial development in the United Arab Emirates; promotion of small-scale industry in India; and labour absorption in industry in Sri Lanka. The two further journals forecast for 1992 could not be issued for lack of funds. [3.186; 3.187]

#### Regional and Country Studies (subprogramme 342)

114. In pursuance of both external and internal requests, the Regional and Country Studies Branch carried out a series of country analyses. These were primarily carried out by regular staff although some support was secured through specialized expertise. For that purpose, mainly extra-budgetary resources were used.

115. In respect of Africa, two more general studies were carried out; one dealt with the global trends in industrial automation and the implications for Africa, and the other focused on the least developed countries, covering issues that are of particular relevance to a large number of African countries. Both studies outlined possible areas of regional support through international assistance. [3.201 (i)]

116. At the level of individual African countries, the studies undertaken concerned industrial sector analyses and programming work (e.g. Ghana), surveys on needs for rehabilitation of industry (e.g. Gabon) and the preparation of Industrial Development Reviews. In the latter series the documents on Swaziland and Uganda were issued. Due attention was given to the development of technical cooperation concepts emerging from the studies, in particular those concerning industrial rehabilitation and restructuring policies. Work was started on the 1992-1993 activities for technical support services at the programme level (TSS-1) with substantive inputs provided by staff in the fields of policy (Swaziland), human resource development (Botswana), integration of women (Togo), private sector development (Comoros) and industrial rehabilitation (Ethiopia). In this context, a study on prospective industrial development was also initiated in southern Africa. [3.197 (i), (ii); 3.199]

117. In the Arab region, economic analyses covered, *inter alia*, prospects of industrial cooperation between Egypt and Saudi Arabia. The increasing importance of developing industry-related services in North African countries was highlighted in a study under preparation for issuance in 1993. Work was also initiated on TSS-1 projects dealing with human resource development (Algeria,

**Table 5**  
**Significant performance indicators: Industrial**  
**Policy and Perspectives**  
**(Programme 340)**

Activities	Planned 1992-1993	Achieved 1992 a/
<b><u>Global Issues and Policy Analysis (341)</u></b>		
Global Report [3.186]	2	1
Annual reports on industrial restructuring [3.186]	2	1
Special studies on industrial policies and strategies	b/	3 c/
Analytical reports to assist in process of policy formulation [3.186]	b/	5
Journal <u>Industry and Development</u> [3.186]	8	2
Meetings to assess economic and industrial prospects [3.188, annex H]	2	1
Meetings to assess current perspectives of industrial development in developed and developing countries [3.188, annex H]	2	-
Preparatory meeting, International Committee for the Tenth International Conference on Input-Output Techniques [3.188]	1	-
<b><u>Regional and Country Studies (342)</u></b>		
Industrial development reviews [3.197 (i)]	16 d/	6
Country technical assistance framework studies [3.197 (ii)]	6	2
Analyses of industrial development structures and trends in selected subregions and regions [3.197 (iii)]	3	4
Support services under TSS-1 [3.198]	b/	3
Rehabilitation studies in manufacturing industry in Africa [3.199]	4 g/	1
Project profiles in rehabilitation studies [3.200]	20 g/	1
Regional meeting to present surveys and project profiles [3.200]	1 g/	-
Consolidated essay to present overview of industrial rehabilitation issue [3.200]	1 g/	-
Analytical studies on specific policy issues [3.201 (i)]	6	14
Policy advisory studies [3.201 (ii)]	4	2
Country analysis on human resource development [3.201]	1 g/	-
Country analyses on current and emerging skill requirements [3.201]	2 g/	-
Analysis of skill requirements [3.201]	3	2

Activities	Planned 1992-1993	Achieved 1992 a/
<u>Industrial Statistics and Sectoral Surveys (343)</u>		
Copies of UNIDO statistical database sold or exchanged [3.212]	<u>b/</u>	84
Handbook of Industrial Statistics 1992 [3.212]	1	1
African Industry in Figures [3.212]	1	-
Inventory of UNIDO database [3.212]	<u>b/</u>	1
Sectoral surveys [3.213]	2	2
Manual on statistical process control/continuous improvement in manufacturing [3.214]	1	-
Country-level sectoral surveys [3.214]	<u>b/</u>	-
Expert group meeting on world industrial census [annex H]	1	-
Meeting on industrial statistics in ASEAN countries	<u>f/</u>	1

a/ Includes studies completed in 1992 for issuance in 1993.

b/ Amount not specified in the programme and budgets, 1992-1993.

c/ Published in the Global Report.

d/ May not be fully implemented owing to a revised, more comprehensive format.

e/ Full implementation unlikely owing to lack of funds.

f/ Additional output.

Saudi Arabia and Yemen) and the establishment of an information network in support of subregional cooperation (Maghreb). Findings of research work, which included emerging trends in other regions, were presented at workshops and conferences. [3.196; 3.201]

118. In Asia and the Pacific, research and advisory work was provided to Cambodia as a basis for the envisaged reconstruction programme and to China in the field of foreign investment and related issues. Work on Industrial Development Reviews continued with documents issued on Mongolia and Thailand. The TSS-1 programme in the countries of the region was initiated with staff services provided to Thailand (industrial pollution control) and Fiji (tariff restructuring). In the framework of UNIDO-Economic and Social Commission for Asia and the Pacific (ESCAP) cooperation, two studies on the subjects of industrial financing and private sector development were prepared and presented to the ESCAP meetings of Ministers and senior officials held at Teheran, Islamic Republic of Iran, in June. [3.197 (i), (ii); 3.198]

119. In the Latin American and Caribbean region, staff activities (supported by specialists financed from extrabudgetary resources) included diagnoses of and recommended measures for industrial modernization in Central America, advisory services on industrial policy in Brazil and joint work with the Inter-American Development Bank regarding the socio-economic report for Brazil. Staff of the Branch also participated in an International Fund for Agricultural Development (IFAD) mission on rural development in Mexico and in an Inter-American Development Bank/Economic Commission for Latin America and the Caribbean (ECLAC) workshop on the initiative for the Americas. Assistance was continued to Jamaica in the field of industrial productivity and to Antigua and Barbuda and Grenada in conducting industry sector studies. TSS-1 activities were initiated regarding an analysis of structural adjustment needs in the MERCOSUR countries (Argentina, Brazil, Paraguay and Uruguay). [3.196; 3.201]

120. In the case of Europe, analyses were carried out and an expert group meeting was

held in Vienna in March on the implications of the single European market for industrialization in developing countries. The report of the meeting, an analysis of the main implications and six sectoral studies were issued. A pilot study on the importance of industrial services in a European country was published as a basis for further work in developing countries. Concerning Central and Eastern Europe, staff were involved in various policy advisory and programming-related missions. In this framework, the workshop on industrial policies in the economies in transition was held jointly with the Economic Commission for Europe at Budapest, Hungary, in October and missions were undertaken to the Baltic States and the Russian Federation. Two studies were issued on: "Foreign direct investment in Central and Eastern Europe" (PPD.210) and "Towards regional development in the Central and Eastern European countries" (PPD.217). The Branch was also actively involved in conceiving UNIDO technical cooperation projects in the region and in the preparation of Industrial Development Reviews; the Review on Czechoslovakia was finalized and issued by a commercial publisher. [3.197 (i), (ii), (iii); 3.201 (i)]

#### Industrial Statistics and Sectoral Surveys (subprogramme 343)

121. Work under this heading continued in the areas of industrial statistics, sectoral surveys and technical cooperation. The database on industrial statistics was maintained, updated and supplemented with more detailed statistics. Special emphasis was placed on those industrial sectors experiencing the most rapid change, both in developed and in developing countries, such as fine chemicals and high-technology industries. The "Handbook of Industrial Statistics 1992" was scheduled to be issued as a sales publication in early 1993. During the year a total of 84 copies of the UNIDO database were sold and/or exchanged with international organizations, commercial firms and research institutes. [3.211; 3.212]

122. Work continued on the sectoral survey dealing with the leather industry. The sectoral survey on non-ferrous metals industries was completed and published by a commercial publisher in early 1992. The sectoral survey on fine chemicals was also completed and commercially published at the beginning of 1992. 16/ [3.211; 3.213]

123. As regards technical cooperation activities in data collection and computer systems for industrial statistics as well as on statistical process control - an important aspect of manufacturing efficiency - nine projects were ongoing and

a number of further projects were prepared for implementation in 1993. A meeting on industrial statistics in ASEAN countries was held in Vienna in March/April. Activities in support of programme and project development for technical cooperation continued to increase, particularly in connection with NISP - the National Industrial Statistics Programme - a software programme developed by UNIDO. [3.211; 3.214]

#### **D. INDUSTRIAL COOPERATION AND FUNDS MOBILIZATION** (Programme 350)

124. The Industrial Cooperation and Funds Mobilization Division, which is responsible for this programme, continued its endeavours to find new ways of increasing the international flow of finance required for restructuring and revitalizing industry in developing countries. In order to generate a higher level of funds, especially at a time when resources traditionally available to the Organization under UNDP were diminishing, the Division undertook a vigorous effort to obtain additional resources from donor Governments, non-governmental organizations, financial institutions, industrial associations and public and private enterprises through enhancing the awareness of the Organization's abilities and increasing the confidence of the donors. This effort resulted in increases in trust funds and self-financing arrangements and in raising the pledging and approval level for the Industrial Development Fund (IDF). The Division participated actively in the finalization of the Director-General's bulletins DG/B.18/Rev.1 on model agreements and related guidelines for projects financed from UNIDO-administered funds, DG/B.41/Rev.1 on management of UNIDO-administered funds for technical cooperation and establishment of the Programme and Project Review Committee, and DG/B.73/Rev.1 on administrative instructions for the development, appraisal, approval and implementation of special trust fund projects, which were aimed at smoothing out administrative problems, ensuring effective in-house coordination, bringing about greater transparency and enhancing the quality of programmes and projects. Under the guidance of the Office of the Director (subprogramme 354) regular informative and consultative briefings and review meetings were held with IDF donor Governments at UNIDO Headquarters. Similarly visits to UNIDO Headquarters were organized for business delegations from Australia, Canada, Finland, Japan, the United Kingdom of Great Britain and Northern Ireland, the United States of America and the countries of the Commonwealth of Independent States (CIS). Many other entrepreneurs from various developing countries also interacted with the Division, opening up possibilities for more extensive industrial cooperation through UNIDO services. Innovative projects utilizing World Bank credit lines were undertaken and business and industrial

16/ IDB.9/10, chap. II, para. 12.

cooperation was promoted between enterprises from developing countries. The Division collaborated closely with the Industrial Investment Division in the successful organization of investment promotion meetings at Xian for North-West China and in Vienna for CIS countries (see chap. IV, paras. 13 and 22). [3.285; 3.286]

125. The programme is composed of two main subprogrammes: Industrial Development Fund Mobilization and Funds Management (subprogramme 353) and Industrial Cooperation and Management Services (subprogramme 351). With the changes introduced in the Secretariat in July, the responsibilities for subprogramme 351 were assigned to two organizational units: the Industrial Cooperation and Management Services Branch and the Industrial Enterprises and Non-governmental Organizations Section. Furthermore, subprogramme 352, originally in this programme, was transferred to programme 320 (see paras. 12 and 30-37 above). The reporting below is based on those organizational changes.

Industrial Development Fund Mobilization and Funds Management

(subprogramme 353) [previously Project Review Committee Secretariat and Funds Administration]

126. Under this subprogramme, the Industrial Development Fund Mobilization and Funds Management Section was responsible for mobilizing, coordinating and managing contributions to IDF. The Section also managed the Special Industrial Services (SIS) programme and the Regular Programme of Technical Cooperation. In recognition of the increased importance of UNIDO-administered funds, and the increasing reliance of UNIDO on them, the Director-General established at the end of the year the new Programme and Project Review Committee (PPRC). This inter-departmental body is composed of senior staff at the Director level and is chaired by the Deputy Director-General of the Department for Programme and Project Development. Its major objective is to ensure a clear, coherent and consistent policy in the programming and management of UNIDO-administered funds, taking into account relevant decisions by the UNIDO governing bodies. The PPRC is to focus its deliberations on policy issues, the promotion of improved quality and the application of the programme approach, as well as to ensure internal coordination and promote teamwork. The Secretariat of the PPRC is provided by the subprogramme. [3.273]

(a) Special Industrial Services programme

127. Details of the funds available under the Special Industrial Services programme and the geographical distribution of approvals are provided in chapter VIII, paragraph 18. The results of the evaluation of the SIS programme, which had been carried

out at the end of 1991, 17/ were circulated and discussed within the Organization in early 1992. Based on those results, UNIDO prepared a proposal for a new orientation of the programme, which was sent to UNDP in June 1992. The proposal foresees the concentration of SIS projects in the following areas: (a) services related to the preparation and implementation of investment projects in industry; (b) services related to manufacturing processes aimed at solving problems at the production level, e.g. quality improvement, environment, energy and selection and acquisition of new technologies; and (c) services related to the provision of advice to economies in transition. The services would continue to focus on problem identification, problem solving and policy advice. Suggestions to streamline procedures were also made in accordance with the recommendations of the evaluation. Since the existing guidelines were considered to be flexible enough to accommodate those suggestions, it was proposed to UNDP to continue activities in the framework of the existing guidelines, although these should be re-examined prior to the commencement of the new SIS cycle in 1997.

(h) Regular Programme of Technical Cooperation

128. In view of the limited size of the Regular Programme of Technical Cooperation, the programme was used as a complement to the other UNIDO-administered sources of funds to finance technical cooperation projects in support of the medium-term plan priorities, within the various components of the programme (chap. VIII, paras. 2-4 and 29). Thus, to achieve greater impact, the LDC component was programmed together with the umbrella contribution of the Government of Italy for the industrialization programme for LDCs. For example, a project on the promotion of traditional wood industry in the least developed countries of Western and Central Africa covered the preparatory phase of a programme to promote and upgrade the traditional wood-working industry in selected LDCs in Central and West Africa. The main phase of the programme would be financed under the Italian contribution. Likewise, a regional project approved for the development of agro-industries in LDCs of Asia and the Pacific would prepare and elaborate a plan of activities to be carried out under the Special Programme for the Industrial Development of Asia and the Pacific in compliance with General Conference resolution GC.3/Res.18 and decision GC.4/Dec.12. Once complete, this plan is expected to enable the Organization to mobilize various sources of funds to finance it. Another example of complementary programming is a project on the

17/ IDB.9/10, chap. V, para. 15; chap. VIII, para. 6.

technical-economic aspect of the application of genetic engineering to the agro-industrial sector in Latin America, which was used to start activities and prepare the ground for a regional programme for Latin America in biotechnology. A workshop on objectives-oriented project planning, held at Dhaka, Bangladesh, in October, also contributed to furthering the Organization's efforts to enhance project quality. Furthermore, the Regular Programme enabled UNIDO to add flexibility to the utilization of contributions in non-convertible currencies and thus carry out a wide range of training programmes with participants from many developing countries, including a large proportion of LDCs.

#### (c) Industrial Development Fund

129. Activities concerning IDF concentrated on implementing General Conference decisions GC.4/Dec.11 and GC.4/Dec.21, in particular as they relate to the proposals contained in document GC.4/28. The nature of those activities is described under (i) to (iv) below, while information on the level and components of IDF during the year is provided in chapter VIII, paragraphs 20 to 26.

##### (i) Project and programme quality aspects

130. The quality criteria defined in the annex to document GC.4/28 were adopted by the General Conference in decision GC.4/Dec.11. IDF has been recognized by Member States as a mechanism that is well suited to enhancing quality in UNIDO's technical cooperation activities. In order to enhance the quality of project design, thorough preparatory activities have to be undertaken and close cooperation with the target beneficiaries should be ensured. Hence, the role of the general-purpose convertible segment of IDF for financing these preparatory activities becomes crucial. Many donor countries, including Austria, India and Italy, have continued to contribute to this segment, while Germany has provided an umbrella contribution for preparatory assistance activities. As a follow-up to General Conference decision GC.4/Dec.11 and Board decision IDB.9/Dec.7 the objective-oriented project planning methodology used by many major donors to IDF was tested in some of the IDF-sponsored preparatory assistance projects. Objective-oriented project planning is characterized by its participatory, teamwork approach, i.e. the full involvement of counterparts and target beneficiaries in the recipient countries in project design, formulation and implementation. The methodology therefore ensures that the projects are client-oriented, catering to their specific needs, and is thus instrumental in ensuring project quality in terms of relevance to the needs of the recipient countries. In support of UNIDO efforts to further adapt, develop and upgrade appropriate methodological and analytical tools for the preparation and implementation of technical cooperation projects, the Government of Italy pledged a "token" contribution for the improvement of

project quality. More details on UNIDO activities relating to the improvement of project quality are provided under sub-programme 322 in paragraphs 3 to 9 above. [3.276]

131. Project and programme evaluation received special attention under IDF as an important management tool for enhancing project quality. The results of mid-term evaluations were used to take corrective action to improve project implementation and the recommendations of terminal evaluations were applied in the development of second-phase projects. With the support of the Government of Germany, four ex-post evaluations were financed from IDF. The results of those evaluations will be utilized both in the development and appraisal of future projects of a similar type and as a tool for revealing pertinent lessons from past experience, also on overall policy issues such as assistance to the private sector. Other evaluations carried out through IDF included an in-depth evaluation of the UNIDO human resource development programme, also with financing from Germany, and an evaluation with financing from the United Kingdom of a series of group training programmes that had been implemented under the United Kingdom contribution to IDF. The results of the evaluations are expected to have a major policy impact on the entire UNIDO human resource development programme, which also proves the relevance that IDF can have as a mechanism to assist the Organization in improving the quality of its activities from a programmatic perspective. [3.276]

##### (ii) Development of large-scale projects and programmes

132. Many of the efforts of the Secretariat were concentrated on promoting selected large-scale programmes being financed or proposed for financing by multi-donor funding arrangements, as illustrated by the following examples. Efforts began to find funding for a programme of assistance in pollution control in the tanning industry in South-East Asia consisting of an umbrella project with regional coverage and a package of eight related country projects in the amount of \$14.7 million. As the extent of pollution in the region emanating from tanning activities is the cause of serious concern, the programme aims at assisting in the introduction of low waste, clean technology in all phases of leather processing. Assistance in promoting appropriate legislation, enhancing monitoring facilities and providing information and documentation are also envisaged in the programme. An ongoing regional programme for industrial automation of the capital goods sector in Latin America was given a new orientation (see para. 109 above). The programme, which concentrates on the modernization of the capital goods sector, will be divided into three inter-related subprogrammes on entrepreneurial advice, training and strengthening of institutions; promotional efforts continued in order to secure additional contributions based on the new approach. A programme for

a regional Africa leather and footwear industry scheme, originally recommended by an in-depth evaluation mission as a follow-up to the currently operational large-scale regional programme on hides and skins, leather and leather products improvement, was formulated, taking into consideration the recommendations made by several meetings and workshops on the subject. The programme is based on an integrated approach that targets the entire industrial cycle - from hides and skins to leather products - in order to address systematically the needs of the participating countries for specialized technical cooperation, capacity building and the promotion of private sector participation in the development process.

133. The experience acquired in the promotion of programmes showed that the limited financial resources available did not easily allow for full funding of programmes. While the Secretariat continued its efforts to diversify funding sources, it was hoped that major traditional donors would reconsider their pledging pattern to IDF in light of the more demanding substantive and financial requirements of the programme approach. [3.275]

(iii) Mobilization of financial resources for developing countries

134. The Industrial Development Fund, being limited in size, should be used as a means to mobilize other multilateral and bilateral sources, be it grant aid, investment resources or loans. Thus many IDF projects focus on activities that may have a multiplier effect. This role of the UNIDO-administered funds as "seed" money and their links to other resources was specifically addressed in document GC.4/28. The four IDF programming lines for the biennium 1992-1993 elaborated in that document reflect different modalities of promoting the mobilization of additional financial resources as follows: promotion of "up-front" activities for technical cooperation to serve as a basis for the development of projects and programmes; pilot projects for the transfer and appropriate application of new and advanced technologies; comprehensive programmes of technical cooperation; and promotion of activities to increase the flow of resources to productive investment projects.

135. A number of projects carried out in 1992 may be illustrative of the use of IDF as an instrument to mobilize investment flows. In the Latin American region, IDF supported projects to strengthen a number of national institutions and to provide training in order to develop the capacities of existing or new investment promotion offices to identify and formulate bankable investment projects. In that context, comprehensive direct support was given to the development of the private sector. Through the general-purpose convertible segment of IDF, a preparatory assistance project was financed in the Andean region to lay the groundwork for a subregional programme in investment promotion for special-purpose

donor financing. This project received an additional contribution from the Andean Development Corporation, which would probably continue its assistance in the second phase of the programme. Similar results were expected in other subregions of Latin America. [3.276]

(iv) Implementation of the medium-term plan priorities

136. The implementation of the medium-term plan priorities is the guiding principle for the programming of IDF. Through the mechanism of an informal consultative group consisting of the major IDF donors, special emphasis has been placed on the need to promote contributions to the medium-term plan programme frameworks (see chap. I, para. 19), so as to permit a more flexible use of special-purpose contributions. In 1992, some donors had already responded favourably and others were expected to follow suit. Thus, Norway provided two contributions, one for subprogrammes I and II of the UNIDO environment programme (i.e. enhancing UNIDO's capacities in rendering ecologically sustainable industrial development-related assistance; and integrating environmental considerations in developing countries' industrial development strategies and policies) and one for the promotion of women in industrial development; approval authority for individual projects and programmes under these two themes was delegated to UNIDO. The 1992 contribution by Norway to the environment programme, together with the 1990 contributions by Norway and Sweden for the same purpose, was used to initiate UNIDO activities to promote technologies for the replacement of chlorofluorocarbons (CFCs). This preparatory work has assisted the Organization in its successful efforts to become the fourth implementing agency of the Montreal Protocol on Substances that Deplete the Ozone Layer, with the expected allocation of up to \$4.5 million to IDF for the preparatory work required to develop projects and programmes to reduce the use of CFCs in developing countries - another example of the role of IDF as "seed" money and its potential to mobilize financial resources. Under Norway's contribution for the environment, projects have also been approved in the areas of biotechnology and environmental information, and cooperation has been fostered with UNEP and the World Bank.

137. Another example of this type of contribution is for a pilot project for the promotion of women in industrial development, which was approved by the Government of the Netherlands. This umbrella project finances the participation of national "women-in-industry" experts in both preparatory assistance missions and country programming. The objective is to involve women from the identification and project development phase, in order to ensure that project concepts and proposals for technical cooperation take the needs of women adequately into account. The project proposals that will be identified therefrom will also belong to



Table 6

## Significant performance indicators:

Industrial Development Fund Mobilization and Funds Management

(Subprogramme 353)

	Achieved 1992 a/
Preparation of IDF programmes and plans for PBC and IDB	1
Project proposals reviewed and assessed for financing from UNIDO-administered funds	42 <sup>a</sup>
Project Review Committee and related meetings	45
Projects submitted and approved for financing by special-purpose donors	81
Requests for project budget revisions reviewed and processed	414
Cooperation agreements reviewed	5
Meetings of joint committees	3
Meetings of informal consultative group of major IDF donors	2

a/ Planned amount not specified in the programme and budgets, 1992-1993 (GC.4/42).

priority areas for the integration of women, such as small-scale industries, agro-industries, appropriate technologies, development of human resources and industrial planning. [3.273; 3.275]

Industrial Cooperation and Management Services  
(subprogramme 351)

138. There was growing demand from developing countries for UNIDO services to provide direct support to industrial plants and to assist in various stages of industrial investment project planning and implementation. These services and activities, which linked traditional technical cooperation to industrial investment and which were financed through trust funds and self-financing arrangements, expanded into new industrial sectors and a larger number of developing countries. The activities fall into the same eight major project types as in the previous year; 18/ some notable examples are given below, while information on the value of projects approved and implemented during the year is provided in chapter VIII, paragraphs 27 to 28. [3.239; 3.242; 3.244; 3.245]

139. Plant performance improvement: Projects of this type under self-financing arrangements that were approved and ongoing in 1992

included cement, steel and plastics factories in Egypt, the Libyan Arab Jamahiriya and Nigeria. Under trust funds provided for Hungary by the Government of the United Kingdom, assistance was extended to an engineering company on the introduction of advanced computer-aided design techniques, to a foundry on the introduction of computerized modelling techniques for aluminium castings and to a number of pharmaceutical plants for the introduction of good manufacturing practices and quality assurance, as well as for engineering and manufacture of necessary equipment. In Poland, also with United Kingdom trust funds, assistance was provided to modernize the packaging of pharmaceutical and medical supplies and to upgrade the agricultural machinery industry. In addition, pilot restructuring projects were carried out on nine large Polish state-owned enterprises in sectors such as: electrical and electronic equipment, computer peripherals, construction site cranes and metal frames for railway carriages, industrial textiles and decorative fabrics, television sets, video recorders, trucks and transport equipment, foundry and enamel ware. Training was also provided to the management of these companies, some of which have been privatized. The results achieved in the pilot or model restructuring projects have encouraged the Government of Poland to continue the same type of work, under World Bank financing, on a large number of enterprises in order to prepare them for privatization.

18/ IDB.9/10, chap. VIII, paras. 22-29.

140. Project planning - pre-investment studies and services: Under self-financing arrangements, a number of government organizations, public and private companies sought UNIDO assistance in project planning and feasibility studies. Among them were a Bahraini company seeking assistance in planning several investment projects in the chemicals sector, an Iranian design and consulting company wishing to set up industrial projects in the field of non-ferrous metallurgy, an Iranian ministry needing UNIDO assistance in development of projects in the mining and metallurgical sectors, and the New Nigeria Development Company for which UNIDO recently completed a feasibility study on caustic soda production. Leading petrochemicals producers in India and Saudi Arabia were assisted by UNIDO in sourcing technologies for their projects for which appropriate technology supply arrangements would follow; UNIDO cooperation helped achieve a better competitive position, wider technological choice, and better appreciation of international marketing opportunities for the products. With trust funds provided by the Danish International Development Agency (DANIDA), several pre-feasibility and feasibility studies were carried out, e.g., on calcium carbonate production in Nepal for which an investor was identified, and on investment opportunities in the fishery sector in Viet Nam. The DANIDA trust funds also financed a pre-investment study on the rehabilitation of food-processing industries in the State of Karnataka in India; the study would identify arrangements for technical and financial collaboration between small- and medium-scale industries in Karnataka and Danish companies, leading to product diversification, quality improvement and overall modernization. With trust funds from Japan, pre-investment studies were carried out on the production of coal briquettes in Viet Nam and the development of the silk industry in Nigeria. In Madagascar, UNIDO provided advisory services for the development of the fishery industry. Trust funds contributed by the Government of the Republic of Korea were used to organize activities that would promote industrial cooperation between the Republic of Korea and Eastern European countries, particularly the former Czechoslovakia and Poland. Similarly, with trust funds from France, investment opportunities were identified in a number of Eastern European countries.

141. Project financing advice and assistance: With trust funds from Japan, UNIDO assisted the Government of Guinea in formulating a programme to develop women entrepreneurship mainly in the context of privately owned agro-based small-scale industry development. This programme was designed to attract financing by the African Development Bank. Another example was a coconut processing plant in the Solomon Islands for which negotiations were started on joint venture arrangements involving foreign companies and financing institutions. This was a sequel to a pre-investment study carried out by UNIDO in 1991 with trust funds from DANIDA. Based on

a feasibility study carried out by UNIDO with trust funds from Japan, the East African Development Bank and the United States Agency for International Development decided to finance a project in Uganda for the extraction and export of castor oil.

142. Special training services: A project on development and promotion of traditional textiles industry in four West African LDCs (Burkina Faso, Guinea, Mali and Senegal), carried out with Japanese trust funds, involved extensive training activities to upgrade product design and quality of traditional textiles in order to meet the high standards of export markets. The trust fund projects in Hungary and Poland financed under the British Know-how Fund (see para. 139 above) involved high training components, e.g., in quality improvement of frozen food products, pharmaceutical products, etc. The projects also involved extensive training programmes for government officials, planners and industrialists in restructuring, rehabilitation and privatization of enterprises. In Brazil, under self-financing arrangements, UNIDO started to assist the largest textile and garment technology centre of the National Industrial Training Service (SENAI) in the application of modern technologies and management systems. The assistance covered improvement of training capabilities of selected SENAI textile schools through the application of computer-aided design systems.

143. Fact-finding missions and diagnostic studies: The China Metallurgical Construction Corporation established a trust fund with UNIDO to identify projects in other developing countries for transfer of expertise, technology and equipment from China. The funds were intended for fact-finding missions and diagnostic studies and would support the ECDC/TCDC programme of UNIDO. Under DANIDA financing, UNIDO started diagnostic appraisals of 10 representative dairy plants in China in order to contribute to the Chinese Government's master plan for dairy industry development. In the Russian Federation, a study was started on transformation of the pharmaceutical industry to a market-oriented system.

144. Procurement of equipment and spare parts: Under self-financing arrangements, assistance was provided to a regional research and development centre in Argentina for purchase of equipment for food processing. In Pakistan, support was provided to the Synthetic Fibre Development Centre in the Federal Chemicals and Ceramic Corporation Limited for supply of air-conditioning equipment. Preparations were made to provide procurement services to several projects financed by World Bank loans in Colombia, Nigeria and Central and Eastern European countries.

145. Service to development finance institutions: Upon request of the Islamic Development Bank, a study was undertaken for rehabilitation of a foundry in Tunisia and assistance was provided for the

establishment of a science park at Dakar, Senegal. With financing from the Ford Foundation, UNIDO started a research project to study various aspects of competition policies in public and private sectors of the Turkish industry. A project, financed by the International Fund for Agricultural Development (IFAD), was started to develop and disseminate technologies and equipment appropriate for cereal processing by rural women in sub-Saharan Africa.

146. Institution building: Through self-financing arrangements, UNIDO assisted SENAI in setting up a regional technology centre for leather and footwear at Paraiba, Brazil, where emphasis will be given to introduction of clean technologies for leather processing and effluent treatment. In Nigeria, while a plastics technology centre was being set up near Port Harcourt with UNIDO assistance, further help was organized for the Nigerian National Petroleum Company to set up a marketing network for petrochemical products. With trust funds from Japan, UNIDO advised the Governments of Kenya, Madagascar, the Republic of Tanzania and Zambia in improving their systems for industrial statistics. Under self-financing arrangements, UNIDO assisted the Government of Argentina to promote industrial investment through the establishment and operation of a centre at Buenos Aires for that purpose.

Industrial Enterprises and Non-governmental Organizations  
(subprogramme 351)

147. Cooperation with the public and private sectors of industry and non-governmental organizations was further enhanced through the implementation of a wide variety of activities. The trust fund scheme was promoted in discussions with representatives of companies and non-governmental organizations visiting UNIDO, in particular a number of specific projects were actively promoted for industrial cooperation through UNIDO under its special trust funds, e.g., a project for the establishment of a hot rolling mill for steel in an Asian country for which implementation began in 1992. As a result, the Industrial Enterprises and Non-governmental Organizations Section worked closely with, and was able to support the activities of the Industrial Cooperation and Management Services Branch. [3.242]

148. The UNIDO Centres for International Industrial Cooperation at Beijing and Moscow entered their second two-year cycles of operation. Both of these Centres have shown increased activity, demonstrating that they are useful vehicles for the establishment of enterprise-to-enterprise cooperation through, among others, export/import of technologies and industrial know-how between

the host countries and industrialized and developing countries, privatization activities and promotion of industrial investment. [3.243]

149. A very successful regional workshop on consumer protection and product standardization in developing countries was held at San Juan, Puerto Rico, in June. This activity, which was organized in close co-operation with the Department of Consumer Affairs of Puerto Rico and the International Organization of Consumers Unions, brought together 20 participants from consumer organizations and consumer government agencies with senior industrialists from the consumer goods industries involving 11 Latin American and Caribbean countries. Participants were provided with assessed information on consumer protection and standardization programmes in order to enable them to enhance their knowledge and develop appropriate programmes in their own countries. An added feature of this innovative workshop was a half-day seminar, conducted by a media expert and television broadcaster, on the use of media and television to promote consumer protection. [3.225; 3.241]

150. The Section participated in and provided inputs to selected activities organized by international non-governmental organizations and industrial enterprises. For instance, at the Regional Conference on the Economic Opening: the Cooperative Response (Mexico City, 4-7 December) organized by the International Cooperative Alliance (ICA), UNIDO contributed towards the formulation of an overall strategy for the restructuring of cooperative enterprises of the Latin American region to improve their competitiveness and thus enable their successful participation in world markets in accordance with the new trends of globalization of the economies. [3.225; 3.241]

151. In cooperation with associations of retired executives from several Western European countries, the Section could comply with several requests for the provision of short-term experts received from small-scale industries in developing countries. In addition, short-term training fellowships and study tours were provided to individual participants from developing countries in the fields of small-scale glass manufacturing and ceramic products, electronics, cocoa processing and metallurgy. These activities were financed from a special-purpose contribution to IDF. [3.241]

152. At its tenth session the Industrial Development Board granted consultative status to four international non-governmental organizations (decision IDB.10/Dec.21), bringing to 97 the number of non-governmental organizations having consultative status with UNIDO.

## CHAPTER IV. INDUSTRIAL PROMOTION, CONSULTATIONS AND TECHNOLOGY (400)

1. The promotional activities of this major programme continued to constitute a valuable contribution to the industrial development of developing countries and provided essential support to the technical cooperation activities of the Organization. The Office of the Deputy Director-General (programme 410) was responsible for the overall management and direction (sub-programme 411) of the activities undertaken by the subprogrammes mentioned below within the Department for Industrial Promotion, Consultations and Technology. [4.18]

2. During the first half of the year, the Office of the Deputy Director-General was also involved in the preparatory stages of programme development (subprogramme 412) through activities related to technology policies and techno-economic intelligence. With effect from 1 July, along with the merger of the two Technology Divisions (see paras. 60 and 61 below), these activities were transferred to the Office of the Director of the Technology Development and Promotion Division which assumed overall coordination for technology policy and technology management activities.

### A. INDUSTRIAL INVESTMENT (Programme 420)

3. The activities of the Industrial Investment Division aim primarily at: (a) assisting sponsors of industrial investment projects in developing countries and partners to engage in appropriate forms of business cooperation; and (b) advising developing countries on ways and means of strengthening investment opportunity identification, project preparation and promotion capabilities.

4. As mentioned in chapter II, paragraph 40, as of 1 July various changes were introduced in the organization of the Division to streamline operations and improve internal coordination. In particular, the Feasibility Studies Branch in the Industrial Operations Support Division, Department of Industrial Operations, was moved to the Industrial Investment Division, Department for Industrial Promotion, Consultations and Technology. The change was made in accordance with the recommendations of the evaluation of the industrial investment programme. The natural alliance between the Industrial Investment Division and the Feasibility Studies Branch is readily apparent. One of the main aims of the Feasibility Studies Branch is to provide substantive methodological and administrative support in the field of preinvestment analysis for the development and implementation of technical cooperation programmes and projects throughout the Secretariat. Therefore, the linking of the two

organizational units allows UNIDO to offer developing countries programmes that are both comprehensive and integrated.

5. The Office of the Director (sub-programme 425) was responsible for the overall formulation, coordination and management of the activities of the Division. Following the organizational changes, the Industrial Investment Division (programme 420) consists of the Industrial Investment Programmes Branch, the Investment Promotion Network Unit, the Feasibility Studies Branch and the Office of the Director (for terms of reference of the respective units see Director-General's Bulletin UNIDO/DG/B.156). While the presentation below is based on the new structure of the Division, for ease of comparison reference is made to the corresponding sub-programmes and relevant outputs and activities foreseen in the programme and budgets, 1992-1993 (GC.4/42). These activities were undertaken in accordance with the directives of the medium-term plan 1992-1997. The mobilization of financial resources for industrial development is one of the three elements common to industrial development in the medium-term plan. In that respect it should be noted that the value of investment projects successfully concluded by UNIDO rose to the level of \$1,473 million in 1992. At the same time, the work in industrial investment was guided by the five major target problem areas in the medium-term plan: (a) human resource development; (b) development and transfer of technology; (c) industrial rehabilitation; (d) small- and medium-scale industry development; and (e) environment and energy. It was also guided by activities related to the two other elements that the medium-term plan identifies as being common to industrial development: economic cooperation among developing countries and the integration of women in industrial development. [4.97]

6. Because of lack of extrabudgetary and staff resources, no studies on the general aspects of investment promotion were prepared in 1992 by the Office of the Director. Other activities originally foreseen under the Office of the Director were transferred to the new Investment Promotion Network Unit (see paras. 24-27 below). [4.98; 4.99; 4.101]

7. The sectoral approach<sup>1/</sup> continued to be developed with the implementation of the agro-food industry interregional technical cooperation programme and the building materials regional technical cooperation programme in Africa. Outputs included the preparation of kits on "How to start agro-food industries" and "How to start wood

<sup>1/</sup> IOB.9/10, chap. III, para. 43.

industries", as well as concluding the promotion of six investment projects. During 1992, three new sectoral programmes were prepared and approved covering the following industrial sectors: electronics in all developing regions, building materials in China and rice processing in Viet Nam. Implementation of the three new programmes was expected to start early in 1993. [4.100; 4.104]

(a) Industrial Investment Programmes

8. The Industrial Investment Programmes Branch consists of four regional units, thus combining the activities of subprogrammes 421, 422, 423 and 424 as reported below.

Africa  
(subprogramme 421)

9. In the African region, the total value of technical cooperation implemented reached \$1.1 million. Three investment technical cooperation programmes were completed in Cameroon, Mali and Senegal in agro-food processing, building materials and textiles. Advisory services were provided to the Governments of Gambia, Mali and Zambia on legal, institutional and fiscal measures aimed at the creation of an enabling environment for private investment. Assistance was extended to investment-related institutions in Guinea, Kenya, Mali, the United Republic of Tanzania and Uganda, involving the establishment of data banks for investment promotion, and the identification of investment opportunities in targeted subsectors. Four workshops on privatization and restructuring were organized for the staff of the investment promotion agencies - two in Kenya, one in Senegal and one in the United Republic of Tanzania. Advisory services were extended to Mali for the updating of its investment code. The investors' guide to Gambia was also updated. A Round Table of African investment promotion centres was held from 7 to 9 September at Bulawayo, Zimbabwe, to discuss measures to improve the investment climate in African countries and to associate the centres with the UNIDO network of Investment Promotion Service Offices by making use of the UNIDO methodology for the formulation, screening and promotion of investment projects. [4.44]

10. During 1992, the promotion of 41 projects with a total investment of \$150.2 million was concluded. A total of 144 investment projects were identified in the context of the national investment forum for Madagascar, scheduled for the third quarter of 1993, the round table at Bulawayo and the Investment Forum for the Economic Community of West African States (ECOWAS) that was held at Dakar, Senegal, in December. That Forum, which was organized by the European Community in collaboration with UNIDO, attracted 743 participants, including 268 from Europe, Asia and North America. UNIDO supported the participation of 23 entrepreneurs at the Forum, of whom

two signed partnership agreements and seven signed letters of intent. [4.47]

11. Country presentation tours were organized for the United Republic of Tanzania in Denmark, Norway, Sweden and the United Kingdom of Great Britain and Northern Ireland, and for Zambia in Germany. Some 70 staff members of the Ministries of Industry and national investment-related institutions in Kenya, Senegal and the United Republic of Tanzania were trained in the use and application of the UNIDO computer-based project appraisal software, Project Profile Screening and Pre-appraisal Information System (PROPSPIN), the Computer Model for Feasibility Analysis and Reporting (COMFAR) and the Databank for Investment Promotion Programmes (DIPP), an investment promotion database. About 20 employees of Tanzanian consulting companies benefited from training on the UNIDO methodology for project evaluation. Through South-South cooperation, a staff member from the Kenyan Investment Promotion Centre (IPC) was sent to the Chamber of Commerce and Industry at Lahore, Pakistan, and another to the Malaysia Industrial Development Agency in Malaysia, a Tanzanian IPC staff member was trained at the Ghana Investment Centre and two others at the Mauritius Export Development and Investment Agency. [4.45; 4.47; 4.48]

12. In the framework of a technical co-operation investment programme in Kenya two subsectors - agro-industries and building materials - were analysed with special emphasis on five industrial branches (milk, fish, meat, fruits and vegetables and marble). As a follow-up of the Bulawayo Round Table, operational links were established between 20 African investment promotion centres and IPS offices through the use of uniform methodology and tools and direct linkage for the promotion of investment projects. Within the framework of the delegates' programme, one representative from Kenya joined the IPS office in Paris. [4.49]

Asia and the Pacific  
(subprogramme 422)

13. In the Asia and Pacific region the total value of technical cooperation programmes implemented in 1992 to promote industrial investment projects and mobilize investment resources was \$1.6 million. Three programmes were completed, one in China, one in Bangladesh and one in Sri Lanka. Programmes were implemented in China, Nepal and Viet Nam, including a regional programme for countries of the Association of South-East Asian Nations, financed by Germany. Six new programmes became operational: one in China, completed in 1992, one each in the Democratic People's Republic of Korea, Maldives, Philippines and Sri Lanka, and a regional environmental technology programme for selected Asian countries, also financed by Germany. Two new programmes were proposed and formulated for China and India in

response to government requests. The programmes implemented in 1992 resulted in the organization of two investment forums (Xian, China and Kathmandu, Nepal) and 34 country promotion presentations. A total of 19 delegates from nine Asian and Pacific countries participated in the UNIDO on-the-job orientation programmes and bilateral programmes. Several hundred investment opportunities were identified, of which 444 (with a total investment value of some \$1.3 billion) were selected for promotion, while 57 investment projects, representing a total investment of \$472 million, were concluded. [4.57; 4.58; 4.60]

14. The China Northwest Investment and Business Forum, a UNIDO-executed project, was held from 14 to 20 September at Xian City, Shaanxi Province. It was financed under a cost-sharing arrangement by UNIDO and the United Nations Development Programme (UNDP). Sponsors of the Forum included Shaanxi Province, Gansu Province, Qinghai Province, Xinjiang Uighur Autonomous Region, Ningxia Hui Autonomous Region, the Xinjiang Agriculture, Industry and Commerce Corporation and the Xian Municipality, under the auspices of the Ministry of Foreign Economic Relations and Trade, China. The People's Bank of China and the Asian Development Bank also supported the project. The Forum was attended by over 4,000 participants, among them high-level officials representing institutions such as the United Nations Department for Economic and Social Development and the Asian Finance and Investment Corporation, as well as 990 businessmen from 42 countries and territories. The UNIDO IPS offices were represented by staff from Paris, Seoul, Tokyo and Vienna. The UNIDO Beijing Centre for International Industrial Cooperation also participated. A large number of individual business negotiations took place between the participants, which are expected to produce positive results. [4.60]

15. The Nepal Investment Forum was held at Kathmandu from 30 November to 4 December, as part of the UNIDO integrated technical cooperation programme that started in August 1990 and is financed by UNDP. Prior to the Forum, UNIDO assisted in the identification, formulation and screening of industrial investment projects. Most of the 83 selected projects were supported by pre-investment studies carried out by a local consultancy company. Other United Nations agencies involved in the programme were the Food and Agriculture Organization of the United Nations (FAO), financing 10 pre-investment studies for agro-based projects, and the Economic and Social Commission for Asia and the Pacific, financing a technical expert. Industrial investment project proposals, completed in June/July, were promoted by the IPS network and Nepalese embassies and also through country presentations and investment promotion missions organized in various countries of Asia and Europe. The Forum was attended by nearly 300 foreign participants representing 203 companies from 26 industrialized as well as developing

countries. International organizations and financing institutions were also represented, including the Commonwealth Development Corporation, International Monetary Fund, World Bank, FAO, United Nations Conference on Trade and Development (UNCTAD), the Asian Development Bank and the Asian Finance and Investment Corporation. The IPS offices in Germany, Italy, Japan and the United States of America were also represented. Nearly 100 local investors discussed 102 projects with foreign participants who also suggested 34 additional project proposals for Nepal. Nearly 800 programmed and approximately 300 non-programmed individual business meetings took place during the forum, which resulted in the signing of 128 letters of intent with an estimated total investment of \$740 million. The achievements of the Forum, which exceeded the Government's expectations and which were commended by the local businessmen, resulted in the conclusion that a follow-up should be carried out in order to facilitate completion of the projects. It was agreed that UNDP will further extend financing of the project and the follow-up phase will continue until June 1993. [4.60]

#### Latin America and the Caribbean (subprogramme 423)

16. In the Latin American and Caribbean region, investment promotion programmes were started in Argentina (two), Bolivia, Ecuador, Uruguay and Venezuela. Investment promotion centres were established in Argentina and Bolivia. A sectoral programme on agro-industry was implemented in Ecuador and financed by France. Ongoing activities were aimed at developing promotion programmes with two of the main partners of Latin America: Spain and the United States. Two investment meetings were held in Argentina with industrialists and entrepreneurs from the United States in the mining and tourism sectors and a Spain/Latin America/UNIDO programme culminated in an investment meeting held at Madrid, Spain, in November. The highlight of activities undertaken in the Caribbean region was a major programme in Jamaica. Preparatory work was undertaken for programmes in Aruba, Barbados and Suriname as well as a joint programme between Puerto Rico and eastern Caribbean States. With the intention of optimizing resources and capabilities within the United Nations system, a joint investment programme was designed for Nicaragua; the UNIDO share in its implementation would amount to \$1 million. A total of 14 technical cooperation project documents were prepared for the whole region. [4.70; 4.71; 4.72]

17. Some 200 investment projects were identified in the Latin American and Caribbean region. Assistance was given to 150 entrepreneurs for the formulation of their projects, and the promotion of 52 investment projects was successfully concluded, amounting to \$177.8 million. [4.73; 4.74]

18. Some 150 representatives from the public and private sector were trained in the use of UNIDO tools and methodology for the identification, formulation and promotion of investment opportunities in the region. In the framework of the Andean Development Corporation (ADC)/UNIDO/UNDP regional programme, a seminar on the use of DIPP, PROPSPIN and COMFAR took place for all five Andean Group countries. PROPSPIN seminars were held also in Argentina, Jamaica and Mexico. The UNIDO methodology on the formulation of investment projects was transferred to and accepted by the Mexican authorities. In addition, 15 country presentations were made and four countries participated in the IPS delegates programme. Five DIPP data banks were installed for the Andean Group countries and in Jamaica. [4.73; 4.74]

19. Joint programmes with financial institutions were implemented: (a) the regional programme for the five Andean Group countries with ADC; and (b) the joint UNIDO/Latin American Association of Development Financing Institutions (ALIDE) programme covering Argentina, Brazil and Uruguay. During the year, eight operational links were established with institutions such as the Inter-American Development Bank (IDB), ADC, Banco Sabadel, ALIDE and the secretariat of the Organization of Eastern Caribbean States. Following discussions between the Director-General and IDB, a \$1.8 million programme was designed for Bolivia. As a result of the discussions which took place between the Director of the Industrial Investment Division and the Inter-American Investment Corporation, some investment projects identified and formulated by UNIDO programmes were forwarded to the Inter-American Investment Corporation for possible financing. [4.72; 4.75]

Arab Countries, Europe and the Mediterranean Region  
(subprogramme 424)

20. In the Arab countries, Europe and the Mediterranean region, six technical cooperation programmes were completed, 220 investment projects were identified and 52 national staff (from the former Czechoslovakia, Egypt and Turkey) were trained. [4.85; 4.88; 4.89]

21. In the Arab countries, contacts were made with the Government of Saudi Arabia concerning the setting up of an IPS office at Riyadh, while negotiations were well advanced with the Government of Bahrain for the establishment of an IPS office. Approval of an institution-building programme in Sudan was postponed for funding reasons but was expected to commence in 1993. A new regional programme was formulated to prepare a workshop in cooperation with the Inter-Arab Investment Guarantee Corporation and the Foreign Investment Advisory Service of the World Bank group on country and investment projects promotion in the Arab countries. A training session was held in Egypt on PROPSPIN. [4.85; 4.89]

22. In the Mediterranean region, two workshops were held on the promotion of foreign investment in the framework of an ongoing UNDP programme in Turkey. In Algeria a UNDP programme was set up to analyse legal measures for the promotion of foreign investment. A programme financed by the Government of France was started in 1992 to identify investment opportunities in the North African States. [4.85; 4.86; 4.89]

23. As regards Central and Eastern Europe, a programme was implemented in order to follow up the outcome of the Investment Forum for the former Czechoslovakia, which included a workshop on PROPSPIN and DIPP held at Prague. For Hungary, a business guide was prepared and published. The Third Investment Forum for Poland was held in October at Warsaw. Under a trust fund project financed by the Government of France, approximately 50 investment opportunities were identified in the former Czechoslovakia, Hungary, Poland and Romania in various industrial sectors, including environmental protection. A regional programme was formulated in cooperation with the Metallurgical Industries Branch to organize an investment conference in Hungary in the field of metallurgical pollution control. In November more than 400 participants attended a conference organized by UNIDO in Vienna on the Commonwealth of Independent States entitled, "Post-Soviet Republics - New Frontiers for Trade and Investment". This conference was financed by a trust fund contribution from AWT International Trade and Finance AG, a member of the Austrian Creditanstalt Banking Group. Some 170 investment opportunities identified in Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation and Ukraine were presented during the conference. [4.86; 4.88; 4.89; 4.90]

24. For the Arab countries, Europe and the Mediterranean region implementation of technical cooperation programmes for the mobilization of investment resources amounted to \$330,000 as of end December. The promotion of 41 investment projects was concluded during 1992, with a total investment of \$672.1 million. [4.88]

(b) Investment Promotion Network  
(part of subprogramme 425)

25. The activities of the new Investment Promotion Network Unit were previously included in the Office of the Director (subprogramme 425). They are listed in paragraphs 4.98, 4.99, 4.101 and 4.103 of document GC.4/42.

26. During 1992 the network of IPS offices expanded. Following successful negotiations with the Government of Greece, an IPS office at Athens was inaugurated officially in November. A project was signed with the Government of the United Kingdom to provide the business community in that country with services similar to those offered by IPS offices. Negotiations to establish Investment Promotion offices were

undertaken with Australia, Bahrain, the Islamic Republic of Iran, Saudi Arabia, Spain and Turkey. [4.98; 4.103]

27. The IPS network continued to play a significant role in the implementation of the investment programme and other UNIDO technical cooperation programmes. The main focus of the IPS network was oriented towards the promotion of specific investment projects. This was achieved in part by the hosting of delegates and the organization of country promotion presentations. The number of participants in the delegates' programme in 1992 within the IPS operation is reflected in table 1. As in previous years, the programme was funded from a variety of sources including bilateral financing from developed and developing countries, as well as from UNDP. [4.99]

28. In accordance with the recommendations of the evaluation of the investment programme, during the course of the year an operational manual was prepared and distributed to the IPS offices. The manual is aimed at improving the efficiency of those offices and ensuring a uniform operational pattern throughout the network.

(c) Feasibility Studies  
(subprogramme 541)

29. Feasibility Studies was part of the major programme (500) Industrial Operations before July. Following the move to the Industrial Investment Division the work programme for 1992-1993, as described in the programme and budgets (GC.4/42), remained, however, unchanged. Feasibility studies and related pre-investment activities concentrated to a larger extent than in previous years on rehabilitation and privatization projects with particular emphasis on environmental issues. The largest feasibility study ever carried out by UNIDO, a second generation integrated steel mill planned for West or East Java (Indonesia), culminated in a high-level meeting of national counterparts and UNIDO experts held at Jakarta, Indonesia, at the end of the year. Following that meeting, the first phase of the feasibility study was completed. It had the task of assessing five different technological routes for steel-making as well as six locational alternatives. The first phase also comprised detailed marketing research of the domestic steel market, the outline of a marketing strategy and related feasible production capacities, the assessment of domestic raw materials (non-coking coal), preliminary environmental impact assessment as well as financial and economic considerations. The steering committee of the national counterpart was to decide by January 1993 on the technological alternatives and the location for phase two, and on the preparation of a bankable feasibility study for this mega investment project, which would need capital investment in the range of \$1.5 to \$2.1 billion. A feasibility study on the extraction of vegetable oil and protein cake from indigenous plants in Zambia reached an advanced stage. A

number of tests undertaken showed good results, thus supporting small-scale production and reducing importation of vegetable oil. The plants concerned are scattered throughout the country, so the project is expected to represent a good employment spinner. [5.179]

30. One major outcome of the efforts to integrate the UNIDO environment programme into the work of feasibility studies was the collaboration with companies based in African countries specializing in refrigeration and air conditioning to determine the costs and policy measures of substituting new, cleaner, non-chlorofluorocarbon-based technology in those enterprises producing refrigeration equipment. Country reports have been prepared which serve as a basis for further negotiations on the possible local production of recovery and recycling equipment for mobile air conditioning. The programme fully corresponds with UNIDO's role in assisting the developing countries to meet the requirements of international agreements to protect the ozone layer as stated in the Montreal Protocol on Substances that Deplete the Ozone Layer. Additional financing has been provided by Norway. [5.179]

31. Feasibility analysis has been extended increasingly to the health sector. In Tunisia a techno-economic assessment of the viability of producing blood bags was carried out with financing from the Industrial Development Decade for Africa (IDDA). The technical viability was evaluated positively, but the long-term economic and financial viability was shown to depend on some form of subregional cooperation in marketing. Significant efforts were made in obtaining funds from special-purpose donors and through trust funds agreements for the financing of pre-investment work, in order to make up for the decrease in UNDP resources. In that connection a third agreement was signed with Japan, providing UNIDO with additional funds of \$1.4 million for a project on industrial cooperation for the promotion of investment projects in developing countries. Studies financed from those funds included prefabricated construction materials (Turkey), integrated textile mill (Bangladesh), modernization of a cokery plant (Poland), and annatto processing for the production of bixin (Dominican Republic). The Dominican Republic study was completed and it was expected that the investment would materialize. [5.179]

32. The number of training seminars on project preparation and evaluation decreased in 1992 primarily owing to the lack of funds as well as to a certain reduction in large-scale institution-building projects as a result of UNDP successor arrangements. (Several training activities had taken place within such projects in the previous years.) Nevertheless cooperation with some training institutions was intensified, in particular with the Entrepreneurship Development Institute



Table 1

Significant performance indicators: Industrial Investment  
(Programme 420)

	Planned <sup>a/</sup> 1992-1993	Achieved 1992
<b>Technical cooperation programmes</b>		
Africa	10	6
Arab countries, Europe and Mediterranean	10	2
Asia and the Pacific	10	13
Latin America and the Caribbean	10	8
<b>Investors' guides</b>		
Africa	4	1
Arab countries, Europe and Mediterranean	4	1
Asia and the Pacific	3	1
Latin America and the Caribbean	0	-
<b>Investment opportunities identified and formulated for promotion</b>		
Africa	400	144
Arab countries, Europe and Mediterranean	250	220
Asia and the Pacific	400	416
Latin America and the Caribbean	380	180
<b>Investment projects whose promotion was concluded</b>		
Africa	80	41 (\$15.6) <sup>b/</sup>
Arab countries, Europe and Mediterranean	50	41 (\$672.0)
Asia and the Pacific	60	60 (\$473.0)
Latin America and the Caribbean	50	52 (\$178.0)
<b>Investment forums</b>		
Africa	4	2
Arab countries, Europe and Mediterranean	4	2
Asia and the Pacific	2	2
Latin America and the Caribbean	<sup>c/</sup>	-
<b>Country presentations for: <sup>d/</sup></b>		
Africa	6 tours	15
Arab countries, Europe and Mediterranean	6 tours	24
Asia and the Pacific	6 tours	55
Latin America and the Caribbean	<sup>c/</sup>	22
<b>Participants in IPS delegates' programme from:</b>		
Africa	20	6
Arab countries, Europe and Mediterranean	10	7
Asia and the Pacific	40	9
Latin America and the Caribbean	15	4
<b>Feasibility Studies (subprogramme 541)</b>		
Project approvals	110	32
Project completions	100	33

<sup>a/</sup> Source: Programme and budgets, 1992-1993 (GC.4/42).

<sup>b/</sup> Dollar figures are in millions.

<sup>c/</sup> Quantified in programme and budgets, 1992-1993 (GC.4/42) as 15-20 promotional events.

<sup>d/</sup> See also table 2.

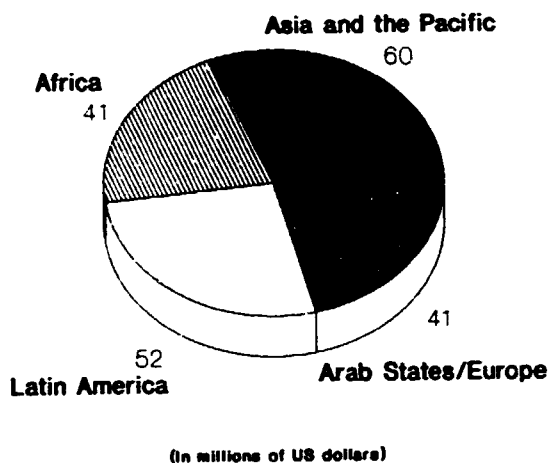
Table 2  
Country promotion presentations organized by UNIDO in 1992

Country promoted	Venue	Number of presentations
Algeria	France (10)	10
Argentina	Australia, South Africa, United States (2)	4
Barbados	France	1
Brazil	France (4)	4
China	France (3), Germany (3), Japan (6), Republic of Korea (2)	14
Costa Rica	Germany	1
Czechoslovakia	France, Italy	2
Ecuador	France	1
Egypt	Germany	1
Ethiopia	Germany, Japan	2
Fiji	Germany	1
India	France (5), India	6
Indonesia	Japan	1
Kenya	France (4), Germany	5
Madagascar	Algeria, France (3)	4
Malaysia	Italy	1
Mexico	Algeria, France (8)	9
Morocco	Germany	1
Nepal	France, Germany (3), Japan (4)	8
Philippines	France (2)	2
Poland	France, Italy	2
Republic of Korea	United States	1
Romania	Germany (2)	2
Russian Federation	Italy, Republic of Korea	2
Sri Lanka	Japan, Republic of Korea (3)	4
Turkey	Japan (4)	4
United Republic of Tanzania	Germany, United Kingdom	2
Uruguay	Brazil	1
Viet Nam	France (7), Italy, Japan (5), Republic of Korea (4)	17
Zambia	Germany	1
Zimbabwe	Germany	1
Latin American and Caribbean region	Italy	1

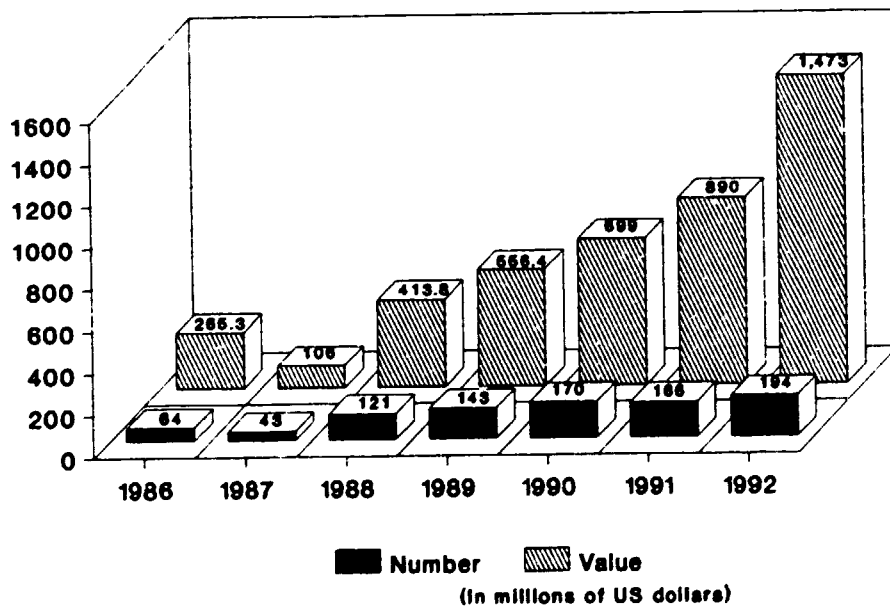
116

Total: 31 countries and 1 region promoted at 116 presentations held in 12 countries.

### Investment projects concluded in 1992, by region



### Investment projects concluded, 1986-1992



of India (Ahmedabad), which resulted in the sponsoring of two additional training programmes in 1992. The training programmes were attended by 47 participants from 16 developing countries. Feedback received from the participants confirmed that the programme was highly beneficial to them and that it was well organized. The 130 applications received by UNIDO for these courses reflect the interest shown by developing countries in building up and enhancing their own capabilities in industrial project preparation and appraisal. In line with the global concern for the enhancement of the role of women in the industrial development process and the need to bring them into the mainstream of national economic activities, special attention was paid to women candidates who recorded a 50 per cent representation in the second seminar held at Ahmedabad, India. That aspect is expected to continue to receive due attention in future seminars to be implemented at the Entrepreneurship Development Institute and is also the subject of separate women-oriented programmes currently under preparation. [5.181]

33. The development and updating of UNIDO's standardized methodology for the preparation and evaluation of pre-investment studies continued to play an important role. Guidelines were amended and updated to integrate various new aspects of pre-investment work in conformity with the second edition of the Manual for the Preparation of Industrial Feasibility Studies (ID/372) published at the end of 1991. Based on that manual the development of the new version of the Computer Model for Feasibility Analysis and Reporting, COMFAR 3.0, took place during the year. This new version follows the latest trends and standards in software development by using a graphical user interface. Furthermore COMFAR 3.0 is expected to be run not only on personal computers compatible to the industry standard, but also on other hardware platforms such as Apple Macintosh, IBM-PS/2 and Unix-based mini computers. The official release of COMFAR 3.0 for personal computers was planned for mid-1993. By the end of 1992 the number of COMFAR users (version 2.1) all over the world reached 700. [5.181]

#### B. SYSTEM OF CONSULTATIONS (Programme 430)

34. Under the guidance of the Office of the Director (subprogramme 435) further efforts were made during the year in the System of Consultations to promote a fruitful dialogue between the major actors involved in the development of particular industrial sectors. In order to foster that objective, better integration was achieved with all the activities of UNIDO, *inter alia*, Industrial Operations, Area Programmes, Development and Promotion of Technology and Industrial Investment. The Sectoral

Advisory Committees were involved in the preparation as well as in follow-up activities. As a new strategy, the opportunity was taken at Consultations to draw attention to the UNIDO programmes relating to the sector under discussion. As a consequence, the number of technical cooperation programmes and projects identified has increased. Additional experience was gained, in particular, in developing a greater synergy between the consultation process and promotion of investment. This has resulted in the identification of an expanded number of investment opportunities during and after the Consultations. [4.165; 4.166]

35. Considerable progress was made in attracting more business-oriented participants to Consultations; for example, two thirds of those attending the Regional Consultation on the Petrochemical Industry were from industry (see para. 48 below). Furthermore, the focus on regional Consultations has given rise to improved economic cooperation between developing countries. [4.165]

36. Enhanced international cooperation has emerged from closer ties with FAO, the International Labour Organisation (ILO), the International Trade Centre UNCTAD/GATT (ITC), the United Nations Centre for Human Settlements (Habitat) and the World Health Organization (WHO). Representatives from those organizations have actively participated in the selection of issues and the deliberations of the Consultations. [4.165]

#### Light Industries (subprogramme 431)

37. As a follow-up to the Regional Consultation on the Fisheries Industry for Asia and the Pacific Island Countries held in December 1991, and in accordance with requests made by participants, the System of Consultations Division in cooperation with the Least Developed Countries Coordination Unit organized a Workshop on quality and hygiene regulations in the fisheries industry, from 6 to 10 July. The Workshop took place at the North Atlantic Fisheries College, Shetland Islands, United Kingdom, and was hosted by the Shetland Islands Council. The Workshop, which was attended by 28 participants from 15 countries, focused on the concern of developing countries with regard to European Community regulations coming into force in 1993, the need to adapt to the new standards, and to improve the quality of fish products to be exported to the European Community. Participants were briefed on the new directives by the representative of the Commission of the European Community as well as by specialized institutions of European Community member and non-member countries. Guidelines and advice were given on the quality and hygiene standards demanded by, as well as other measures required in response to, the new regulations. Visits to the Shetland Islands fisheries industry provided participants

with a first-hand view of how to respond to those new standards. The Workshop afforded an excellent opportunity for further co-operation between UNIDO and the European Community countries in the fields of quality control and human resource development with regard to the fisheries industry sector. Interest was expressed in the possibility of organizing a similar workshop for participants from Central America. [4.118; 4.121]

38. With a view to addressing problems related to training, post-harvest technology and infrastructure for the fisheries sector, a meeting on cooperation between specialists from African and Asian fisheries was held at Singapore from 25 to 30 October. The meeting, attended by 22 participants from 15 countries, was a follow-up to the 1991 Regional Consultation on the Fisheries Industry for Asia and the Pacific Island Countries. It was organized in cooperation with the Economic Cooperation among Developing Countries Section and was financed under that subprogramme. A number of institutions in Asia were identified that could provide assistance to fisheries specialists from Africa in specific priority areas. On that basis, possibilities for future cooperation through interregional projects involving African and Asian counterparts were discussed and UNIDO was requested to provide appropriate follow-up. [4.118; 4.121]

39. In preparation for the regional Consultation on animal feed and related industries in Africa to be held in October 1993, a regional preparatory Meeting was held at Bamako, Mali, from 15 to 17 December. The technical papers prepared as a basis for discussion included the role of the animal feed industry in agro-industrial development, technology process and equipment for the small-scale manufacture of animal feeds using local raw materials, and evaluation of the potential for producing and processing agricultural raw materials for compound feeds in Africa. A number of country studies prepared for the Meeting described the situation and development aspects of the animal feed industry in African countries, and contained analyses of potential sources of raw materials and existing technologies for their processing, development constraints and marketing. The Meeting was attended by 34 participants and four consultants from 16 countries in Africa, Europe and the United States, and representatives of FAO, the Organization of African Unity and the Economic Commission for Africa. A number of conclusions and recommendations were adopted and issues selected for the forthcoming regional Consultation on animal feed and related industries in Africa. The recommendations included: the promotion of the use of local agricultural and industrial raw materials, by-products and wastes, including research and information on the composition, modalities of utilization and processing requirements as well as quality control; the promotion of small- and medium-scale enterprises with special

emphasis on adequate technologies and training; and the development of regional cooperation in the areas of marketing, exchange of processing know-how, equipment and technology and information. [4.119; 4.121]

#### Heavy Industries (subprogramme 432)

##### Capital Goods Industries

40. A preparatory meeting for the regional Consultation on the restructuring of the capital goods industry in Latin America and the Caribbean was held at Sao Paulo, Brazil, from 25 to 27 March. The meeting was organized by UNIDO, the Economic Commission for Latin America and the Caribbean, the Latin American Association of Capital Goods Manufacturers, the Brazilian Association of Machinery and Equipment Industries and National Union of Machinery and Equipment Industries. The meeting selected two issues for discussion at the Consultation: (a) measures to improve the international competitiveness of the capital goods industry in Latin America and the Caribbean and (b) the role of the State, associations of industries and the private sector in the development of the capital goods industry in Latin America and the Caribbean. The preparation of the Consultation was closely linked with the regional Latin American project on the automation of the capital goods industry. [4.131; 4.133]

41. The Regional Consultation on the Restructuring of the Capital Goods Industry in Latin America and the Caribbean took place in cooperation with the Latin American Economic System (SELA) and the Consejo Nacional para el Desarrollo de la Industria de Bienes de Capital (CONDIBIECA) de Venezuela at Caracas, Venezuela, from 9 to 12 November. It was attended by participants from 14 Latin American countries as well as representatives from Austria, France and Sweden, and in addition seven regional organizations including the Centre for the Development of Industry of the African, Caribbean and Pacific Group of States and the European Community - CDI (ACP-EEC). The participants emphasized, *inter alia*, the necessity for all actors involved in the sector, i.e. capital goods producers, professional associations, research and development institutions, Governments, labour organizations, and regional and international organizations to identify their new role and to cooperate in the introduction and application of the measures required to improve the international competitiveness of the Latin American capital goods industry (see also chap. III, para. 108). [4.131]

42. While recognizing the key role and main responsibility in the new industrial strategy lies chiefly with the capital goods producers themselves, it was the general view that Governments should become active partners as well. It was expected that professional associations would develop

new capabilities to render qualified services to their members in areas such as market intelligence, technical training, product and process design, quality assurance and technology innovation. The Regional Consultation recommended, *inter alia*, that the regional and international organizations should support the efforts of the capital goods industry in pursuing a higher international competitiveness, particularly by developing regional cooperation programmes for the capital goods industries in the Caribbean and Central America, bearing in mind the characteristics of each subregion. It was proposed that CDI (ACP-EEC) should play an active role in implementing this programme for the Caribbean countries. The conclusions and recommendations of the Regional Consultation were presented to the VIII Jornadas Venezolanas de Bienes de Capital, that followed that Consultation. As a concrete outcome of the Consultation, discussions were held concerning a special programme in capital goods for the Caribbean countries to be developed in cooperation with the Caribbean Community in Guyana and also a similar programme for the Central American countries. Also during the Consultation, a cooperation agreement was signed between UNIDO and the Latin American Economic System. [4.131; 4.133]

#### Construction Industries

43. In preparation for the first Consultation on the construction industry, to be held in 1993, UNIDO, Habitat and the Tunisian Centre for Building Materials organized an expert group meeting to discuss the main constraints hampering the development of the industry. Among the key topics selected for further analysis and study were the structure and function of the construction industry with emphasis on the developing countries and management and organizational structure for efficient construction industry operations. [4.130]

44. In order to identify and recommend the main issues for discussion, a global preparatory meeting was held from 1 to 3 December at Berkeley, California, United States. The Meeting was sponsored by the University of California and the California Foundation on the Environment and the Economy. Eighteen experts from Africa, Asia and Europe attended as well as participants from North and Latin America. Among the key issues that emerged from the Meeting for consideration by the Consultation were: the highly cyclical trends of the construction industry and the fragmented linkages between the main actors of the industry and other components of the economy as a result of insufficient policies relating to environmental protection, technical standards and land-use planning; the excessive waste of resources in terms of energy content of building materials and building operations; and the severe shortage of capital for project development and lack of capital budgeting and cost recovery strategies. The experts recommended that

the Consultation should also take into account in the discussions the creation of a conducive policy environment to improve access to financing, technologies and resources. Other factors to be discussed should be planning, financial management, energy and resource-conserving design and efficient construction methods. Focus should be put on human resource development and the establishment of a strong network for the promotion of the construction industry among the main actors from both the public and the private sectors as well as at the local, national and international levels. [4.130]

#### Metallurgical Industries

45. The Heavy Industries Unit initiated, in cooperation with the Metallurgical Industries Branch and the Environment Coordination Unit, a series of preparatory activities related to the Consultation on environmental management and cleaner production technologies in the metallurgical industry scheduled for the 1994-1995 biennium.

46. From 24 to 27 August, a seminar on total quality management in the iron and steel industry was held at Buenos Aires, Argentina, in cooperation with the Latin American Iron and Steel Institute (ILAFA), the Argentinian Iron and Steel Institute and the Pan American Standards Commission. The main topic of the discussion was the implementation of total quality management systems in iron and steel plants as an essential precondition for environmental activities. Special consideration was given to regional experiences and strategies that have been applied to overcome the constraints encountered. Results and future development prospects were also considered and UNIDO assistance was requested for establishing national accreditation systems in the International Organization for Standardization (ISO) 9000. Local resources for implementation of relevant training programmes for quality auditors were being identified.

47. Furthermore, environmental committees in the iron and steel industry were established in Latin America in cooperation with ILAFA and an environmental advisory board was established in cooperation with the South-East Asia Iron and Steel Institute.

48. Other meetings held during the year in Brazil, Chile, Japan and Malaysia focused on evaluating the constraints and local level of technology in key areas of environmental concern in the iron and steel industry. Surveys in the main iron and steel producing countries of Latin America and South-East Asia continued to be carried out in cooperation with the national iron and steel environment committees of those countries. The surveys would be instrumental for the formulation of concrete action-oriented activities as well as regional projects aimed at alleviating the environmental constraints in the iron and steel industry. [4.133]

Process Industries  
(subprogramme 433)

Petrochemical Industry

49. The Regional Consultation on the Petrochemical Industry in the Arab Countries, held at Innsbruck, Austria, from 22 to 25 June 2/ was attended by representatives of 31 countries; two thirds of the participants were from public and private sector industries. The conclusions and recommendations of the Consultation concerned the development of new products, expansion of the domestic market, and human resource development, issues that were seen as important keys to an integrated approach - an approach recognized as essential at the regional level. It was also agreed that national economic policies in the Arab countries should be reviewed to permit the full integration of the petrochemical industry with the other economic sectors. In that context, due consideration should be given to the development of the downstream processing industries. Partnership arrangements should be encouraged as the most practical means and mechanisms for cooperation, whether among Arab countries or producers, or between them and partners from other regions. Such partnerships should pay due attention to the mutual interests of the parties concerned. The adoption of effective marketing policies and strategies based on identified consumer needs should be regarded as an indispensable condition for market development of petrochemicals, covering products, prices, availability and quality, as well as product promotion and assistance in end-use. During the Consultation, a large number of projects in technical cooperation, investment promotion, technology transfer, and trust fund arrangements for the petrochemical sector were identified on bilateral and multi-lateral bases. [4.146]

50. In order to establish priority issues for submission at the global Consultation on downstream petrochemical industries scheduled for November 1993 at Teheran, Islamic Republic of Iran, a global preparatory meeting, hosted by the Indian Petrochemicals Corporation Limited was to be convened at Vadodara, Gujarat, India, in February 1993. [4.147]

Fertilizers

51. At the request of the Fertilizer Association of India (FAI) and in conformity with the recommendations of the Workshop on Appropriate Strategies for Fertilizer Technology and Development held at Lahore, Pakistan, in 1991, and the Expert Group Meeting on the Processing and Utilization of Phosphates held at Dakar, Senegal, in 1991, the financing of a project proposal was under consideration for a workshop on policy environment conducive to the growth

2/ For the report on the Consultation, see document ID/383.

of fertilizer industry in the developing countries. The workshop was to be hosted by FAI which would also provide substantive and logistic support. [4.148]

52. In implementing the recommendations of previous Consultations and subsequent meetings in the sector, the UNIDO fertilizer manual was being updated for submission to the Publications Board as a potential sales monograph. [4.148]

Pharmaceuticals

53. As follow-up to the Third Consultation on the Pharmaceutical Industry (1987), as well as in preparation of the forthcoming regional Consultation on the subject, a Workshop on the industrial utilization of medicinal and aromatic plants was held in cooperation with INDENA/Inverni della Beffa Group at Milan, Italy, from 24 to 27 March. One of the recommendations emanating from the Workshop was that developing countries should adopt appropriate policies to ensure the development of that subsector. Another recommendation was that concrete steps should be taken to develop and strengthen capabilities in agro-based and process technologies, quality control and pharmacological evaluation, regulatory requirements, exchange of information, research and development and trade areas. Furthermore, international organizations such as UNIDO, WHO, FAO and ITC were called upon to assist developing countries in the relevant areas of their competence for the development of the plant-based medicinal subsector of the pharmaceutical industry. The Workshop stressed the need to develop appropriate new international cooperation schemes to foster and increase the flow and dissemination of information on new technologies, to undertake joint ventures between developed and developing countries for the production of plant-based medicine, and to organize special training programmes for the development of human resources. [4.145]

54. The Global Preparatory Meeting for the regional Consultation on the industrial utilization of medicinal and aromatic plants in Asia and the Pacific held in Vienna, Austria, from 18 to 20 November, considered the overall question of integrated development of the medicinal and aromatic plant-based subsector of the pharmaceutical industry covering phytopharmaceuticals, herbal preparations as well as essential oils, aroma chemicals and fragrance substances. The need was emphasized for multi-functional pilot plants that would make a bridge between research and development and commercial production. In that context, a presentation was given of the programme of technical cooperation by UNIDO's Chemical Industries Branch. Furthermore, the Meeting identified the elements of the issue for consideration at the regional Consultation to be held in March 1993, namely: (a) policies covering health, agricultural, industrial and trade aspects; (b) agro-based and industrial technologies for industrial-scale production of plant-based medicaments and aroma chemicals;

Table 3

Significant performance indicators:  
System of Consultations  
(Programme 430)

	Planned 1992-1993	Achieved 1992
<u>Consultations a/</u>		
Animal feed, Africa (431) [4.119]	1	-
Capital goods, Latin America/Caribbean (432) [4.131]	1	1
Construction (432) [4.130]	1	-
Petrochemicals, downstream (433) [4.147]	1	-
Medicinal and aromatic plants, Asia (433) [4.145]	1	-
Petrochemicals, Arab countries (433)		1 b/
<u>Regional, interregional, global and other meetings</u>		
Leather (431) [4.120]	1	-
Wood (431) [4.120]	1	-
Food packaging (431) [4.118; annex H]	2	-
Sugar cane processing (431) [4.120]	1	-
Animal feed (431) [4.119]	1	1
Fisheries (431)	c/	1
Construction (432) [4.130; annex H]	3	2
Capital goods (432) [4.131]	1	1
Electronics (432) [4.132; annex H]	1	-
Medicinal and aromatic plants (433) [4.145; annex H]	2	2
Petrochemicals (433) [4.147; annex H]	2	-
Fertilizers and pesticides (433) [4.148; annex H]	1	-
Human resource development (434) [4.155]	1	-
Small- and medium-scale enterprises (434) [4.156]	3	1
Industrial rehabilitation (434) [4.157]	1	-
<u>Studies/manuals/reports</u>		
Wood (431) [4.118]	3	-
Animal feed (431) [4.119]	4	3
Construction (432) [4.130]	2	2
Capital goods (432) [4.131]	2	2
Electronics (432) [4.132]	c/	-
Medicinal plants (433) [4.145]	1	1
Petrochemicals (433) [4.146]	3	3
Fertilizers/pesticides (433) [4.148]	1	-
World trends (435) [4.166(i)]	c/	-
Technical assistance programmes and projects (435) [4.166(ii)]	1	-
Progress in consultation process (435) [4.166(iii)]	2	1
Implementation of policy recommendations (435) [4.166(iv)]	c/	-

a/ Includes the preparation of studies for their substantive servicing, which are not shown separately in the present table.

b/ Postponed from biennium 1990-1991 (IOB.8/22, para. 4).

c/ Amount not specified in programme and budgets, 1992-1993 (GC.4/42).



(c) research and development; (d) human resource development; and (e) regional and interregional cooperation. [4.145]

55. A document entitled "Factors having a bearing on the industrial utilization of medicinal plants for the production of plant-based medicines" was prepared to serve as a guideline for developing countries in their development of the medicinal and aromatic plants-based subsector. A comprehensive study on "Regional/interregional cooperation in the production of pharmaceutical chemicals and their intermediates" was completed in October. It is expected to enhance cooperation among developing countries for the systematic development of the pharmaceutical sector. [4.145]

Common Topics  
(subprogramme 434)

56. Following the recommendations of the Regional Consultation on Industrial Rehabilitation/Restructuring with Special Focus on the Food-processing Subsector in Africa (1990) and recognizing the importance of privatization of state-owned enterprises, a study on privatization theory and policy was prepared. The study dealt with crucial issues ranging from methodologies and cost benefit analysis to a review of past experience with privatization in industrialized, developing and some former centrally-planned economy countries. A number of guiding principles were recommended to assist developing countries in pursuing privatization as a policy option. The paper was circulated widely and was well-received by Governments and industrialists in developed and developing countries. [4.157; 4.158]

57. In addition, a study was prepared at the request of the Government of Nigeria on the analysis of present access to financing of small and medium industries in Nigeria, with a view to convening a round-table consultation on the establishment of a small industries corporation in Nigeria. However, financial constraints prevented the holding of that meeting. [4.156]

58. A round-table discussion on the restructuring of small- and medium-scale enterprises with special focus on African/Asian cooperation held at New Delhi, India, from 29 September to 2 October was attended by 64 participants of governmental and non-governmental bodies from 19 African and Asian countries. The participants had for their consideration three studies: "Structural adjustment programmes: impact on small- and medium-scale enterprises"; "Small-scale industry development - the cross-roads: Strategies and programmes for the 1990s and beyond with special reference to Africa"; and "The role of non-governmental/private voluntary organizations in African countries in the restructuring of small- and medium-scale enterprises with special focus on Africa/Asia cooperation". The participants concluded that new development strategies were required since, as a

result of liberalization policies, the provision of direct subsidies, as provided by many countries to small-scale industries, would be substituted by services to the sector. It was also concluded that transitional measures were required in order to introduce such new development strategies to entrepreneurs. These innovative strategies and programmes would give different roles to both the government and the private sector in the development strategy. [4.156]

59. In the area of human resource development, a paper on industrial maintenance in Africa was prepared and presented to the International Conference on Culture and Development in Africa held at Washington, D.C., in April and organized jointly by the World Bank and the United Nations Educational, Scientific and Cultural Organization (UNESCO) within the framework of the World Decade for Cultural Development. At the meeting it was recognized that the general lack of maintenance in African countries was a problem and recommendations were made for a project to foster awareness regarding maintenance and to establish pilot projects to illustrate models of maintenance. The project would be executed by UNESCO in cooperation with UNIDO, ILO and the World Bank. Preparations were under way for convening a workshop on industrial maintenance management in Asia. [4.155]

60. Preparatory activities were initiated for an expert group meeting on industrial restructuring with special focus on small- and medium-scale enterprises in Central America and Belize. The meeting was scheduled to be held in May 1993 and was being organized in cooperation with the UNIDO Country Director in Central America. [4.156]

**C. INDUSTRIAL TECHNOLOGY DEVELOPMENT  
AND PROMOTION**  
(Programmes 440 and 450)

61. The Industrial Technology Promotion Division and the Industrial Technology Development Division corresponding to programmes 440 and 450 respectively were merged to form the Technology Development and Promotion Division, with effect from 1 July. Accordingly, the two subprogrammes 444 and 455 (Offices of the Directors of the two previous Divisions) were merged under the Office of the Director of the new Division which continued to carry out the relevant outputs and activities. [4.215; 4.272]

62. As mentioned in paragraph 2 above, the Office of the Director of the Division was also assigned the overall coordination for activities related to technology policy and management and techno-economic intelligence. In that context, the following activities were initiated: preparatory work was carried out in technology-policy related activities in Ethiopia, Pakistan and the

Republic of Korea; an international programme to revitalize industrial research institutions in developing countries was being developed, since many of these had been founded in the 1960s and 1970s and needed to be updated and restructured in the light of the new economic, industrial and technological environment of the 1990s; a proposal was being considered to draw up practical guidelines in that respect, based on case studies carried out in Latin America and elsewhere in 1992, and in cooperation with the International Development Research Centre of Canada.

63. While the presentation below is based on the new structure of the Division, for ease of comparison reference is made to the outputs and activities foreseen under the relevant subprogrammes in the programme and budgets, 1992-1993 (GC.4/42).

(a) Industrial and Technological Information

64. The new Industrial and Technological Information Section combines the activities of subprogrammes 441 and 451 as reported below.

Industrial and Technological Information  
(subprogramme 441)

65. The activities of the Industrial and Technological Information Bank (INTIB) were focused on strengthening further the national capabilities of Member States to provide information support and services to small- and medium-scale industries. This was achieved through expansion of the regional sub-networks in Africa, Asia and the Pacific, Eastern Europe and Latin America and the Caribbean, and by the creation of new national focal points. Technical cooperation projects were implemented to develop technology and business information systems to satisfy the needs of the private sector and to facilitate regional cooperation. A feasibility study on the establishment of an industrial technology and market information network for Sri Lanka was successfully completed. Operational frameworks were established in Brazil and Colombia to enable the integration of their computerized information systems into the regional network of Latin America and the Caribbean. Progress was also made on the development of a world-wide referral system, which will be based on the successful publication "Directory of French sources of industrial and technological information" (IPCT.115), with inputs from Austria, Brazil and Mexico. [4.179]

66. Special attention was given to the development of an energy and environment information system with financing from a special-purpose contribution of Norway to the Industrial Development Fund. A detailed survey was made of current information resources and activities as well as the key institutions already active in supporting small- and medium-scale industries and

environmental information management in order to develop their capacity to deliver appropriate energy and environment information to entrepreneurs. On the basis of its proven ability to manage and deliver industrial information to developing countries, INTIB was requested to act as focal point during the pilot phase of an environment-friendly and energy-efficient technology transfer clearing-house set up by the United States Environmental Protection Agency, Department of Energy, and the Agency for International Development, in order to provide access to this facility for small- and medium-scale industries in Europe and developing countries. The facility is proving to be a valuable resource for handling the increasing number of energy- and environment-related queries that have been received following the United Nations Conference on Environment and Development in Brazil (June). The Latin American iron and steel industry is placing increased emphasis on environmental issues. As a result, INTIB was requested to install its personal computer software for managing energy and environmental information in the offices of the Latin American Iron and Steel Institute in Chile and to train users from Argentina, Brazil and Chile. During the year, co-operation was strengthened with the United Nations Environment Programme (UNEP), in particular the Industry and Environment Programme Activity Centre in Paris, France, and the International Environment Information System (INFOTERRA) Programme Activity Centre at Nairobi, Kenya. A large number of queries were forwarded by the latter to UNIDO for processing. [4.179; 4.180]

67. A workshop on advanced information technology applications and networks integration held at Odessa, Ukraine, for staff of national focal points from 15 countries resulted in the initiation of a regional project for the development of a Euro-Asian network for exchange of technology and market information. The project is to be carried out with the support of the Institute for Advanced Systems, Moscow, and General Electric, Austria. Two Techmart (technology market) fairs<sup>3/</sup> were held, one in Zimbabwe (September) and one in India (November), to enable entrepreneurs from over 30 countries to gain direct access to alternative technologies from both industrialized and developing countries in manufacturing and agro-based industries. The information activities were coupled with technology transfer and investment services to help achieve concrete results - an approach which led to the conclusion of numerous technology transfer agreements. Catalogues containing offers of more than 3,000 technologies were distributed at the fairs to interested organizations and companies. Preparatory work started on techmart fairs to be held in 1993 in Brazil, Canada (Montreal) and Tunisia. [4.181]

68. An examination was initiated of modes of marketing and pricing information pro-

<sup>3/</sup> IDB.9/10, chap. III, para. 24.

ducts in an effort to establish a sustainable information delivery mechanism for the benefit of Member States. INTIB continued its monthly production and in-house distribution of the Environmental Awareness Bulletin. In addition, three issues of an abstract journal on industrial energy and environment were prepared under the Energy and Environment series of publications. Four issues of INTIBNet, the newsletter for INTIB networks, were produced as well as fully searchable diskette versions of the Industrial Development Abstracts. [4.180; 4.182; 4.183]

#### Industrial Technology Monitors (subprogramme 451)

69. The publication of the three major Monitors (Genetic Engineering and Biotechnology, Microelectronics, and New Materials) continued on schedule. In an effort to help defray printing and mailing costs a handling fee was charged to readers in developed countries. As forecast in the budget 1992-1993, work on the development of a database continued but a limitation on resources will be a factor in fully completing the work forecast for the biennium. [4.226; 4.227]

70. In the Technology Trends series, "Trends in informatics-related service industries in selected developed and developing countries" was published while work was under way in other areas. Work was also initiated on a biennial survey on the impact of selected new technologies on the global and industrial technological market as well as the regional and sub-regional promotion of monitoring mechanisms and capabilities, which is expected to be realized during 1993. The UNIDO Newsletter continued to appear monthly in six languages. For some years the publication has faced a dilemma: a rapidly escalating number of requests to be added to the circulation list on one hand and a zero-growth budget for printing on the other. Consequently, a freeze on the addition of new subscribers begun in 1991 continued through 1992 in order to retain zero growth, resulting in a waiting list of several thousand requests. [4.228; 4.229; 4.231]

71. Monitoring of follow-up to the Vienna Programme of Action on Science and Technology for Development 1979, as well as participation in the Administrative Committee on Coordination Task Force on Science and Technology for Development, continued during the year and a study (IPCT.148(SPEC.1)) was prepared on the contribution of biotechnology to sustainable development within the framework of the United Nations system. [4.231]

#### (b) Technology Promotion

72. The functions assigned to the new Technology Promotion Branch (Director-General's Bulletin UNIDO/DG/B.156) cover subprogrammes 443, 452, 453 and 454 as described in document GC.4/42.

#### Appropriate Technologies (subprogramme 443) [previously Basic Technologies]

73. Promotional work was primarily focused on two areas: (a) technology management capabilities and technology financing, and (b) identification, development, promotion and application of technologies appropriate to the requirements of developing countries. [4.204]

74. Within the first area, two meetings related to key issues of industrial technology management were planned for the biennium. One was held in 1992, entitled "Appropriate technologies for Central America and Panama", focusing mainly on technology management for the application and selection of appropriate technology. The other, a seminar on technology management, was scheduled for implementation in 1993 subject to the availability of extra-budgetary resources. A case study on technology management for competitiveness in Malaysia was started in 1992 and was scheduled for completion in 1993. UNIDO has had successful experience in the establishment of "industrial incubators" - facilities put at the disposal of young aspiring technologists to provide them with an infrastructure they need for developing their ideas. The incubators are often located at or attached to a university or technical college. Following the study of such an incubator in Ecuador the promotion of a new technology-based enterprise was initiated in 1992 and was expected to be completed in 1993. Two workshops on promotion and application of the International Organization for Standardization (ISO) 9000 were prepared during the year: one was held at Tokyo, Japan, in 1992, while the second was scheduled to be held at Manila, Philippines in the first half of 1993. A project was launched for the establishment of a work unit on technology management at COLCIENCIAS (Fondo Colombiano de Investigaciones Cientificas y Proyectos Especiales "Francisco José de Caldas"). A guide to sources of financing for technology in Latin America was under preparation and by the end of the year information was already available on some 30 institutions. A seminar/workshop for the development of a plan of action for science and technology for the Caribbean, held in Saint Lucia under the auspices of the Caribbean Council for Science and Technology, was co-sponsored and co-served by the Appropriate Technologies Unit. A final formulation mission for a technology extension service for the members of the Organization of Eastern Caribbean States and Belize was finalized and the resulting main project was expected to start in 1993. A "technology incubator" at Berisso, Argentina, was being promoted through a project whose second phase was approved for special-purpose donor financing. The creation of an appropriate technology centre in Guinea was under way and a consultant was to be fielded in early 1993. [4.205; 4.206]

75. Within the area of identification, development, promotion and application of

technologies suitable for conditions in developing countries, 1992 saw the completion of the programme for evaluation and promotion of successful and feasible technologies in the field of biomass gasification. Activities aimed at identifying technologies developed in a developing country, and which are suitable for other developing countries, were pursued in Brazil and were also expected to start in India. An assessment mission to identify technologies available and suitable for promotion was also undertaken in China, where a national consultant was under recruitment at the end of the year to prepare detailed information on such technologies for dissemination. With regard to technology missions, one project in Sri Lanka was started in 1992 with expected completion in 1993, while another, which had been planned for Bolivia, was reformulated into a project for the development of local technologies and was expected to become operational in 1993. Programmes for the rational use of energy resources in the steel and textile industries were carried out in Indonesia and Malaysia and yielded the publication of handy manuals on energy conservation. An expert hired under the IDDA short-term advisory services (STAS) programme was fielded to identify local technologies for promotion in Lesotho while another made an assessment of existing technological capacities and capabilities in Zambia and Zimbabwe as part of an integrated industrial sector programme. Mechanisms for promoting local technologies, inventions and innovations in Burkina Faso were put in place by a consultant provided under STAS. [4.207; 4.208]

76. Preparatory work was also carried out on the following projects and programmes: (a) a seminar on technology management scheduled for the first half of 1993; (b) a programme on promotion of standardization and quality control in Indonesia; (c) a programme for the rational use of energy-saving technologies in the pulp/paper and glass industries in the Philippines and Thailand; and (d) a programme on appropriate technologies in Central America. [4.205; 4.207]

#### Informatics (subprogramme 452)

77. The activities of the Informatics Unit relating to the development of the telecommunications industry 4/ in developing countries were extended. A workshop for Asia and Pacific region representatives from the telecommunications industry, held in connection with "Electronics '92" - an

electronics and telecommunications fair - at New Delhi from 24 to 27 September, was attended by 71 participants from 12 countries. The workshop contributed to the promotion of enterprise-to-enterprise cooperation by bringing together industrialists, entrepreneurs and their associations in the telecommunications and feeder industries along with network operators, and by facilitating negotiations in joint ventures, transfer of technology, training, testing and standardization. Prior to the workshop, an inventory was prepared on testing, certification and standardization centres for telecommunications equipment for countries in the Asia and Pacific region. [4.238]

78. In cooperation with the International Telecommunications Union, implementation of a project was considered for the assessment of capacities and capabilities for the manufacture of telecommunications equipment in Africa. The collection of information on a regional scale related to conditions for the indigenous production of telecommunications equipment was being undertaken by an international consultant. Advisory services were provided to the African Institute for Higher Technical Training and Research, in Kenya, regarding the establishment of an electronics and communications centre. The UNIDO Workshop for African and Arab Country Representatives from the Telecommunications Industry, held in India in 1990 5/ recommended the promotion of a roving exhibition of Indian telecommunications and electronics equipment and applications in African countries. A preparatory mission to selected African countries was undertaken to facilitate the organization of such a roving exhibition in 1993. [4.238]

79. At the request of the Pan African Union of Science and Technology, a project was prepared to assist in the establishment of a software application programme for promoting computer applications for small- and medium-scale industries. The first phase of the regional programme on cooperation in informatics and microelectronics in Latin America and the Caribbean 6/ was completed successfully, and the second phase, which was approved by UNDP, was under implementation (see chap. III, para. 109). An expert mission was undertaken to Hong Kong and Thailand to ascertain priorities of software applications to industry and to propose a programme for that purpose. Further support was given to Trinidad and Tobago for the development of the software industry. The ongoing project on the subject 7/ was revised at the request of the Government implementing agency, the National Institute of Higher Education, Research

5/ IDB.8/10, chap. III, para. 21.

6/ Ibid.; IDB.9/10, chap. III, para. 16.

7/ IDB.8/10, chap. III, para. 21.

4/ Ibid., para. 17.

Science and Technology, to give emphasis to training. At the request of UNDP, the Informatics Unit is also backstopping a project for assistance in software production for the Dominican Republic. [4.238; 4.239]

80. UNIDO support was requested by Saudi Arabia for assistance in the establishment of permanent training facilities for upgrading integrated circuit design in the Arab region and a project document was prepared accordingly. Preparations were also under way for the holding of a training course in integrated circuit design for participants from the Arab region, to be held at Trieste, Italy, in the first quarter of 1993. [4.239]

81. A project was prepared that aims at supporting private sector participation in the growth of the informatics industry in Mauritius through the establishment of an "informatics incubator" centre for new enterprises. A project was also drawn up for assistance in the development of micro-electronics applications in the Asia and Africa regions. A study to develop the industry decision support system and determine its applicability was undertaken in order to assist developing countries with this type of software application. [4.241]

#### Biotechnology and Genetic Engineering (subprogramme 453)

82. The Biotechnology and Genetic Engineering Unit continued to be actively involved in the establishment and programmes of the International Centre for Genetic Engineering and Biotechnology (ICGEB). The required number of ratifications having been reached, a plenary meeting was convened notifying the United Nations Depository of the entry into force of the statutes. Following that meeting the Centre was expected to become autonomous in mid-1993. However, UNIDO will be responsible for the execution of the ICGEB project during a transitional period (not exceeding two years) during which the responsibilities and assets will be transferred to the new autonomous entity. The Centre expanded its training programmes to include pre-doctoral short- and long-term research fellowships. A total of 12 training courses were conducted for the benefit of 235 scientists and researchers from 28 countries. Cooperation was strengthened with affiliated centres (which increased to 17 during 1992) by the holding of training programmes at some of these centres and collaborative research projects, as well as by interactions at a forum of scientists, held at Trieste. An agreement between an Indian company and ICGEB for licensing a diagnostic kit for human immunodeficiency virus (HIV) viral infection was concluded and a patent was filed in Austria for a component of a hepatitis vaccine. A meeting was held jointly by ICGEB and UNIDO in cooperation with Central and Eastern European countries. [4.249]

83. In November/December a UNIDO training workshop on bioinformatics was held at Pustchino, Russian Federation, to promote networking and link-up to both ICGEB and the UNIDO database on biosafety which was being established. A programme was initiated on biotechnology for the benefit of developing countries to facilitate research advances for improvements to traditional lactic acid fermentation processes through linkages and networking arrangements of existing national and regional programmes. A study in that respect was completed and proposals for a network of focal points were being formulated in Africa, with IDDA funds, as well as in Asia through an extension of a UNIDO project in the Republic of Korea, and through already funded research groups in China, Japan and Thailand. The financing of a project for cultures collection in Brazil was under consideration. A study was completed on the formulation of network arrangements among groups working in the area of bioconversion of waste materials to food, including fungi and other useful products. A programme in marine biotechnology was progressing, in cooperation with the New Technologies Unit (subprogramme 454), and plans were being discussed for holding regional meetings in Asia and in the Caribbean to set priorities in marine biotechnology for developing countries. [4.250]

84. The concept of enhancing opportunities and training programmes leading to the commercialization of biotechnology processes and products in South-East Asia is being promoted. A study was thus conducted jointly with Carl Duisberg KG, of Vienna, on the commercialization of biotechnological research in the Philippines and Thailand, in preparation for the development of a training programme to facilitate transferring research results from universities to industry. A proposal was prepared for Zimbabwe to strengthen training in bioprocessing and biotechnology. Proposals on biomedical instrumentation for Algeria and Zimbabwe were also prepared and their financing was under consideration. In collaboration with the Investment Promotion Service in Paris, a plan was formulated to promote technological cooperation between French and Indian biotechnology companies. [4.251]

85. Greater understanding and appreciation of biotechnology development and applications were promoted based on previous UNIDO initiatives in biosafety and its Voluntary Code of Conduct for the Release of Organisms into the Environment. The Code, as well as an annotated version of it, were widely disseminated. The harmonization of biosafety guidelines to facilitate the safe application of biotechnology was promoted, and biosafety issues crucial to the production and trade of biotechnology products were discussed in meetings organized in cooperation with ICGEB. Implementation began of a project aimed at strengthening UNIDO services for the provision of information and advice on biosafety issues

to developing countries. The services are to include a referral system for national regulatory authorities, information on national and international biosafety standards, guidelines and regulations, an inventory of biosafety information resources, as well as in-house expertise to provide advice to developing countries on the drafting of national regulations and the setting up of institutional biosafety committees. A proposal to establish a joint UNDP/UNEP/ UNIDO training programme in biosafety for Thailand was also under preparation. Projects dealing with the microbial enhancement of oil recovery and with bioremediation were formulated for Algeria, Indonesia, Kuwait and Mexico and a proposal for a global network was being promoted. [4.252]

#### New Technologies (subprogramme 454)

86. The activities of the subprogramme were carried out by the New Technologies Unit. In the area of marine industrial technology, work continued on the promotion of a Caribbean regional centre and a preparatory project for the establishment of this centre was being considered for funding. A study was undertaken with regard to aspects of marine industrial technology for the Baltic region, to be utilized in the development of a programme on regional cooperation. Preparations were made for a workshop on marine industrial technology for the development of marine non-living resources and its industrial applications, to be held at Madras, India. [4.263]

87. The activities related to the international centre for science and high technology 8/ were expanded during 1992 and included a number of training programmes as well as research activities. Discussions were held between the Government of Italy and UNIDO on a comprehensive agreement covering the establishment of the centre that would form the basis of the legislation to be put forward by Italy for ensuring regular financial contributions to it. [4.259]

88. In the area of new materials, one study was prepared on the experience of both developed and developing countries on the utilization of new materials for housing, and three country studies were completed on the application of advanced materials in different fields. Further promotional work was done towards the establishment of an international materials assessment and applications centre. In that connection, discussions were held with organizations interested in Brazil, China and Mexico. A feasibility study on the establishment of an international centre on materials evaluation technology was prepared based on the results of a mission of experts

to nine countries (funded by extrabudgetary resources). The main activities of such a centre would be to serve the basic needs of the region in promoting cooperative research and development programmes and networking institutions in the field of materials evaluation technology. A joint UNIDO/Arab School of Science and Technology workshop on composites and advanced materials development and technology, held in February at Damascus, Syrian Arab Republic, led to the preparation of a project document for a feasibility study on the establishment of an Arab centre for multidisciplinary materials research. At a joint UNIDO/Economic and Social Commission for Western Asia (ESCWA) regional workshop on new and advanced materials and their impact on the economy of the Middle Eastern countries, also held at Damascus, Syrian Arab Republic, in September, recommendations were made for the formulation of a regional plan of action for the promotion of regional cooperation in the field of materials technologies, to be implemented jointly by UNIDO and ESCWA. Preparatory-phase projects to establish regional networks of materials technology centres were formulated for Asia and were also included in the IDDA programme and the Regional Cooperation Programme for the Industrial Recovery of Latin America and the Caribbean for implementation in 1993. [4.260; 4.261; 4.262]

89. Concerning new technologies in the manufacturing sector, studies begun in the previous biennium were completed on Brazil, India and Mexico. The results of these studies, which deal with the role of institutions and technology in the strengthening of manufacturing sectors, were reviewed with representatives of the countries concerned. Possible follow-up activities were being considered, and discussions were being held with the National Institute for Industrial Engineering (NITIE), Bombay, India, on the possible joint UNIDO/NITIE development of internationally-oriented activities. In addition, preparatory activities for the establishment of an international centre for the advancement of manufacturing technologies proceeded, with discussions taking place with representatives of both developing and developed countries. A series of technology seminars and consulting visits to leather products manufacturers was under preparation and were scheduled to take place in sub-Saharan Africa in early 1993. [4.264]

90. A workshop on small hydropower policy, together with a Technical Advisory Group meeting of the Regional Network for Small Hydropower Asia/Pacific, was held at Kuala Lumpur, Malaysia, from 23 to 27 November. One of the major items under discussion during that meeting was how to expand the Regional Network and its Regional Centre at Hangzhou, China, to an international scale of activities. [4.265]

91. Programmes on new energy technologies included solar energy, hydrogen fuel and small hydropower. In accordance with the

8/ IDB.9/10, chap. III, para. 20.

recommendations of the Meeting of the Consultative Group on Solar Energy Research and Application (COSERA) 9/ held in December 1991 at Marrakesh, Morocco, a proposal to establish a centre for applications of solar energy was put forward by the Western Australia state government; this proposal was the subject of detailed discussion at another COSERA meeting, held at Perth, Australia, from 7 to 10 December. The meeting welcomed the offer of Australia. Further discussions with Australian authorities were envisaged for early 1993 on the modalities of promoting the establishment of such a centre. Based on an earlier methodological study on "The photovoltaic market in developing countries", 10/ a project to assess the commercial prospects of solar energy applications in Morocco was planned for implementation early in 1993. Similarly, a project for the introduction and promotion of photovoltaic electricity technology in Sierra Leone was prepared and was being considered for funding. [4.265]

92. The year saw considerable activity in the programme component for hydrogen energy. Working in conjunction with the Asia and Pacific Centre for Transfer of Technology of the Economic and Social Commission for Asia and the Pacific, a meeting was held at Kathmandu, Nepal, in July, at which several leading experts in hydrogen energy technology were brought together. At the meeting, methods were explored for applying hydrogen as an efficient and clean energy alternative, highlighting the opportunities for and needs of the developing world. A follow-up meeting was held in December at Havana, Cuba, for the countries of Latin America and the Caribbean. With the potential of hydrogen for the developing world in mind, the Government of Turkey offered to sponsor a feasibility study on the establishment in Turkey of an international centre for hydrogen energy technology. The study would be undertaken early in 1993. [4.265]

(c) Technology Policy, Acquisition and Negotiation  
(subprogramme 442)

93. In the field of technology acquisition and negotiation, 1992 saw the continued intensification of activities aimed at stimulating and facilitating the flow of technology from developed to developing countries and responding to specific needs relating to capability building, including training and institutional assistance.

94. The highlights of the year included the development of the concept of an expert system on contract drafting and negotiation as an innovative way of helping negotiators to achieve faster and more effective negotiations. After extensive research and

serious deliberation with experts on technology transfer negotiations and software specialists, a proposal for an expert system consisting of a draft contract generator and a complementary support system was formulated. Another highlight was the major boost given to the UNIDO programme for BOT (build-operate-transfer). Research commenced on the BOT scheme as an alternative arrangement for implementing large industrial and infrastructural projects, and contacts with both national and international organizations currently involved with such projects were established. A programme of action was launched that will lead to increased awareness and utilization of the full potential of the BOT scheme as a mechanism for transfer of technology and strengthening national competence. The preparation of a set of guidelines on the development, negotiation and contracting of BOT projects was initiated with a meeting of a group of BOT experts in Vienna in December. Also of special note was the further strengthening of the relationship between UNIDO and the Licensing Executives Society (LES), as manifested by the participation of UNIDO in the LES International Conference held at Barcelona, Spain, in June, by the high-level LES delegation visit to UNIDO Headquarters, also in June, and by the resulting agreement to cooperate in certain programmes of common interest. One of these programmes includes the joint UNIDO-LES review of the draft of a manual on technology transfer negotiations, which is expected to lead to a consensus on the issues surrounding technology transfer and licensing, particularly between developing and developed country practitioners. Such cooperative undertakings consequently give wider international acceptance to the UNIDO programmes in the field of technology transfer and enhance the perspectives of UNIDO technical cooperation with the private sector. [4.192; 4.193]

95. The association with LES has also positively influenced the maintenance of the Technological Information Exchange System (TIES) network of cooperation among developing countries, which was evolving according to the new circumstances of the international environment. TIES continued to be an active source of information on current data and materials on technology transfer transactions, particularly at the national level, and also a means for increasing dissemination of information on UNIDO activities and its assistance to developing countries in the field of technology acquisition. The TIES Newsletter and the TIES Watch Information Note series provided useful instruments for delivering information worldwide on events and developments related to technology transfer. [4.191; 4.192]

96. Regional TIES activities, specifically African TIES, received another boost with the approval of the African-TIES project under the programme for the Second IDOA. The project, which has given strong focus

9/ Ibid., para. 21.

10/ IDB.8/10, chap. III, para. 26.

to human resource development activities in technology transfer negotiation, was approaching the concept of technology sharing and exchange among countries in the region. An inventory of locally developed technologies in Africa was initiated under the project. In response to the growing demand for its training programmes on technology acquisition and negotiation, UNIDO organized courses on technology transfer negotiation and contracting. For example, three workshops were held during the year at Brno, Czechoslovakia in March (in conjunction with the UNIDO Technology Days in Czechoslovakia), at Zanzibar, United Republic of Tanzania in September, and at Kathmandu, Nepal in November (in conjunction with an investment promotion forum). In addition, workshop modules and advisory services on technology contracting were provided to the UNIDO Technar's that were held at Bulawayo, Zimbabwe in September and at New Delhi, India in November. These educational activities are greatly interlinked with the development of the manual on technology transfer negotiations and

with the subsequent development of a UNIDO course on technology transfer negotiations. [4.192; 4.193; 4.194; 4.195]

97. Capability building through institutional assistance continued to be implemented, both via the large-scale project for the establishment of a national system for technology acquisition, indigenization and monitoring in the United Republic of Tanzania <sup>11/</sup> and a similar large-scale project for strengthening the National Office for Technology Acquisition and Promotion in Nigeria. <sup>11/</sup> Under the IDOA programme, institutional assistance was also implemented in Senegal with a view to building up self-sufficient advisory and training capabilities in the field of technology transfer operations, not only to serve the national needs of Senegal but also to be utilized at the subregional level. [4.192]

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<sup>11/</sup> IDB.9/10, chap. III, para. 28.



Table 4

Significant performance indicators: Development and  
promotion of industrial technology

(Programmes 440 and 450)

	Planned 1992-1993	Achieved 1992
<b>A. Studies/Publications</b>		
<u>Industrial and Technological Information (441)</u>		
Industrial Development Abstracts	8	4 <u>a/</u>
Sectoral dossiers	10-15	-
Directories	<u>b/</u>	5
Guides to information sources	<u>b/</u>	1
INTIB (quarterly newsletter)	8	4
INECA Journal (quarterly newsletter) (renamed Energy and Environment Series)	8	3
News releases	<u>b/</u>	8
<u>Industrial Technology Monitors (451)</u>		
Monitors, quarterly	32	13
UNIDO Newsletter	24	12
Technology Trends series	<u>b/</u>	-
Biennial survey on impact of new technology	1	-
Studies on endogenous capability building and other subjects within purview of ACC Task Force on Science and Technology for Development and the Vienna Programme of Action on Science and Technology for Development	<u>b/</u>	1
<u>Appropriate Technologies</u> <u>[previously Basic Technologies] (443)</u>		
Guidelines for technology management in small-scale industries	1	-
Country case studies:		
(a) Innovation policy and management of technological change (countries to be selected)	2	-
(b) Technology policy (Ethiopia and Jamaica) (see also 455 below)	2	1
(c) Proposals for R and D cooperation in selected subject areas between developed and developing countries	1	-
(d) Technology management and competitiveness (Malaysia)	1	-
(e) Promoting new technology-based enterprises: industrial incubator in Ecuador	1	-

	Planned 1992-1993	Achieved 1992
Studies on promotion of locally developed technologies (Brazil, China and India)	3	-
<u>Informatics (452)</u>		
Publications on software production and computer/microelectronics applications in developing countries	b/	1
Documents focusing on the creation of subregional networks for the design, tropicalization and manufacture of selected items of telecommunications equipment (for meeting in Latin America)	b/	-
<u>Biotechnology and Genetic Engineering (453)</u>		
Proposals for cooperation in bio-informatics, culture collection, etc. in Africa, Asia, and the Middle East	b/	2
Studies/proposals for the industrial application of research results, including research-industry cooperation and enterprise-level cooperation	b/	1
<u>New Technologies (454)</u>		
Country and regional reports for two regional workshops to establish networking arrangements and identify areas for cooperative programmes in selected new materials	b/	4
Proposals, based on experts' reports, for international cooperation in research, development and application of composite materials and superconductive materials	2	-
Preparatory studies on establishment and operation of two regional centres for marine industrial technology	b/	1
Joint technology development programmes for above regional centres	2	1
Studies on marine biotechnology and equipment for monitoring the marine environment	b/	-
Studies on advanced manufacturing technology	b/	3
<u>Technology Policy, Acquisition and Negotiation (442)</u>		
Guidelines/studies on technology transfer and negotiation trends and new forms of technology business:		
(i) World-wide trends and issues, especially related to new and emerging technologies	1	1
(ii) Practices and trends in negotiating technology transfer agreements in field of biotechnology	1	-
(iii) BOT contracts as alternative to technology transfer	1	-
(iv) Practices and trends in negotiation and export of technologies from developing countries	1	-

	Planned 1992-1993	Achieved 1992
TIES Newsletter (quarterly)	8	3
TIES Watch Information Notes	b/	12
Regulatory rules and practices governing technology transfer in developing countries (monographs)	4	1
UNIDO course on technology transfer negotiations (manual)	1	-
<u>Office of the Director (455)</u>		
Country case study: Technology policy - Pakistan [originally under subprogramme 443]	1	1
<b>B. <u>Expert group and other meetings</u></b>		
<u>Industrial and Technological Information (441)</u>		
TECHMARTS (technology markets)	2	2
Training of trainers for network operations and database use	b/	1
<u>Appropriate Technologies (previous Basic Technologies) (443)</u>		
Seminars/workshops related to key issues of industrial technology management	b/	1
<u>Informatics (452)</u>		
Preparatory technical meeting and technological cooperation conference on the telecommunications industry in Latin American region	1	-
Regional seminar-cum-training workshop comprising "informatics incubators", promoting services related to informatics and information industries and the application of microprocessor control in such areas as energy conservation	1	-
Consultative Group on Informatics Technology for Development	1	-
<u>Biotechnology and Genetic Engineering (453)</u>		
Participation in two meetings of the UNIDO/WHO/UNEP/FAO working group promoting a global code of conduct for the release of genetically engineered micro-organisms and plant materials	2	1
Regional meeting on biosafety guidelines and code of conduct	1	-
<u>New Technologies (454)</u>		
Regional workshops to establish networking arrangements and identify areas for cooperative programmes in selected new materials	2	1
Regional meetings on establishment and operation of two regional centres for marine industrial technology	2	-
Meeting of Consultative Group on Solar Energy Research and Application (08)	1	1

	Planned 1992-1993	Achieved 1992
<b><u>Technology Policy, Acquisition and Negotiation (442)</u></b>		
Selected heads of technology transfer offices (TIES meeting)	1	-
Expert group meeting on acquisition and negotiation of new and emerging technologies, and new forms of technology business	1	-
Human resource development on technology acquisition and negotiation (seminars/workshops)	<u>b/</u>	2

a/ Issued in diskette form only.

b/ Not specified in the programme and budgets, 1992-1993.

## CHAPTER V. INDUSTRIAL OPERATIONS (500)

1. The main thrust of this major programme remained the delivery of technical services at all stages of the technical assistance project cycle in support of the Organization's technical cooperation programmes and projects. Technical cooperation activities continued to concentrate on the implementation of projects in the five priority areas outlined in the medium-term plan, 1990-1995 (GC.3/17): human resource development, development and transfer of technology, industrial rehabilitation, small- and medium-scale industries, and environment and energy; as well as on the three elements common to industrial development, including the thematic programmes: mobilization of financial resources for industrial development, economic and technical cooperation among developing countries (ECDC/TCDC) and subregional industrial cooperation, and the integration of women in industrial development. Great emphasis continued to be placed on the application of environment-friendly technologies in all technical cooperation projects.

2. 1992 was the first year of the transitional period towards the new United Nations Development Programme (UNDP) successor arrangements. As the new operational modalities had not yet reached their full momentum, there was a considerable reduction in UNDP-funded projects. In spite of all expectations, this decrease of UNDP funding resources was not offset by the relatively small increase of other sources of funds. Thus, the largest portion of technical cooperation activities continued to be financed from UNDP resources (indicative planning figure (IPF), Special Industrial Services (SIS) programme, Special Programme Resources and Special Measures). However, the total expenditure from UNDP resources decreased from \$76.3 million in 1991 to \$57.4 million in 1992, and the share within the overall implementation decreased from 51.7 per cent to 42.3 per cent. Overall expenditure on technical cooperation activities decreased from \$147.5 million in 1991 to \$135.6 million in 1992.

3. The total of 1,745 projects implemented or under implementation in 1992 included 206 valued at \$1 million or more, 617 valued between \$150,000 and \$1 million and 922 valued at less than \$150,000. Table 8 of the statistical annex shows the overall technical cooperation expenditure by geographical area, source of funds and project component.

4. The value of project delivery by UNIDO in Africa amounted to \$46.5 million (including \$12.6 million for African Arab States). There was a decrease of \$5.9 million or 11.3 per cent (a decrease of \$2.7 million or 17.6 per cent for African

Arab States) over the corresponding figure for 1991 as a result of the decrease of funds made available in 1992 from UNDP.

5. The value of projects implemented in the Arab States amounted to \$15.7 million (including the African Arab States). This constituted a decrease of \$3.6 million or 18.7 per cent as compared to the figures for 1991. Despite a slightly lower delivery under trust funds, from \$10.4 million in 1991 to \$10.2 million in 1992, the overall lower level of implementation was mainly the result of a decrease of funds made available from UNDP in 1992.

6. The value of projects executed in Asia and the Pacific amounted to \$38.7 million, a decrease of \$5.6 million or 12.6 per cent as compared to 1991. The lower level of implementation was mainly attributable to a decrease in financial resources made available from UNDP and by the increase of Government-executed projects in the region.

7. The value of technical cooperation delivery to Europe amounted to \$5.3 million, an increase of \$0.4 million or 8.2 per cent as compared to the implementation in 1991.

8. The value of projects executed in Latin America and the Caribbean amounted to \$11.5 million, an increase of \$1.7 million or 17.3 per cent as compared to the figures for 1991.

9. The implementation of global and inter-regional projects and programmes decreased from \$32.1 million in 1991 to \$30.5 million in 1992. However, the overall share of this type of project in the total technical cooperation delivery of UNIDO increased slightly from 21.8 per cent in 1991 to 22.5 per cent in 1992.

10. The number of technical cooperation projects implemented or under implementation in 1992 and the regional distribution of technical cooperation delivery, by field of activity, are shown in tables 1 and 2 below. A further breakdown of the number of projects in progress and outputs completed in 1992, by programme element, is shown in table 3. It should be borne in mind that even though projects may be mentioned under specific "activity" headings (e.g. engineering industries), their implementation may cut across organizational lines to include the economic and technical expertise of not only the entire Department of Industrial Operations, but of UNIDO as a whole. Thus, individual branches of the Department provide inputs to, and benefit from, the activities of the Department for Industrial Promotion, Consultations and Technology and the Department for Programme and Project Development.

11. Within the Department of Industrial Operations, the Office of the Deputy Director-General (programme 510) was responsible for the management of the major programme, in support of the overall objective of assisting the developing countries in the acceleration of their industrial development by promoting cooperation at global, regional, national as well as sectoral level. It thus guided and managed all the technical cooperation activities of the three component programmes (520, 530 and 540) and ensured harmonious and fruitful coordination and cooperation among those programmes and between those and other programmes in the Organization (subprogramme 514). [5.38]

12. In addition to providing for the overall direction and management of the major programme (subprogramme 514), the Office of the Deputy Director-General also supervised the three component subprogrammes 511, 512 and 513. A re-organization of the work within the Office of the Deputy Director-General was undertaken towards optimum utilization of resources and resulted in the merger of two of its component units into one: the Integrated Projects and Central Monitoring Section, thus combining subprogrammes 512 and 513.

#### Interregional Advisers (subprogramme 511)

13. With the objective of promoting industry and ensuring its efficient operation in developing countries, six interregional advisers provided advice in six specific fields (organic and inorganic chemical processes; agricultural machinery; agro-based industries - with emphasis on textile industries; computer application in metallurgical processes; pre-investment; and rehabilitation). The interregional advisers assisted in identifying technical cooperation needs of the developing countries and in developing UNIDO programmes and projects in response to those needs, provided technical support to UNIDO staff and enhanced the technical capability of UNIDO, particularly during the technical cooperation delivery by individual Branches in the Department of Industrial Operations.

#### Integrated Projects and Central Monitoring (subprogrammes 512 and 513)

14. As an integral part of the Office of the Deputy Director-General, the Integrated Projects and Central Monitoring Section was concerned with the coordination and preparation of substantive documentation related to the activities of the major programme and to the Organization's technical cooperation programmes and projects. Further, through its services, support continued to be provided for the overall management of the Department, including preparation, collection, analysis and dissemination of data on the implementation

of the Organization's technical cooperation programmes and projects, and the organization at department level of meetings with representatives of Governments, non-governmental organizations, the private sector and UNDP and UNIDO field offices. [5.30]

15. The Section also assisted the management of the Department in the coordination of ISS-1 activities governed by the UNDP successor arrangements and those related to the Second Industrial Development Decade for Africa. In the course of 1992, concerted efforts were also made towards the preparation of projects falling in the following areas: (a) integrated (multi-disciplinary/multi-sectoral) technical cooperation; (b) energy and environment; and (c) computer systems. [5.22]

16. Examples of activities of an integrated (multi-disciplinary) nature are the preparation of a project for industrial restructuring in Hungary and the identification and formulation of technical cooperation projects with regional organizations such as the Arab School of Science and Technology (ASST), the All Arab Railways Union and the Arab Union of Cement and Building Materials. In the field of composites and advanced materials a joint UNIDO/ASST workshop was held at Damascus, Syrian Arab Republic. The Section continued to facilitate the coordination of energy- and environment-related activities within the Department of Industrial Operations, as well as with such organizations as the Canadian International Development Agency and the Southern African Development Community. Within the framework of those activities, a number of proposals for technical cooperation projects were prepared and discussed. Activities related to environment included the participation in the Athens Conference on Europe and the Mediterranean in the New World Situation held at Athens in April as well as the formulation of a technical cooperation project aiming to assess the possibility of establishing a Mediterranean and Black Sea international network for clean technology transfer. Activities in the field of new and renewable sources of energy included the identification of technical cooperation projects on wind energy, and on thermal solar and photovoltaics, both in cooperation with ASST. Activities in the field of computerized systems included: a joint UNIDO/ASST workshop of information systems and technologies held at Damascus, Syrian Arab Republic; formulation of a preparatory assistance project for the provision of advisory services to the General Union of Chambers of Commerce, Industry and Agriculture for Arab Countries in carrying out a diagnostic study for the setting up of a trade information centre under the auspices of the Union; formulation of a project to appraise the technical and financial possibilities of establishing a centre for software development, training and marketing in the Syrian Arab Republic; elaboration of project proposals for

setting up regional industrial databanks for ASST; and provision of technical advice to other units within the Department of Industrial Operations on the application of computer systems in technical cooperation projects. [5.22]

#### A. INDUSTRIAL OPERATIONS TECHNOLOGY (Programme 520)

17. The Industrial Operations Technology Division was responsible for this programme, which provides the specialized technical component of the major programme. The Division continued its endeavours to improve self-sufficiency and sustain industrial development in developing countries through the transfer of know-how and technology in the agro-based, chemical, metallurgical and engineering industries (subprogrammes 521, 522, 523 and 524). The overall management of the activities of these component subprogrammes was ensured by the Office of the Director (subprogramme 525). That Office provided support and guidance to the activities of the subprogrammes and identified areas of technical cooperation and other activities of potential interest to the programme. To strengthen those functions, in May 1991 the Industrial Technologies Support Unit (see below) was established within the Office of the Director. 1/ The Office of the Director continued to play a central role towards the achievement of quantitative and qualitative targets through integration of the activities of the Branches within the Division and coordination of these activities with other units within the Organization and with external organizations and institutions on matters and programmes relevant to the Division. [5.105]

18. The activities of the Office of the Director have been oriented and carried out in accordance with the new trends, placing special emphasis on the closely related areas of energy and environment. Thus a comprehensive regional programme for energy and environment for the Southern African Development Community (SADC) countries, as well as a large-scale programme for energy were being followed up after missions to Angola and the United Republic of Tanzania. Projects were being developed which emanated from the meetings of the Executive Committee of the Interim Multilateral Fund for the Implementation of the Montreal Protocol at Montreal, Ottawa and Copenhagen; as an aftermath to the United Nations Conference on Environment and Development and the follow-up to Agenda 21; and to the Athens Conference on Europe and the Mediterranean in the New World Situation. The Athens Conference

agreed with the initiative of UNIDO to elaborate on the possibility of establishing, *inter alia*, a Mediterranean and Black Sea international network for clean technology transfer (see para. 16 above). The Office actively participated in the work of the UNIDO Task Force on Environment and Development for the drafting of the UNIDO environment programme and the UNIDO work programme on ozone depleting substances. [5.105]

19. Similarly, in the field of energy, the Office represented UNIDO at the Vienna Four group (International Atomic Energy Agency, International Institute for Applied Systems Analysis, Organization of the Petroleum Exporting Countries, UNIDO) which, *inter alia*, submitted a joint paper to the 15th Congress of the World energy council. In addition, the Office prepared a draft UNIDO energy programme (IOB.9/9). The services of a senior adviser on energy matters made available by the Office of Fossil Energy, United States Department of Energy, enabled UNIDO's participation and the presentation of its programmes, activities and proposals at international conferences sponsored by the United Nations Centre for Science and Technology for Development (UNCSTD) (Environmentally Sound Coal Technologies, Madras, India; and Environmentally Sound Coal Technologies, Policy Issues and Options, Berlin, Germany); at the International Conference on the Clean and Efficient Use of Coal in Eastern Europe, Budapest, Hungary; and Energy and Environment: Transitions in Eastern Europe, Prague, former Czechoslovakia. Coal-related programmes were developed for China and India, which include multiple projects to be implemented with UNIDO assistance. An energy programme paper was prepared to document, integrate and focus the numerous energy-related activities of UNIDO for presentation to the Industrial Development Board. Advisory meetings were held with representatives of Member States regarding energy policy and planning development, and conceptual documents were drafted to identify issues and formulate programmes. Assistance was provided in identifying and quantifying energy-related aspects of technical support services at the programme level (ISS-1) activities for 1992-1993 and technical support services at the project level (ISS-2) were provided for two projects in China. [5.105]

20. The World Conference on Health Emergencies in Technological Disasters provided an opportunity to present the activities of UNIDO, e.g., its work in the field of chemical safety, participation in the work of the International Pesticide Manufacturers' Association in the development of Integrated International Safety Guidelines for Pesticide Formulation in Developing Countries, and the possibility for UNIDO to co-sponsor a meeting on chemical safety in New Delhi scheduled for 1993 and to become a member of the International Programme on Chemical Safety. [5.105]

1/ IOB.9/10, chap. II, paras. 154-160.

Table I

Number of technical cooperation projects under implementation in 1992 by region,  
by field of activity and size of project

		Size of project							
		(i).....<\$150,000							
		(ii) \$150,000 - \$1,000,000							
		(iii).....>\$1,000,000							
		Africa	Arab States a/	Asia and the Pacific	Europe	Latin America and Caribbean	Global and interregional	Subtotal	Total
Agro-based Industries	(i)	17	7 (5)	9	6	21	5	60	
	(ii)	28	4 (4)	21	1	13	4	67	
	(iii)	7	2 (2)	17	0	2	0	26	153
Chemical Industries	(i)	21	15 (7)	35	16	23	18	121	
	(ii)	30	12 (10)	50	11	5	6	104	
	(iii)	17	12 (12)	39	0	1	2	59	284
Metallurgical Industries	(i)	5	0 (0)	17	10	12	5	49	
	(ii)	7	1 (1)	20	3	2	2	34	
	(iii)	3	2 (2)	11	0	2	0	16	99
Engineering Industries	(i)	15	6 (4)	21	12	9	14	73	
	(ii)	25	7 (7)	34	9	4	0	72	
	(iii)	8	2 (1)	24	0	1	0	34	179
Industrial Strategies and Policies	(i)	23	3 (3)	6	3	10	6	48	
	(ii)	21	5 (1)	8	1	6	0	40	
	(iii)	6	0 (0)	1	0	2	0	9	97

a/ Figures in parentheses relate to African Arab States and are already included under Africa.



Table 1 (continued)

Size of project  
 (i).....<\$150,000  
 (ii) \$150,000 - \$1,000,000  
 (iii).....>\$1,000,000

		Africa	Arab States a/	Asia and the Pacific	Europe	Latin America and Caribbean	Global and interregional	Subtotal	Total
Institutional Infrastructure	(i)	31	16 (8)	14	9	24	11	97	
	(ii)	45	17 (11)	25	6	14	5	101	
	(iii)	10	3 (0)	7	0	3	2	25	223
Industrial Management/ Rehabilitation	(i)	7	3 (2)	5	6	1	0	20	
	(ii)	10	4 (3)	6	7	3	0	27	
	(iii)	5	1 (1)	5	1	2	0	13	60
Industrial Human Resource Development	(i)	14	2 (0)	10	3	1	58	88	
	(ii)	5	2 (2)	1	3	0	6	15	
	(iii)	0	0 (0)	0	0	0	0	0	103
Other b/	(i)	85	26 (7)	64	23	49	126	366	
	(ii)	42	11 (8)	30	4	15	63	157	
	(iii)	4	3 (1)	1	0	1	16	24	547
Total number of technical cooperation projects under implementation in 1992	(i)	218	79 (36)	181	87	150	243	922	
	(ii)	213	63 (47)	195	45	62	86	617	
	(iii)	60	25 (19)	105	1	14	20	206	1,745

a/ Figures in parentheses relate to African Arab States and are already included under Africa.

b/ See statistical annex, table 6, for breakdown.

Table 2

Regional distribution of technical cooperation expenditure, by field of activity

(Percentage)

	Africa	Arab States a/	Asia and the Pacific	Europe	Latin America and Caribbean	Global and interregional	Total
Agro-based Industries	42.1	5.4 (4.9)	36.5	1.4	16.9	2.6	100
Chemical Industries	51.1	36.5 (35.9)	37.9	2.9	2.0	5.5	100
Metallurgical Industries	21.2	4.0 (4.0)	67.1	5.9	3.6	2.2	100
Engineering Industries	38.5	2.8 (2.8)	54.1	3.0	3.2	1.2	100
Industrial Strategies and Policies	60.0	9.2 (0.4)	15.3	0.9	12.2	2.8	100
Institutional Infrastructure	43.2	10.3 (2.8)	28.5	4.7	14.0	2.1	100
Industrial Management and Rehabilitation	52.3	2.9 (1.7)	12.2	16.5	17.8	0.0	100
Industrial Human Resource Development	37.2	4.8 (2.5)	13.7	10.7	4.4	31.7	100
Other b/	12.9	3.7 (1.2)	10.8	3.4	10.0	60.4	100
<b>Total</b>	<b>34.3</b>	<b>11.6</b> <b>(9.2)</b>	<b>28.5</b>	<b>3.9</b>	<b>8.4</b>	<b>22.5</b>	<b>100</b>

a/ Figures in parentheses relate to African Arab States and are already included under Africa.

b/ See statistical annex, table 6, for breakdown.

Table 3

Number of technical cooperation projects by programme/subprogramme

Programme/ subprogramme	(1)				(2)	(3)
	Projects in progress at 31.12.1992				Projects approved in 1992 a/	Projects completed in 1992
	Intercountry	Interregional/ global	Country	b/		
<b>Industrial Operations Technology:</b>						
521 Agro-based Industries (including wood)	18	5	84	(46)	52	37
522 Chemical Industries	21	20	177	(53)	68	81
523 Metallurgical Industries	5	2	45	(23)	25	43
524 Engineering Industries	11	3	102	(37)	31	51
<b>Total 520 (IO/T)</b>	<b>55</b>	<b>30</b>	<b>408</b>	<b>(76)</b>	<b>176</b>	<b>212</b>
<b>Industrial Institutions and Services:</b>						
531 Industrial Strategies and Policies	15	5	46	(38)	21	19
532 Institutional Infrastructure	11	10	147	(75)	39	40
533 Industrial Management and Rehabilitation (excl. wood)	3	0	45	(23)	12	10
<b>Total 530 (IO/IIS)</b>	<b>29</b>	<b>15</b>	<b>238</b>	<b>(99)</b>	<b>72</b>	<b>69</b>
<b>Industrial Operations Support:</b>						
542 Industrial Human Resource Development	6	13	14	(13)	56	60
543 Project Personnel Recruitment and Administration Service	0	1	0	(0)	0	0
<b>Total 540 (IO/OS)</b>	<b>6</b>	<b>14</b>	<b>14</b>	<b>(13)</b>	<b>56</b>	<b>60</b>
<b>Total 500 D I O (excluding Feasibility Studies)</b>	<b>90</b>	<b>59</b>	<b>660</b>	<b>(113)</b>	<b>304</b>	<b>341</b>

Note: Multifund projects: each project number (each fund source) is counted as a separate project.

a/ All the projects included in column (2) are not necessarily reflected in column (1), particularly in the case of approvals made late in the year.

b/ Numbers in parentheses indicate the number of countries with country projects in progress.

Table 4  
Significant performance indicators: Industrial Operations  
 (Programme 500)

	Projects in progress		New project approvals		Project completions	
	Programmed <u>a/</u> (1.01.92)	Achieved <u>b/</u> (31.12.91)	Programmed <u>a/</u> (1992-1993)	Approved (1992)	Programmed <u>a/</u> (1992-1993)	Completed (1992)
<b>Subprogramme</b>						
521 Agro-industries	149 <u>c/</u>	102 <u>c/</u>	107 <u>c/</u>	52	90 <u>c/</u>	37
522 Chemical Industries	247	258	163	68	127	81
523 Metallurgical Industries	100	85	50	25	55	43
524 Engineering Industries	173	149	62	31	78	51
531 Industrial Strategies and Policies	45	79	35	21	30	19
532 Institutional Infrastructure	<u>d/</u>	178	<u>d/</u>	39	<u>d/</u>	40
533 Industrial Management and Rehabilitation	102 <u>e/</u>	74 <u>e/</u>	78 <u>e/</u>	12	68 <u>e/</u>	10
542 Industrial Human Resource Development	18	<u>68</u>	5	<u>56</u>	10	<u>60</u>
Total		993		304		341
<b>Appointments</b>						
		Programmed 1992-1993 <u>a/</u>	Implemented 1992			
543 Project Personnel Recruitment and Administration		4,600-5,000 <u>f/</u> 300-350 <u>g/</u>	2,323 <u>f/</u> 80 <u>g/</u>			

a/ Source: Programme and budgets, 1992-1993 (GC.4/42).

b/ Source: Annual Report, 1991, chap. II, table 6.

c/ Does not include projects related to wood processing, which were transferred from subprogramme 533 in July 1992.

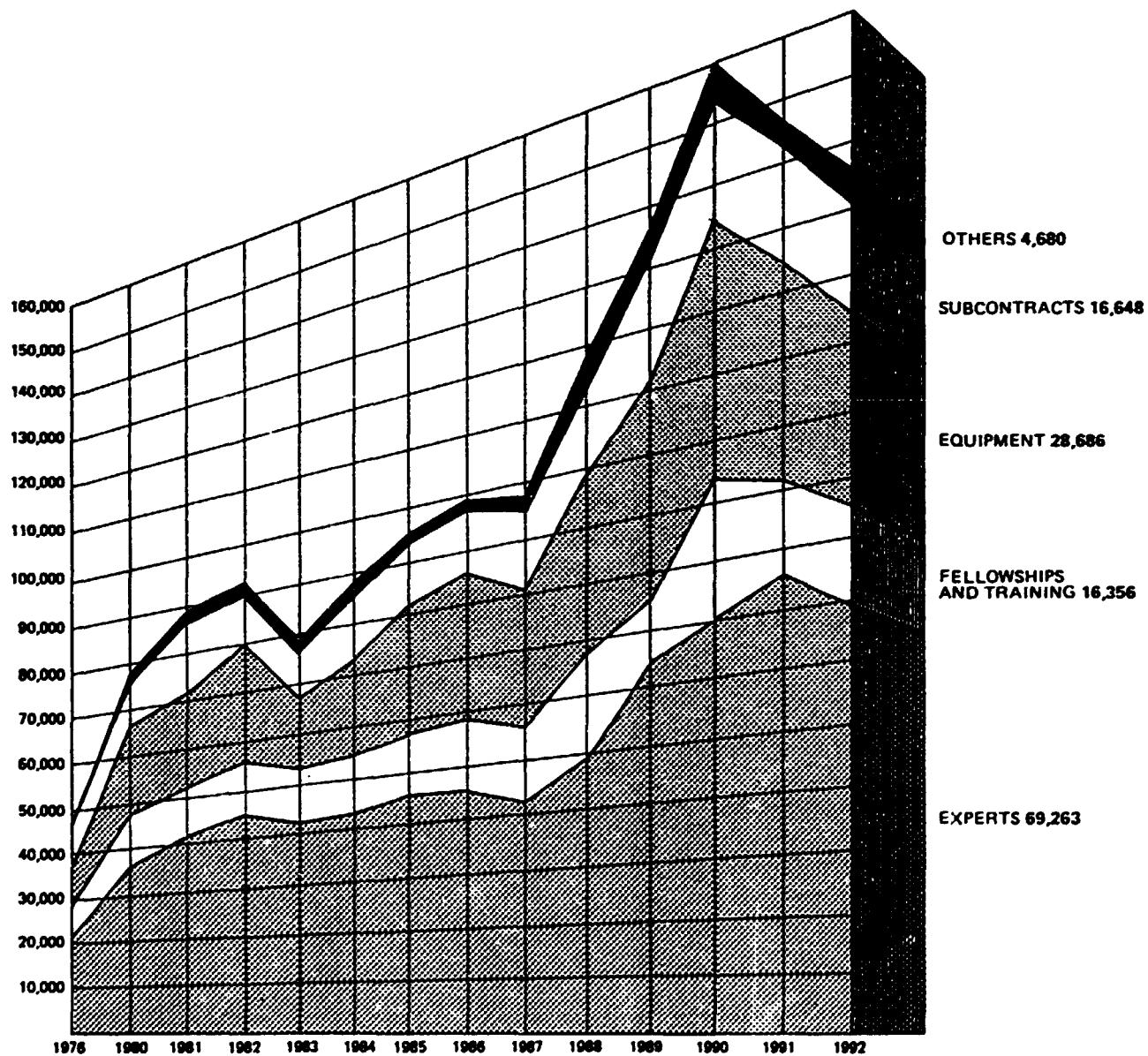
d/ Some 260-300 projects were foreseen to be under delivery during the biennium (i.e. projects in progress at the start of the biennium and new projects approved during the biennium) (cf. GC.4/42, para. 5.136).

e/ Includes projects related to wood processing, which were transferred to subprogramme 521 in July 1992.

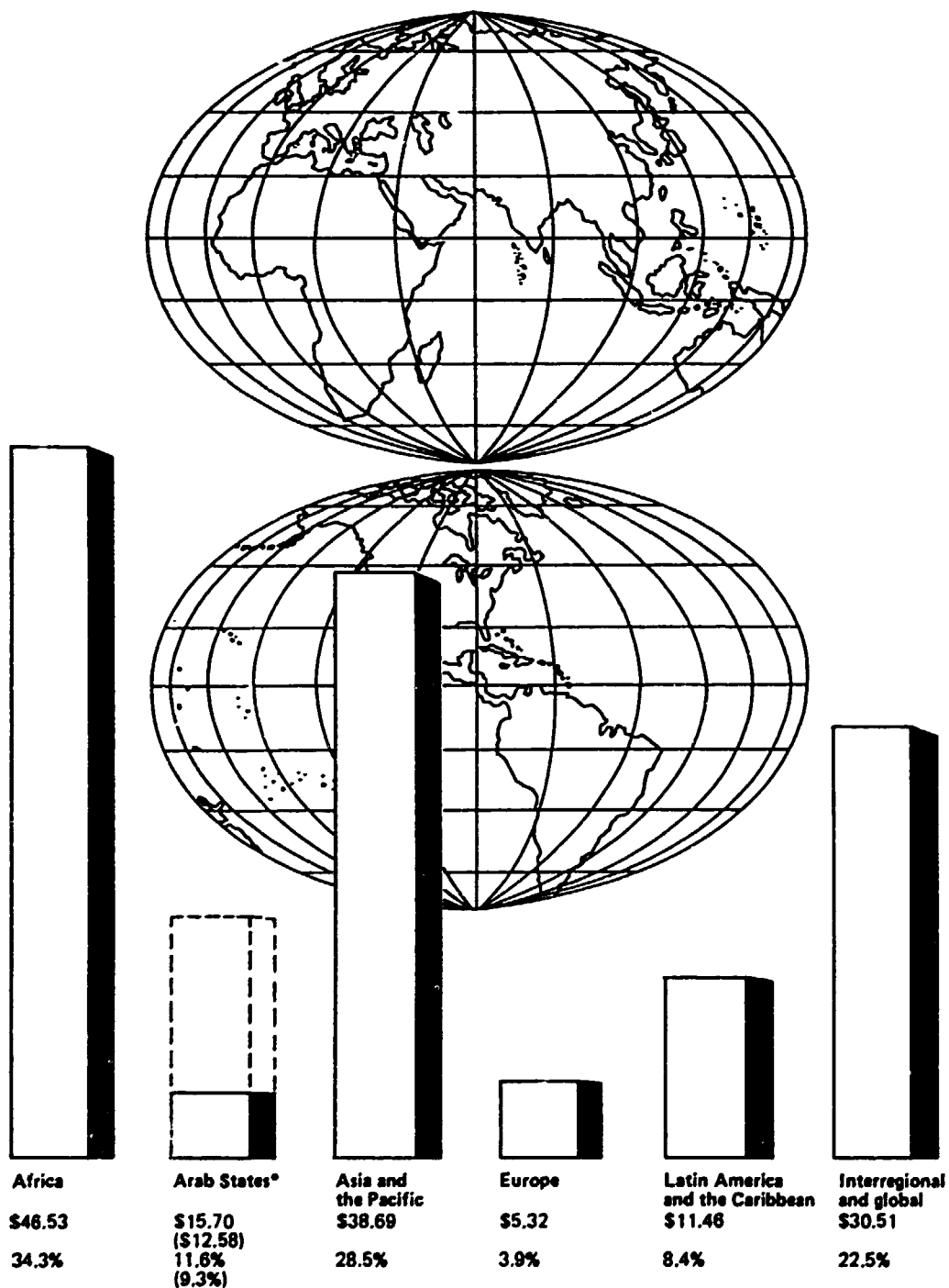
f/ Number of experts.

g/ Number of local project support staff.

**TECHNICAL COOPERATION PROJECT EXPENDITURES  
BY PROJECT COMPONENT, 1976-1992**  
(In thousands of US dollars)

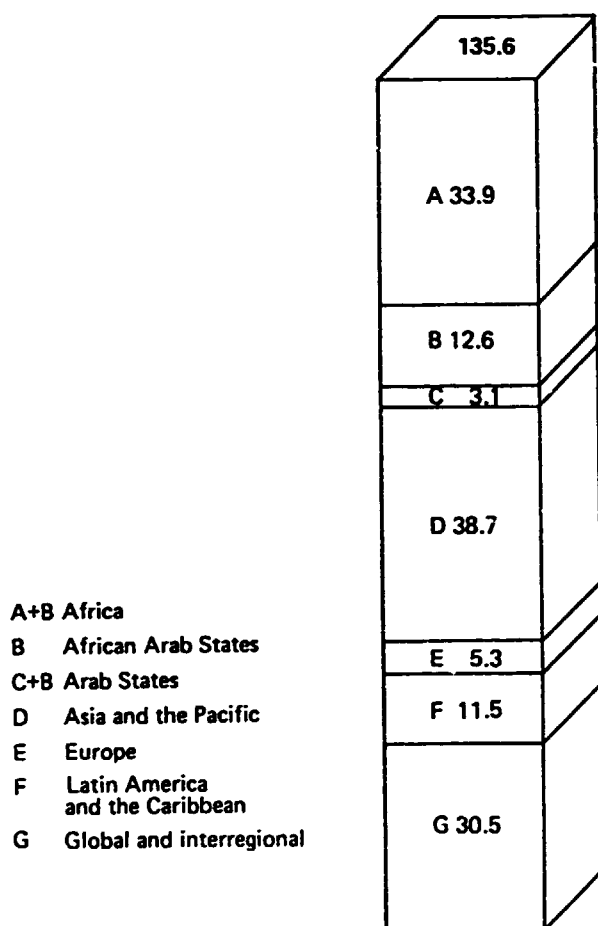


**TECHNICAL COOPERATION DELIVERED BY UNIDO IN 1992**  
 (By geographical area, in millions of US dollars and percentages)

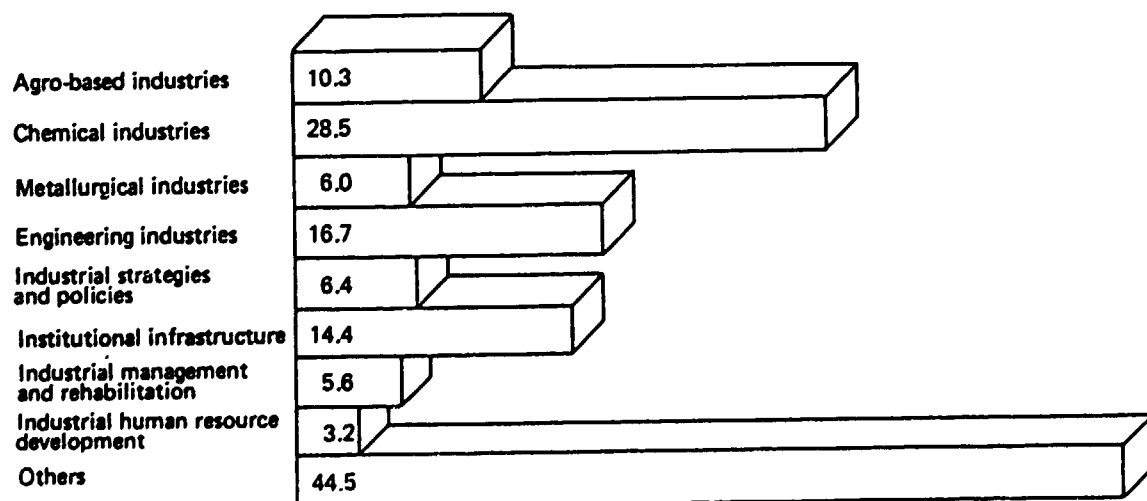


\*Broken lines and figures in parentheses give an indication of the African Arab States that are also included under the column "Africa".

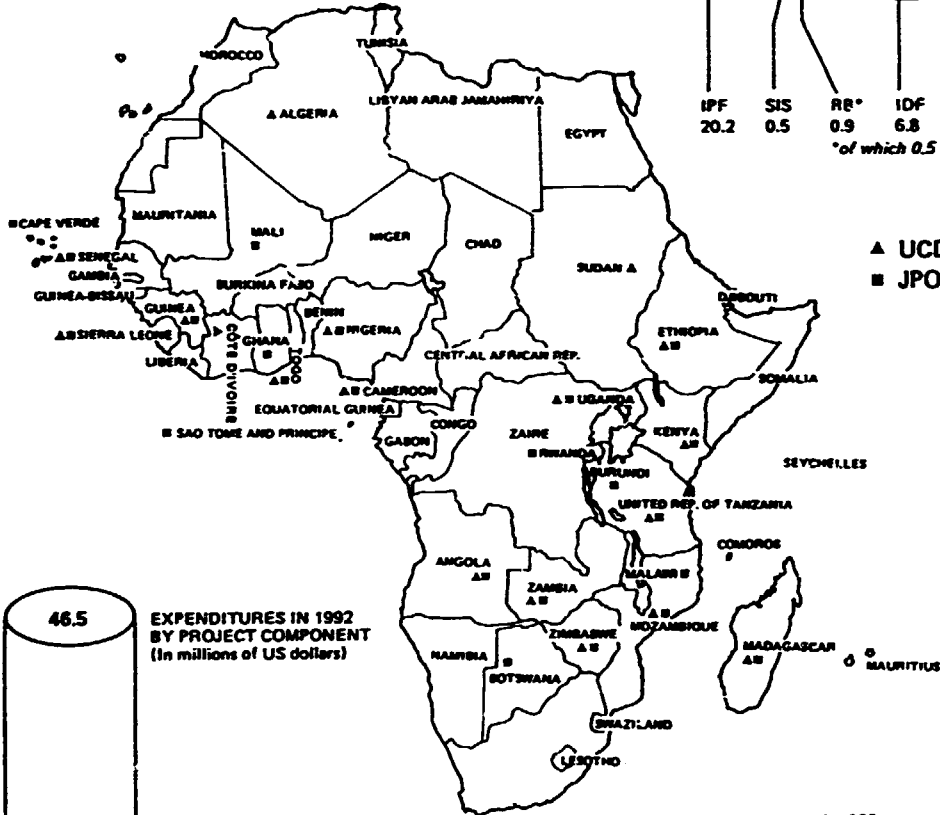
**TECHNICAL COOPERATION DELIVERED BY UNIDO IN 1992**  
(In millions of US dollars)



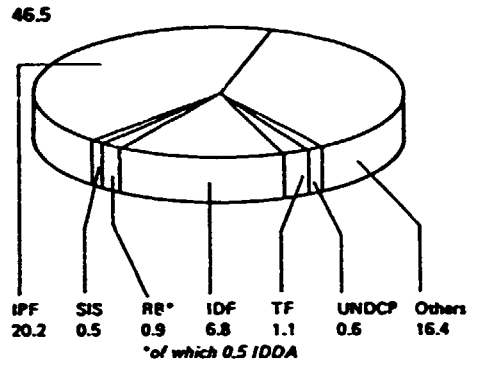
**DISTRIBUTION OF TECHNICAL COOPERATION ACTIVITIES IN 1992**  
(In millions of US dollars)



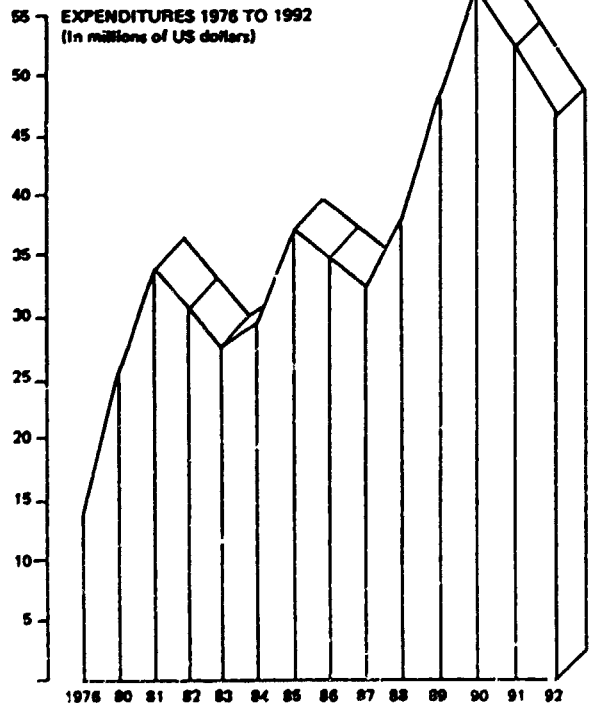
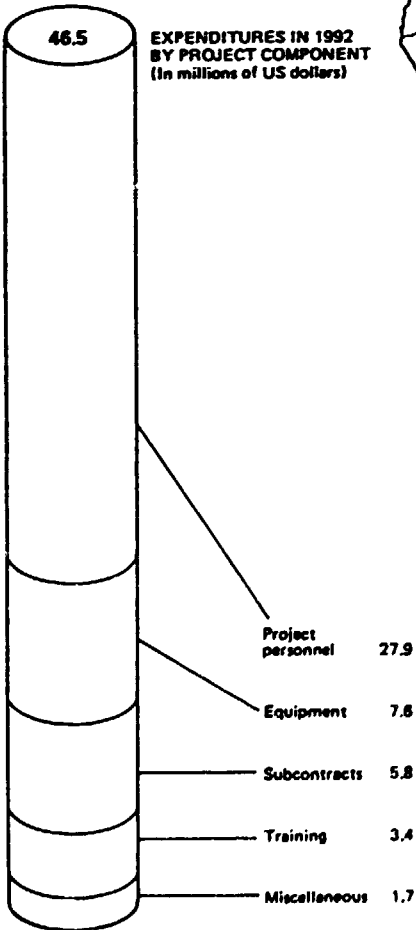
# AFRICA



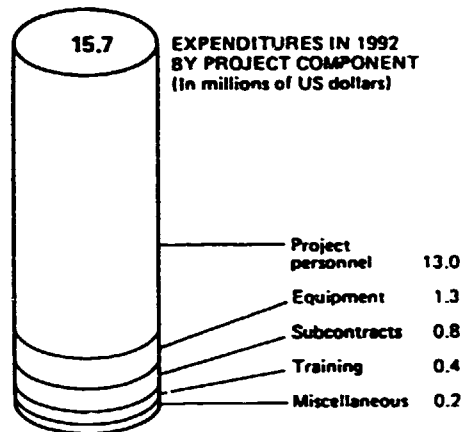
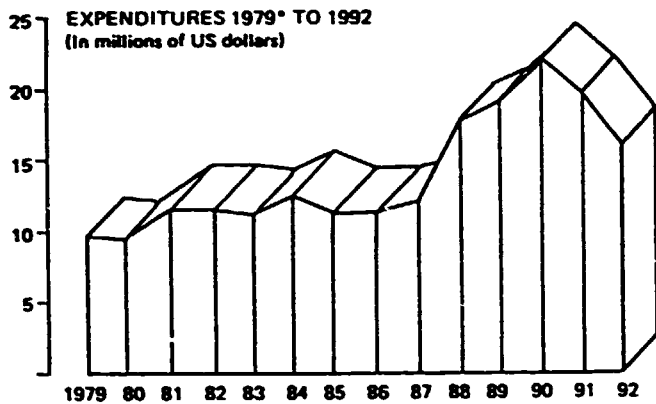
EXPENDITURES IN 1992 BY SOURCE OF FUNDS  
(In millions of US dollars)



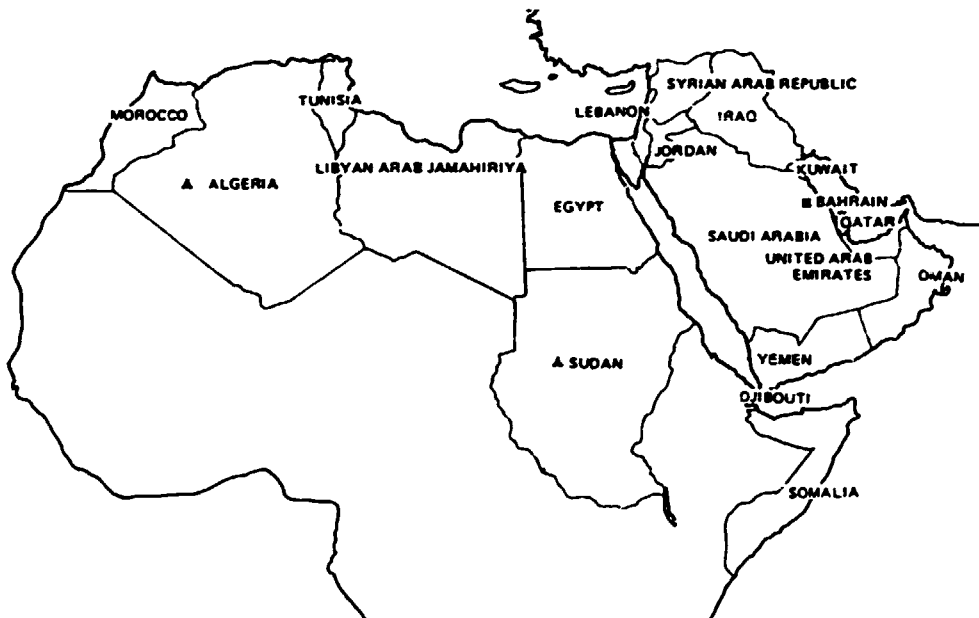
▲ UCD duty station  
■ JPO duty station





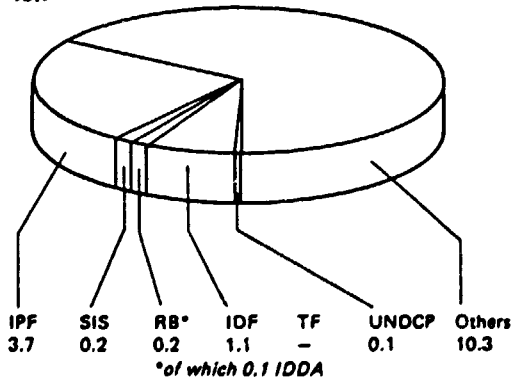


\*For previous years, expenditures related to Arab States were reported partly under Africa and partly under Europe and Western Asia.



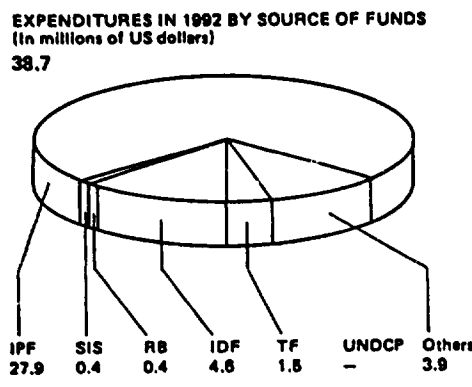
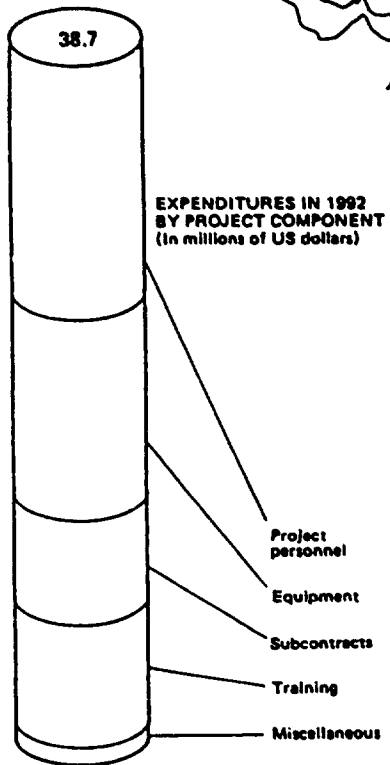
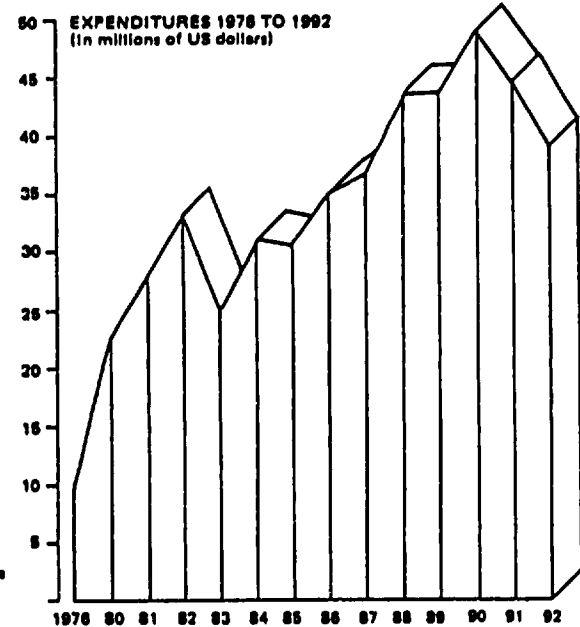
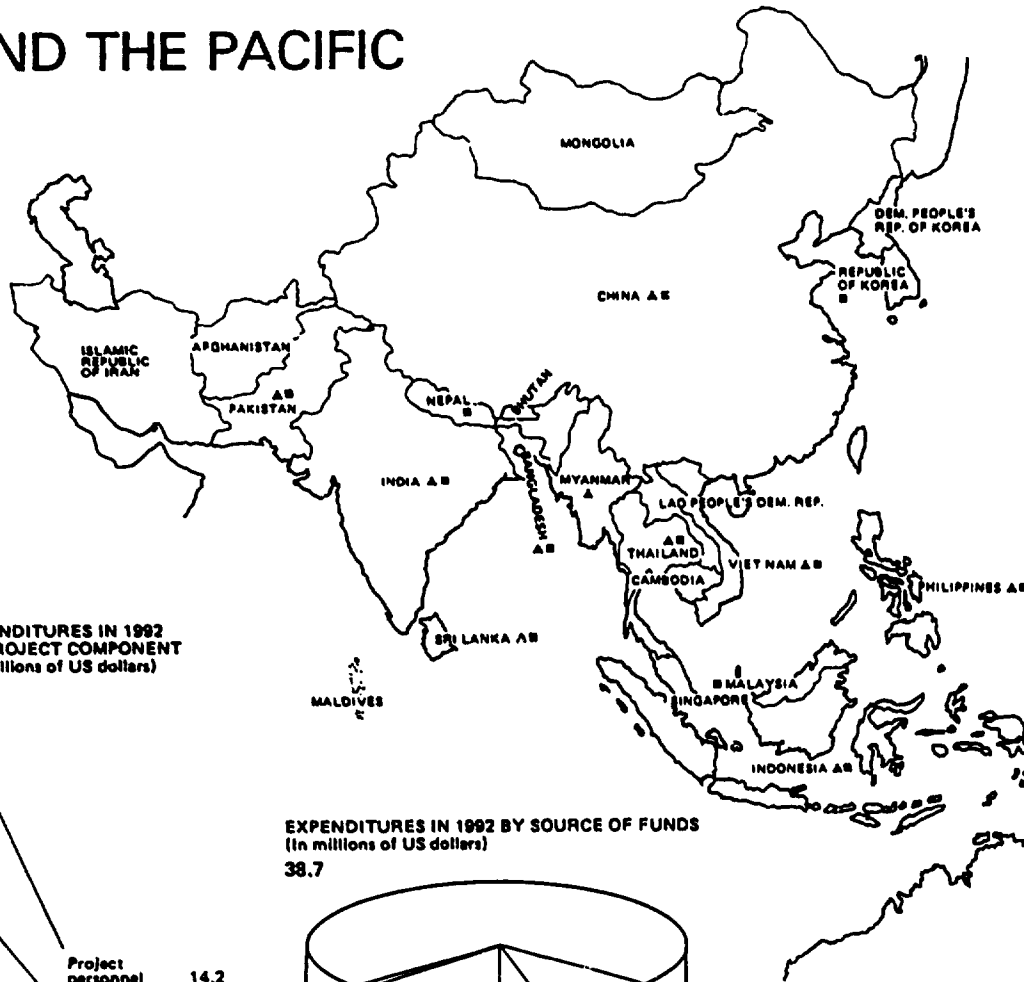
## ARAB STATES

**EXPENDITURES IN 1992 BY SOURCE OF FUNDS**  
(In millions of US dollars)



▲ UCD duty station  
■ JPO duty station

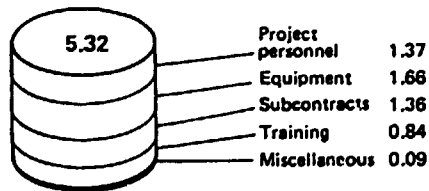
# ASIA AND THE PACIFIC



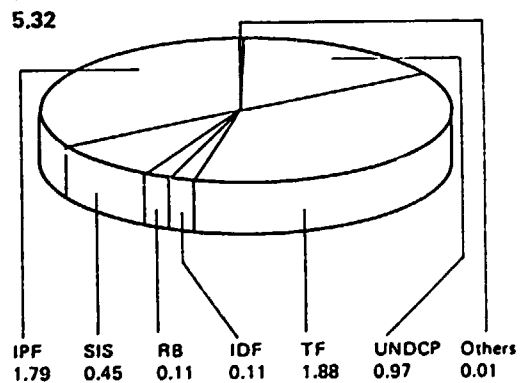
▲ UCD duty station  
■ JPO duty station



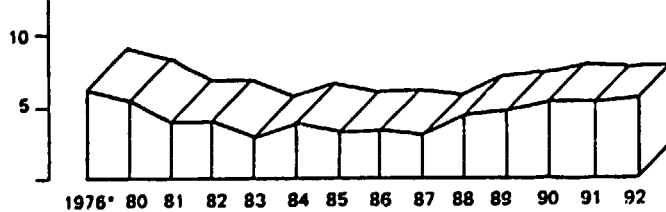
**EXPENDITURES IN 1992 BY PROJECT COMPONENT**  
(In millions of US dollars)



**EXPENDITURES IN 1992 BY SOURCE OF FUNDS**  
(In millions of US dollars)

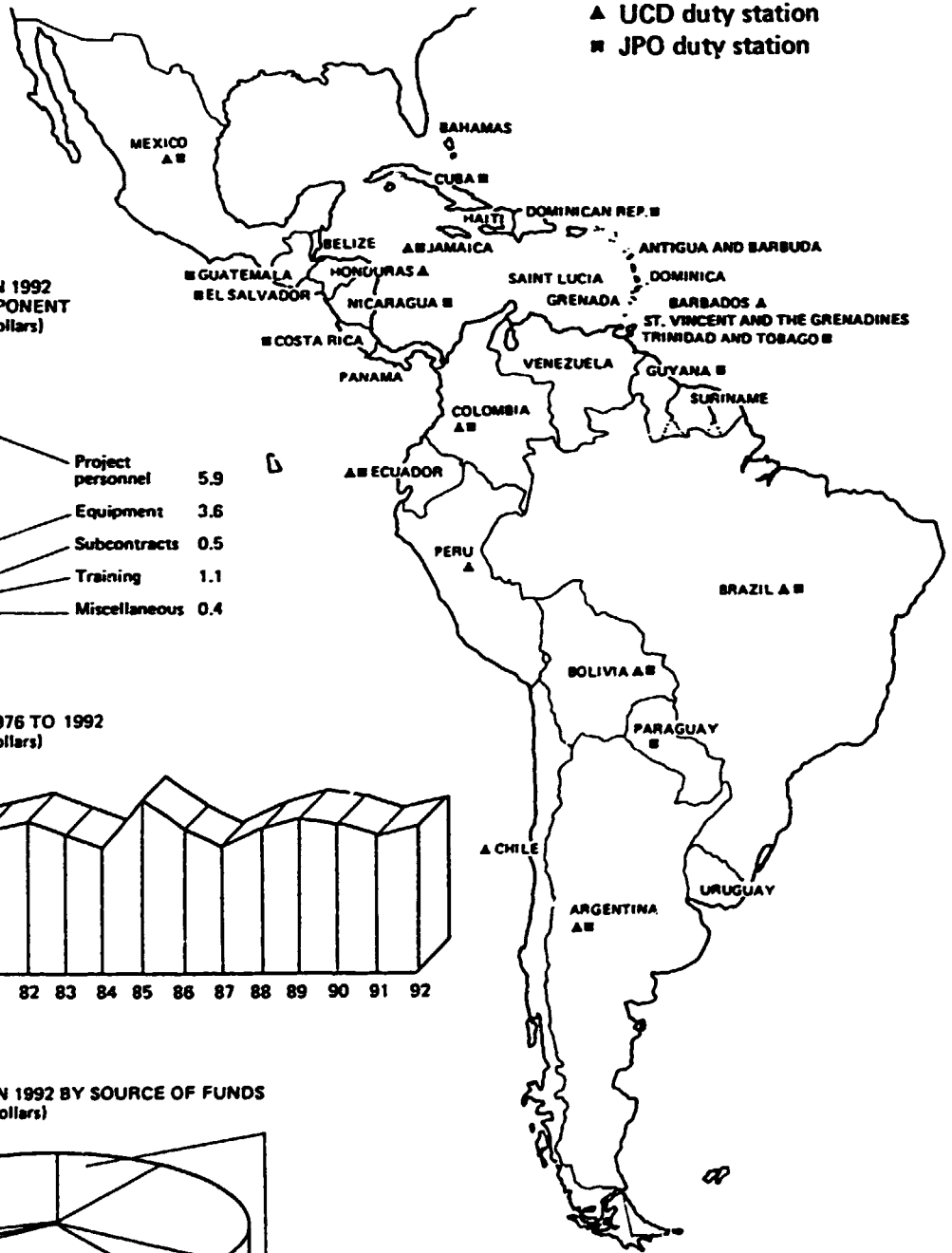


**EXPENDITURES 1976 TO 1992**  
(In millions of US dollars)

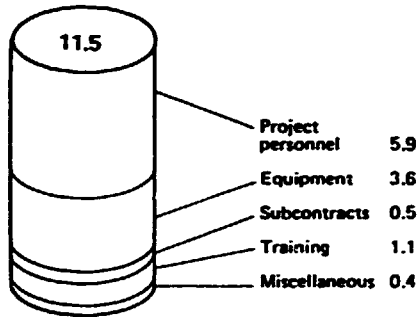


\*The figure for 1976 combines Europe and Western Asia and includes 12 countries which, since 1979, are listed under Arab States.

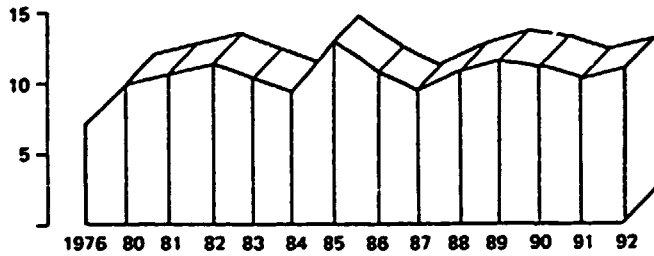
# LATIN AMERICA AND THE CARIBBEAN



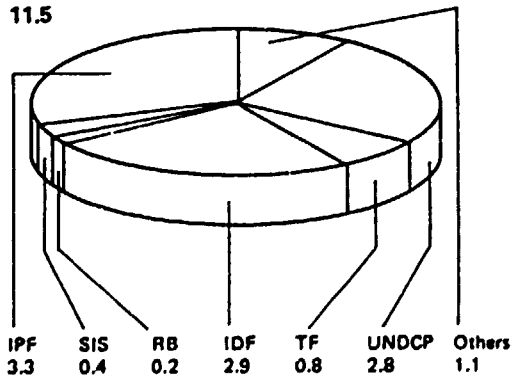
**EXPENDITURES IN 1992 BY PROJECT COMPONENT**  
(In millions of US dollars)



**EXPENDITURES 1976 TO 1992**  
(In millions of US dollars)



**EXPENDITURES IN 1992 BY SOURCE OF FUNDS**  
(In millions of US dollars)



### Industrial Technologies Support (subprogramme 525)

21. The Industrial Technologies Support Unit provided support to the operational programme of the Industrial Operations Technology Division in areas which cut across and are applicable to the mainstream activities of the Division.

22. Through financial resources provided to UNIDO for the first time by the Global Environmental Facility (GEF) of the World Bank, UNEP and UNDP, a large-scale project was approved for a total of \$6 million. The main objective of the project is to determine types and levels of urban and industrial pollution entering the Large Marine Ecosystem of the Gulf of Guinea and to investigate the impact of that pollution on biodiversity and the ecosystem functioning, particularly in coastal areas and lagoons, wetlands and other critical habitats in the five participating countries - Benin, Cameroon, Côte d'Ivoire, Ghana and Nigeria. The project would also determine how best to mitigate pollution stress on those ecosystems both technically and institutionally. The preparatory assistance mission for this project was undertaken during the first half of the year on which basis a full-fledged project document was prepared and finalized; implementation of the project was to start in early 1993. Interest in this project was shown by some donor countries. In particular, the Government of France participated in the funding of the preparatory assistance and was considering making an additional contribution (over and above the \$6 million already allocated by GEF) to finance some specific activities relating to the setting-up and establishment of demonstration sites in the five participating developing countries. The project was expected to provide decision makers in participating developing countries with optimal solutions which would illustrate and define the benefits that the respective Governments and industries can derive from appropriate measures to ensure the long-term environmental sustainability of the Large Marine Ecosystem.

23. A new project on hazardous waste management based on environmentally sound technology with special reference to the tanneries sector was approved by UNDP for implementation in the Syrian Arab Republic with a value of \$402,000. The project aims mainly at assisting the Government and the leather industry to minimize and control the potential toxic effect and hazardous chemicals/wastes both on the environment and the population through the development of necessary technological capabilities for introducing low- and non-waste technologies into the production process of chemicals and through the elaboration of management methods of hazardous waste treatment, disposal and recycling, with special emphasis on the tanneries sector. Implementation of the preparatory assistance phase for that project was under way. As a follow-up of the 1991 joint

UNIDO/UNDP Workshop on Environmental Considerations and Waste Recycling in the Chemical, Metallurgical and Engineering Industries in the Asia and Pacific region, a mission took place with the main objective of developing specific technical assistance projects in the chemical industry in areas identified by participants in the workshop. Other pipeline projects in the area of environment were under active consideration for financing through special-purpose contributions by donor countries or through funding from other multilateral financing sources, such as the World Bank, UNEP and UNDP. In that context, as a result of an agreement signed with the Multilateral Fund for the Implementation of the Montreal Protocol, UNIDO became the fourth implementing agency of the Fund for technical co-operation projects aimed at assisting developing countries' signatories of the Protocol in phasing out ozone depleting substances in refrigeration, solvent and foam. The Fund approved a work programme for UNIDO totalling \$4.55 million for the year 1993.

24. In the area of new materials, a project on transfer of technology of flat displays from the Russian Federation to an industrial enterprise in the Republic of Korea was implemented. The project dealt mainly with transfer of high technology in the area of production of flat displays for personal computers and included development of prototypes for flat displays. It was funded through a trust fund agreement provided by the industrial enterprise concerned in the Republic of Korea. A similar project was approved dealing with research and development institutions in the Russian Federation and one industrial enterprise in the Republic of Korea. Furthermore, implementation started on the preparatory assistance for a large-scale project for the setting-up of a pilot plant for refractories production in Ghana, where the technology developed through this particular project could be utilized by other industrial enterprises in neighbouring African countries. A regional project for North African countries on materials for solar energy devices (phase I: introduction and awareness development programme) was approved under IDDA funds and implementation was to start in early 1993. As a follow-up to the Expert Group Meeting on Application and Processing of New Materials held in 1991, requests were received from various Governments, i.e. Argentina, Brazil, India, Indonesia and Mexico, for the development of projects on new materials.

25. In the area of computer development, a large-scale project proposal for the establishment of a regional centre for software development in India was favourably reviewed by the World Bank. A joint UNIDO/World Bank formulation mission was planned to examine the possibility of establishing such a centre as part of the large-scale World Bank project on an information technology development strategy with a value of over \$200 million, in which the proposed UNIDO subcomponent would amount to \$15 million.

Agro-based Industries  
(subprogramme 521)

26. Technical cooperation expenditures in 1992 under the heading of agro-based industries amounted to \$10.3 million. Some 38 per cent of the total implementation was financed from UNDP resources. A total of 153 projects were implemented or under implementation. [5.58]

27. During the first year of the biennium 1992-1993, projects related to agro-based industries continued to focus on the development and adaptation of technology to suit the needs of the new small- and medium-scale industry structure in line with international market demands, so as to achieve the largest possible impact on rural and social development. Priority continued to be given to the modernization, rehabilitation and sizing of existing private-sector facilities to improve profitability. This mainly involved defining and applying standards, combined with introducing quality control on product and production processes in all agro-based industry sectors according to the domestic and international markets. In that respect technical development centres already established received additional technical cooperation and appropriate equipment for the training of national technicians and managers. Particular attention was given to large-scale projects for the application and development of specific technologies for the protection of the environment. New cleaner technologies continued to be developed and introduced to control pollution in agro-based industries, particularly in the food and leather sectors. Regional projects were elaborated for the introduction of specific technologies for the industrial processing of effluents based on networks of pilot facilities and for a better utilization of the by-products and wastes of animal-based agro-industries. Efforts continued to be made for the development of small-scale integrated rural activities recognized as an important factor for the promotion of the private sector in developing countries, with an increasing integration of women in the production process.

28. Large-scale programmes that continued to be developed under special-purpose contributions included the regional African leather rehabilitation programme; enterprise-to-enterprise technical cooperation for the promotion of joint ventures in the field of food industries which was extended to Peru and Venezuela; and utilization of solar energy for the dehydration of fruit and vegetables in West Africa. In those programmes, environment-related activities were given high priority. In Brazil, the revolving fund programme with a national training institution for the textile and garment sector was extended to introduce the high technologies of computer-aided design, computer-aided manufacturing and computer-integrated manufacturing (CAD/CAM/CIM). The programme for the development of the

leather sector designed in 1991 for India 2/ was put into operation in 1992 with UNDP funds. Projects were initiated to develop similar high-tech processes in footwear manufacture in other Latin American countries to strengthen their capabilities in following the fashion trends as well as to develop their own styles in leather garments in order to meet international standards.

29. New projects in the wood processing industries sector were undertaken to assist the development of handicrafts in Benin, Burundi, Rwanda and Togo, to establish a furniture resource technology centre in Malaysia, and to promote rubberwood utilization through the preparation of status and techno-economic studies in association with the International Trade Centre UNCTAD/GATT. Assistance in production planning continued in Yemen where a cost-sharing contribution was evidence of success, 3/ and in the Democratic People's Republic of Korea 4/ where design capability and training were provided by two study tours to Slovenia and a national seminar. The project to use plantation pine for furniture in Panama 3/ was completed but assistance in the use of guanaquique in Cuba will continue into 1993. In the field of timber construction, an emergency shelter project began in Croatia aimed at introducing the light timber framing technique developed by UNIDO and rehabilitating the wood processing industries sector. The project to promote plantation-based forest industries was completed in member countries of the Preferential Trade Area for Eastern and Southern African States; it included two training seminars held in Malawi and Zimbabwe, and the production of a training video and manual on circular saw blade maintenance, planned as the first of a series on "sawdoctoring". A preparatory assistance project was also carried out to develop a programme with the Amazon Cooperation Council for the rationalization of the forest industries.\* [5.154; 5.155]

30. As in previous years, activities in the textile and garment subsector concentrated on the introduction of technological changes to improve product quality and to permit quick response to fashion changes. A large trust-fund project was begun early in the year to assist the Brazilian industry to improve the quality and increase the quantity of textile fabrics produced. This was done by

\* Activities related to wood processing were transferred in July 1991 from Industrial Management and Rehabilitation (subprogramme 533) to Agro-based Industries (subprogramme 521).

2/ Ibid., para. 64.

3/ IDB.8/10, chap. II, para. 137.

4/ IDB.9/10, chap. II, para. 72.

introducing high-efficiency methods and using advanced equipment to make them competitive for export. The immediate beneficiary, *Servicio Nacional de Aprendizagem Industrial/Centro de Tecnologia da Industria Quimica e Textil (SENAI/CETIQT)* in Rio de Janeiro, Brazil, and in particular the international technical assistance unit of CETIQT, is providing, with the help of UNIDO consultants, direct technical support to participating textile and apparel companies in Brazil in the introduction and application of high-level advanced techniques for textile and garment manufacturing such as computer applications (CAD/CAM), colour matching, dyehouse automation, process optimization as well as in quality management and total quality control systems. The project attracted the interest of neighbouring countries and the goal will be to introduce a similar approach into other Latin American countries. In Asia, the Institute for Garment Technology of the Democratic People's Republic of Korea was strengthened to act as a focal point for the national garment industry. This was achieved through consultancies, fellowships and the provision of specialized equipment and by the establishment of national size charts, better designing practices, efficient testing of fabrics and fibres for determining optimal use as well as improving production processes. Some 300 garment factories are involved. In Africa, the Kenya Textile Training Institute at Nairobi was assisted by UNIDO to enhance product design, range and quality and to improve the entrepreneurial skills of *Jua Kali* women manufacturing textile and related products. This approach proved to be very successful and received a favourable response throughout the country, with one additional project site already located in the town of Nyeri. [5.55]

31. In the food processing industries key inputs for the coconut industry in Asia were provided through the development of an industrial process to manufacture coconut meal for human consumption. The product, for which testing began in 1992 in the Philippines and Thailand, is expected to make a major impact on the feasibility of the coconut oil industry. Expertise in the research and development of agricultural products was transferred to Sri Lanka and is expected to contribute to a trade balance improvement. A comprehensive programme proposal for the rehabilitation and development of the sugar industry in East and West Africa was finalized, but funds for the implementation of the various projects still had to be identified. 5/ In Ghana, the second phase of the project to convert locally produced sorghum into malt,

together with the implementation of the raw materials development plan of the first phase, is contributing towards self-sufficiency in the raw materials supply of Ghana's brewing industry through import substitution. The development of agriculture-related technologies and agro-based industries in Brazil is expected to lead to the production of commercially viable ginseng products based on *pfaffia* plants that will help increase foreign exchange earnings for the country. Expertise was provided to increase production of traditional products and to introduce new agro-industrial products to help Bolivia in the gradual crop substitution of coca. Technology was transferred by assisting in the commissioning of a coconut cream plant in the United Republic of Tanzania which increased the domestic availability of consumer goods and the country's net export earnings. In Sudan advice continued to be provided on equipment needed to convert a dairy plant into a plant for processing local raw materials (the production of Karkadeh powder) for domestic and export markets. 6/ The successful transfer continued to Latin America of basic agro-industrial technologies (cereal storage and processing) available in Western Europe, as well as the industrialization of fruit and vegetable processing and modernization of the dairy industry. 7/ In the field of food industry reconstruction and restructuring, an emergency project was drafted to restore the industrial capacities in Croatia to process and distribute donations of food products. [5.53]

32. Activities in the animal-based food industries concentrated on improving the food supply and supporting food self-sufficiency through programme and project development, modernizing the fish and meat industries and establishing or improving food quality control systems in conformity with international standards. 8/ Programmes and projects for agro-based industry development were formulated during the year for least developed countries of Asia and the Pacific. Modernization of fish processing, conservation and utilization of by-products was undertaken in Morocco and Viet Nam. The installation of the quality control laboratories in Viet Nam 8/ was completed and a training programme developed to make proper use of the sophisticated equipment delivered. [5.54]

33. The implementation of the large-scale improvement scheme for hides and skins, leather and leather products in the African region, 9/ continued to have a positive impact on the development of the region's

5/ Ibid., para. 66.

6/ IDB.8/10, chap. II, para. 74.

7/ IDB.9/10, chap. II, para. 67.

8/ Ibid., para. 68.

9/ Ibid., para. 69.

leather industry. In addition to continued assistance to both public and private industry, headway was made in developing sound strategies and policies of the sector at country and subregional levels and on preparing regional draft standards for grading of hides and skins. Consequently, two major policy papers, "Improved policy guidelines and industrial strategy for the development of the leather industry" and "Guidelines for grading of hides and skins by quality", were presented in April to an FAO intergovernmental group meeting on hides and skins. Both papers were endorsed and recommended for implementation by the meeting. [5.56; 5.57]

34. In line with the intersectoral approach elaborated within the medium-term plan, 1990-1995, an expert on women-in-development issues was attached to the leather industry programme in Africa to promote the consideration of women in UNIDO technical cooperation activities - footwear and leather goods industries being the major sectors in which women in Africa are actively involved. With the aim of creating gender awareness in the leather sector, a survey was made on the employment patterns of women in the leather industry as well as an assessment of training needs. The results of the study showed that future actions aimed at improving women's socio-economic status should concentrate on: (a) preparing women for better employment alternatives by training them in industrial activities such as management, technical skills and entrepreneurship; and (b) creating an awareness of the role of women in the leather industry by sensitizing managers, employers, project personnel and leather associations. The participation of women in the Morogoro Leather Goods Training Course (the United Republic of Tanzania) in April, as well as in the seminar on pollution control in the leather industry held at Nairobi, Kenya in June, both sponsored by UNIDO, should be mentioned in this context. In accordance with recommendations from the in-depth evaluation of the programme (DP/ID/SER.C/36), assistance continued to be given in the establishment of private industry associations, such as the leather industry associations in Malawi and the United Republic of Tanzania, and a footwear industry association in Kenya. These associations are expected to be the main beneficiaries of the second phase of the leather industry programme in Africa and should provide for the sustainability of the programme through the revolving funds operations started in the first phase. [5.56; 5.57]

35. Work concerning environmental protection within the Africa leather programme continued through direct assistance to several plants. A commercial-size model effluent treatment plant started its operations during the year and a regional seminar on pollution control in the leather industry took place at Nairobi, Kenya in June. In line with recommendations of the UNIDO Leather and Leather Products Industry Panel, a comprehensive programme was

developed for the South-East Asia region addressing the issues of environmental legislation, cleaner leather-processing methods and low-cost type effluent treatment systems including safe disposal of solid wastes, and its implementation was started in one country. Common effluent treatment plants for clusters of mainly small- and medium-scale units typical of the leather industry were given special attention. The design of the fully operational treatment plant in Pakistan was completed <sup>10/</sup> and pilot and demonstration effluent treatment units were commissioned in Costa Rica, Tunisia and Viet Nam. [5.56]

36. The work in introducing high technology to developing countries in the leather industry continued by starting CAD services for the footwear companies in Zimbabwe, providing training on CAM (application of automated shoe lasting lines) in Egypt and assessing the training needs in CAD/CAM in Brazil. As a consequence of UNIDO efforts in that field, two footwear design systems were purchased by private companies in Zimbabwe. Two training-cum-technology centres in Brazil were equipped with up-to-date CAD systems through UNIDO technical cooperation. One of them has a range of CAD systems of varying sophistication and price levels available from different suppliers to service local manufacturers and orient entrepreneurs in decisions concerning investments in high technology. A low-cost, general-purpose CAD software programme for designing moulds was installed at the Development Centre for Rubber Technology at Yangon, Myanmar. <sup>11/ 12/</sup> The large-scale integrated leather sector development programme in India incorporated the introduction of CAD/CAM technology for footwear - including three-dimensional designing of tools (moulds) and shoe uppers, as well as the designing of leather garments. [5.56; 5.57]

#### Chemical Industries (subprogramme 522)

37. Technical cooperation expenditures under the heading of chemical industries amounted to \$28.5 million. Some 38 per cent was financed from UNDP resources. A total of 284 projects were implemented or under implementation. [5.71]

38. The chemical industry continued to play a central role in issues of global concern both from an environmental and economical point of view. Environmental issues of significance to the chemical industry are: the safety and environmental

<sup>10/</sup> Ibid., para. 70.

<sup>11/</sup> IDB.8/10, chap. II, para. 78.

<sup>12/</sup> IDB.9/10, chap. II, para. 70.



sustainability of a large variety of industrial operations; the degree to which a final product will be recyclable; how much and which types of wastes will be generated; and the treatment and disposal of wastes. The Chemical Industries Branch continued to devote increasing attention to those considerations resulting every year in a closer engagement in environment-related activities with all relevant subsectors. Such activities included: (a) the choice of the location of chemical plants and introduction of cleaner technologies, for example, in the petrochemical, cement and pulp and paper industries; (b) increased plant and operator safety in the pesticides and fertilizer industries; (c) waste management including treatment of effluents and toxic wastes in practically all subsectors; (d) waste recycling and utilization of wastes and by-products in the plastics, paper, building materials and pharmaceutical industries; and (e) maintaining biodiversity through the systematic cultivation of medicinal plants. Special emphasis was given to the rehabilitation of the small-scale industries sector as well as industries in Central and Eastern European countries, both of which operate to a large extent with inadequate pollution control. During the year the trend towards decentralization and privatization in most developing countries as well as Central and Eastern European countries represented a major challenge. The improvement of product quality to meet export specifications and the use of indigenous raw materials - key issues in improving the economies of developing countries - were fully integrated in the projects implemented. Projects were initiated to establish business contacts between producers from developing countries and potential buyers in industrialized countries, and assistance was given in adapting tailor-made products to specific requirements of export markets. Techno-economic/feasibility studies were carried out for a project on policy advice to improve the legal and financial environment in order to attract investors. [5.69; 5.70; 5.71]

39. The Montreal Protocol, the United Nations Conference on Environment and Development (UNCED) and related Agenda 21 gave a new impetus to many UNIDO activities, including those of the chemical industries sector, and the implementation of their recommendations will open up new possibilities for projects financed under trust fund arrangements and from contributions to the Industrial Development Fund. Under the UNDP successor arrangements, the Branch participated in activities carried out under the ISS-1 facility. Future opportunities for such participation have been recognized, based on the strong infrastructure and advisory capability built in UNIDO during many years of technical cooperation with developing countries. Closely related to environmental and economic issues is the development of the energy sector which again was the focus of the Branch's activities. Energy conservation measures

were integrated in projects dealing with energy-intensive industries such as the petrochemical, cement and glass industries. The development of new and renewable sources of energy such as charcoal, biogas and low-grade coals was promoted especially for rural areas in order to ensure a supply of energy for small-scale industrial activities and homes. As a new activity in Africa, a study was carried out to develop diverse energy options tailored to the resources and needs of the participating countries. [5.69]

40. The main focus of the activities in the cement, lime and concrete industries was centred on capacity utilization, e.g. in the cement industry in Egypt, the Libyan Arab Jamahiriya and Nigeria. <sup>13/</sup> Although standard training activities were a common feature of technical cooperation activities, some countries were in need of special training programmes aimed at upgrading particularly the practical capabilities of local technical managers through in-plant training. Planning has begun for such special training programmes in the cement industry in the Libyan Arab Jamahiriya and in the countries of the Preferential Trade Area for Eastern and Southern African States (PTA). In both cases cooperation with the Industrial Human Resource Development Branch was ensured for the development of training approaches that were well adapted to local needs. Technical inputs were given to the Feasibility Studies Branch for the development and rehabilitation of the cement industry in the PTA countries and in Niger. [5.69; 5.70]

41. As in previous years and as a major part of its activities, assistance was provided to the refinery, petrochemical and related downstream industries with emphasis on energy saving, clean production and environment protection. In Viet Nam, assistance was related to the configuration, choice of technology, feasibility, financing and location of a large grass-roots refinery. In China, transfer of technology and know-how for the national gas industry was promoted through a project financed by France. Opportunity studies have been made on behalf of member States of the Gulf Cooperation Council (GCC) for the possible local production of 10 petrochemical products. As a result of the catalyst development project in India <sup>14/</sup> catalysts were in use in the petrochemical industry in India and have been licensed to companies in Italy and the Netherlands. As part of the ongoing project for developing chemical engineering design capabilities in Viet Nam, <sup>14/</sup> plants for making sulphuric acid and superphosphate as well as plants for treating waste water were designed and constructed and became operational, and the design of a lubricating oil blending plant was completed. <sup>14/</sup> In India a similar

<sup>13/</sup> Ibid., para. 77.

<sup>14/</sup> Ibid., para. 78.

project was successfully completed to assist an engineering firm that designs petroleum refineries, petrochemicals and fertilizer plants. In the Democratic People's Republic of Korea work was progressing successfully in developing a first-of-its-kind process to make acetic acid by carbonylation of methanol using catalysts developed during a previous project. 14/ Following a visit to the successful plastics development centre in Pakistan, a Nigerian petroleum corporation has started a similar project for petrochemical products under trust funds. Cambodia, Lao People's Democratic Republic and Thailand have asked to cooperate with the recently established prosthetics factory in China for the production of artificial limbs 14/ which was set up through a technical cooperation project financed by the United Kingdom of Great Britain and Northern Ireland. A large-scale project was under way for the construction in Indonesia of low-cost housing protected from earthquakes by rubber bearings, using technology developed in a previous global project. 14/ Several projects in Viet Nam related to research and development in chemicals (paint coatings, glues, dyestuffs and pigments, pure chemicals and reagents) have progressed to the stage of pilot plant tests. Environmental considerations were an important factor in many of the above projects, in particular the choice of location in Viet Nam of the refinery, plastics development centres and projects related to research and development in chemicals in that country. Studies on the feasibility of recycling waste lube oil carried out in three countries in Latin America and three countries in Asia 14/ were followed up by workshops held in Ecuador and Pakistan. Building on the expertise obtained as a result of the previous project on plastics recycling at Shanghai, China, two projects on plastics recycling were being implemented in Brazil and the Philippines and presentations on the subject were made to the Athens Conference on Europe and the Mediterranean in the New World Situation (see paras. 16 and 18 above). Following the implementation of a large-scale project in the Southern African Development Community (SADC) countries for the establishment of a regional petroleum training centre, a study was undertaken to prepare an assessment and report on expanding the capabilities of an existing centre in Angola to meet the needs of SADC countries in the energy and environmental sectors, including utilization of local resources of energy as well as development of human resources. [5.69]

42. A number of new developments marked the fertilizer sector. UNIDO delivered a major part of the equipment to the Egyptian Fertilizer Development Centre 15/ for its compound fertilizer pilot plant which will

become fully operational during 1993. The decision was taken to upgrade the Egyptian Centre and turn it into a regional centre for North Africa and the Middle East. As a follow-up to the UNIDO Ecologically Sustainable Industrial Development (ESID) Conference at Copenhagen, Denmark, a number of initiatives were undertaken in co-operation with the International Fertilizer Development Center (IFDC), United States of America, in identifying strategies to ensure environmental compliance in the phosphate fertilizer industry. Environmental issues dominate the UNIDO fertilizer programme. Presentations were made at a number of international events. UNIDO, with IFDC and the World Bank, started activities in Eastern Europe and the former Soviet Union. The major thrust lay in assisting that group of countries in policy issues and in restructuring their fertilizer industry. A package of new projects was developed to ensure investments in the restructuring process. Activities in the fertilizer sector continued to move towards a programme approach. Such programmes have been prepared for China (agricultural inputs) and Viet Nam. [5.69; 5.72]

43. The programme on industrial utilization of medicinal and aromatic plants was expanded to include the issues of private sector involvement, export and trade promotion and rehabilitation of factories. The relevance of that programme to drug supply reduction and control of narcotic substances was emphasized through increased cooperation with the Vienna-based United Nations International Drug Control Programme. Such cooperation concentrated on three main areas: (a) crop substitution through projects on cultivation and industrial processing of medicinal plants/essential oils in Guatemala and Viet Nam; (b) conversion of opium alkaloids to licit drugs for medical use in China, India and the Islamic Republic of Iran; and (c) strengthening of detection techniques at laboratories and development of analytical methods in Thailand, Turkey and Viet Nam. Process technologies developed in Guatemala, Madagascar and Turkey started to be transferred to the private sector. 15/ The laboratories recently strengthened by UNIDO in Thailand, Turkey and Viet Nam have been recognized as entities authorized to issue certificates of quality for aromatic plant products and to offer their services to industry for product development and analysis. 15/ A new project was initiated in collaboration with the UNIDO Investment Promotion Services office at Cologne, Germany, and with Protrade of Germany to hold an exhibition in that country of selected plant products from African countries so as to establish marketing contacts and joint venture investment projects. Visits were arranged for counterpart staff to visit world trading houses to enable products to be tailor-made to the specific requirements of the buyers. Under programmes for the Second IDDA short-term advisory services missions were undertaken to Nigeria and Rwanda to assess and recommend plans of action to

15/ Ibid., para. 80.

improve the industrial utilization of indigenous flora. Equipment fabricated in Viet Nam was used for field distillation units in rural areas to generate employment and involve women in paraprocessing activities. Conservation of the environment was encouraged in the Democratic People's Republic of Korea and Madagascar to maintain biodiversity by introducing systematic cultivation. Factories in Ethiopia and Turkey were rehabilitated to improve technology, increase production and improve the quality of products. Headquarters staff participated as resource persons in a group training programme on medicinal and aromatic plants organized by UNIDO and held in Turkey and at the international scientific meeting on the subject conducted at Milan, Italy and at Maastricht, the Netherlands. For the first time a workshop for national coordinators of projects on medicinal and aromatic plants was held in Turkey. The workshop was successful in exchanging information on management and operational issues of project implementation, and its recommendations are expected to result in the improvement of project design and the speeding up of implementation. UNIDO activities in the area of medicinal and aromatic plants were presented at the World Congress on Medicinal and Aromatic Plants for Human Welfare held at Maastricht, the Netherlands under the joint patronage of UNIDO and the Government of the Netherlands. [5.69; 5.72]

44. In the area of pharmaceuticals the main activities were related to the creation and/or strengthening of local production, quality control and distribution of standards and systems. As a new activity financed under trust funds, UNIDO conducted detailed technical studies for the establishment of a basic pharmaceutical industry in the Islamic Republic of Iran and the restructuring and privatization of pharmaceutical industries in the Russian Federation. Technical cooperation in the establishment of a pharmaceutical chemicals multipurpose pilot plant in the Islamic Republic of Iran culminated in the inauguration of the plant on 25 November. 15/ The second phase of the biotechnology programme for Latin America and the Caribbean commenced. Following a request for additional assistance, a second phase of the project on production of steroid compounds in Cuba was approved. 15/ In the areas of fermentation and biotechnology, special emphasis was given to industrial enzymes and antibiotics. The yields and efficiency of the production of enzymes at the WUXI Enzyme Factory in China were more than doubled. 16/ A feasibility and market study was carried out and recommended to the private sector at Tunis, Tunisia, on the production of cellulose and glucose syrup by enzymatic hydrolysis of agricultural wastes. In China, the pilot facilities for

the production of penicillin the Guang Zhou pharmaceutical factory achieved improved production technology and upgraded quality control and research and development systems. 16/ Based on this, industrial scale facilities will be designed in the near future. In Mongolia, positive results were achieved in the introduction of high technology in the production of enzyme ointments. In Senegal, a programme for research and development in the biomedical and agro-based industries, including recommendations for industrial scale-up, improvement of the legal and financial environment for promotion of new investments and the creation of new small enterprises, was finalized with full participation of the scientific and investors community. 16/ Design and equipment were supplied for the installation of semi-industrial premises in Viet Nam for the production of enzymes and hormones from animal by-products. Production was expanded and upgraded at a pharmaceutical company at Kabwe, Zambia, through the installation of a new unit for oral rehydration salts and veterinary formulations and packaging premises, including improved maintenance facilities and personnel. 15/ Considering the upgraded conditions at Kabwe, its facilities could be used for training technicians from neighbouring countries. Based on the master plan for development of the pharmaceutical industry agreed at the meeting of the African Portuguese-speaking countries in November 1991 at Lisbon, Portugal, national programmes/projects were prepared and approved. 15/ A programming mission visited Guyana to study the pharmaceutical sector and prepare recommendations towards its further development. Assistance was rendered to Thailand in the establishment and operation of a pharmaceutical technology service centre; steps were initiated to promote the visibility of the centre to the public and industry at large as well as to promote its technical services to the local food and drug administration authorities. A training programme on technical, economic and regulatory aspects of the production of medicines was held in Paris, jointly organized by UNIDO and the Syndicat National de l'industrie pharmaceutique (SNIP)/France from 19 October to 6 November. In the area of biologicals, regarding the vaccine assessment programme initiated by the World Health Organization (WHO) and the joint UNDP/United Nations Children's Fund/WHO/UNIDO vaccine production initiative, 17/ the second meeting of the consultative group was held at Geneva, Switzerland, bringing together participants from over 40 countries, including experts in vaccine development and production. [5.69; 5.70]

45. Two workshops were successfully realized in China and the Philippines 18/ under a regional programme on development of

16/ IOB.8/10, chap. II, para. 85.

17/ IOB.9/10, chap. II, para. 81.

18/ Ibid., para. 82.

human resources and research capabilities in pulp and paper research institutes in China, India, Indonesia, Myanmar, the Philippines and Thailand. The workshop in China, on oxygen delignification and bleaching, organosolv pulping, biopulping and small-scale effluent treatment plants, was held as part of the second International Non-wood Fibre Pulping and Papermaking Conference at Shanghai, China. The focus of the workshop in the Philippines was on high grade pulping, alkaline paper making and waste paper recycling. Two project management committee meetings were held during both workshops and participants strongly recommended extension of the project for three more years due to its emphasis on human resource development and waste management, cleaner technologies and environmental protection. Two studies on the market of handmade paper in Europe and North America as well as a domestic market survey were carried out under the handmade paper project in India 18/ and two study tours were completed. The Indian handmade paper products were well received at a show for stationery in New York, and several orders were placed. Almost all laboratory equipment was ordered for the new handmade paper centre being established at Jaipur to support export-oriented development of small-scale industries in India. Under the project, for the installation of a pilot plant for production of bamboo kraft lignin in Myanmar, 18/ laboratory trials to define the ultrafiltration membrane to be utilized in the pilot unit were carried out and, based on the results, the specification of the pilot equipment was established. A survey of the pulp and paper industry in Turkey involved the assessment of 32 mills. A mission was sent to China to review a project proposal for a demonstration plant for oxygen pulping and bleaching on non-wood fibre raw materials before submitting it to a potential donor for funding. [5.69; 5.70]

46. In the energy sector the focus was on renewable energy. Several new projects were developed, based on the successful outputs of previous UNIDO projects such as the charcoal briquette projects in Madagascar and Sudan. 19/ The new projects aim to provide assistance to capitalize on those opportunities. In the area of biogas production from industrial wastes, work continued on constructing pilot demonstration plants. Further projects were developed in that area which aim to assist in developing capability for assessing the utilization of biogas at both specific industrial sites and on a national scale, as well as capability in biogas plant design, construction and operation. Projects in coal continued to focus on the utilization of low-grade coals, and on minimizing the environmental impact of coal usage. 19/ Waste water and process water treatment were also addressed with a number of activities. A particularly successful project concluded in China resulted in the

application of membrane and adsorption technologies for water purification in several factories, and greatly enhanced capability to apply them at other sites. Also in China, a workshop was held to promote the use, and transfer technical information, of a low-polluting ion exchange process for purifying factory process water. Further projects were developed to emphasize in-factory modifications and clean production technologies as a cost-effective means of reducing the volume of wastes produced, and incorporating appropriate additional treatment processes. In each of those projects the potential "multiplier effect", in terms of disseminating the results learned from demonstration activities in selected plants, was strongly emphasized. Other areas of activity included the manufacture of activated carbon, bioreactor design, and chemical production by biotechnology. [5.69]

47. The following activities are examples of UNIDO's approach towards safety and environment protection for the benefit of plant operators and end users in promoting agrochemical industries in developing countries: an expert group meeting at Brussels, Belgium, and supported by the Government of Finland, was held to develop integrated international safety guidelines for pesticide formulation in developing countries; a project on development of prototype mobile seed treatment machines for Africa, supported by the Government of Germany; and a project on the establishment of an ecotoxicology research centre in Pakistan supported by the Government of Denmark. The integrated safety guidelines developed at Brussels were published and efforts were under way to implement them in collaboration with international agencies and non-governmental organizations. Under the Regional Network on Pesticides for Asia and the Pacific (RENAPAP), 20/ project management committee and tripartite review meetings were held at New Delhi, India. With the assistance of the Government of France, the pesticide data collection/dissemination of RENAPAP is being standardized for linking with data collection of the Economic and Social Commission for Asia and the Pacific on pesticide covering the user end. In India, the Institute of Pesticide Formulation Technology, a UNDP/UNIDO project, has been made an independent body to facilitate interaction with private industries to promote newer and safer technologies. 20/ With financing under the Special Industrial Services Programmes assistance was given to Poland to clean up the technology for the production of cereal herbicides, while the assistance provided to Hungary in developing non-toxic insecticide agents was successfully completed. 20/ Some private companies are showing interest in further developing one or two compounds. Based on the proceedings of a symposium in China on pesticides a book was published entitled "Recent developments in the field of pesticides and

19/ Ibid., para. 83.

20/ Ibid., para. 84.

their application to pest control". A workshop on impurities in technical grade pesticide material was held in the Republic of Korea for the benefit of the Asia and Pacific region; with a contribution from the Government of India a permanent secretariat for RENPAP was established at New Delhi to carry out the coordination work of the UNIDO regional project in Asia on agrochemicals. [5.69]

48. In the area of inorganic chemicals and salt production emphasis was placed on the promotion of small-scale industries, rural development and involvement of women in the production process. Activities continued in promoting local salt production to substitute salt imports in Africa. 21/

49. The 1992 African Industrialization Day (20 November) was dedicated to the building materials industry, reflecting the high priority assigned to that sector by African Governments. Several projects in the sector were ongoing in the region, e.g. in Cameroon, Chad, Madagascar and Zaire. 22/ All projects gave priority to the creation of small-scale manufacturing enterprises, often as joint ventures with equipment suppliers, and included training programmes for the entrepreneurs and their staff, providing practical hands-on experience in the selection of raw materials, the manufacture of products and the construction of low-cost housing units using the materials produced. A significant objective of those projects has been to strive for a long-term self-sustaining process giving local building materials the prominent place in low-cost housing and institutional building they justly deserve. The technologies were well established in the selected countries where the process had been going on for several years, and other countries were expressing interest, e.g. Angola, Burundi, Guinea, Rwanda, Sao Tome and Principe, and Togo. Small-scale enterprises not only dominate the African building materials sector, benefiting from UNIDO assistance, but are increasingly characteristic of UNIDO assistance to many other subsectors of the non-metallic mineral-based industries. In addition to the ongoing pottery project in Bolivia, 23/ similar assistance was provided in Kenya; both focus on the integration of women. The products of the Oriang pottery women group in Kenya and the Huayculi pottery association in Bolivia were awarded prizes at prestigious national shows, demonstrating the capacity of rural communities for change and growth. [5.69]

50. Two demonstration plants for the quarrying and processing of marble were finished and commissioned in 1992 - one at Gulele, Ethiopia, and one at Song Be,

Viet Nam. 24/ In both cases, the technology supplied will allow UNIDO to make a practical and effective demonstration of modern, but not overly sophisticated, production methods ensuring increased productivity, a higher yield of finished products per unit of raw material and an improved quality designed to open up larger export markets for the national marble industries in the two countries. The experience gained will benefit other countries with similar raw material resources, e.g. Brazil, where a preparatory mission was carried out towards the end of 1992. The pilot plant for scientific glassware at Hanoi, Viet Nam, went into its final phases of start-up and commissioning. The bench working section, where complex laboratory apparatus are produced by secondary shaping and joining operations, was completed, the staff were trained and were engaged in commercial production. A number of projects, especially in the field of advanced ceramics, achieved noteworthy successes in respect of development of new products and technologies. In Romania, for instance, the Ceramics Laboratory of the Research Institute for Electrical Industry, assisted by UNIDO, carried out the development of a range of prototypes of dielectric, resisting and electro-conducting ceramic materials and components to a point of maturity allowing the transfer of the production technology to a number of specialized factories interested in their manufacture. In Turkey technologies were perfected at the Marmara Research Centre for manufacturing a variety of advanced high alumina products such as cutting tools, engine parts and textile ceramics in close cooperation with the industrial sector. 23/ A direct result of past cooperation with China in the fields of ceramics, glass and non-metallic mineral-based industries was the strengthening of specialized institutions responsible for research, development and plant design in those areas. 24/ Their capacity to contribute more effectively to the industrial growth in their respective subsectors has been significantly enhanced, as demonstrated by the improved performance of the industry. Indeed, some institutions have become sufficiently competent and self-reliant to play an active international role as hosts of UNIDO-sponsored training workshops. Two such workshops were held in 1992 in China arranged by the Shanghai Building Research Centre and the China Glass Development Centre at Bengbu. The first focused on the multiple uses of fly ash - a waste product from coal-fired power stations - and in building materials manufacture and civil engineering thus combining the recycling of waste with improvement of materials properties. The second provided 10 participants with a wealth of practical information on Chinese know-how in the field of energy-

21/ Ibid., para. 85.

22/ IOB.8/10, chap. II, para. 92.

23/ IOB.9/10, chap. II, para. 76.

24/ Ibid., para. 86.

saving and management in the glass industry. Both events also laid the foundation for future bilateral cooperation between the institutions and the home countries of the participants involving technology transfer and follow-up assistance from the Chinese side. [5.69; 5.70]

#### Metallurgical Industries (subprogramme 523)

51. In 1992, technical cooperation expenditures under the heading of metallurgical industries (subprogramme 523) amounted to \$6.0 million. Some 70 per cent of the total implementation was financed from UNDP resources. A total of 99 projects were implemented or under implementation. [5.84]

52. Metallurgical industries, in the field of non-ferrous metals, iron and steel, foundry and metal transformation, have a major impact on the environment due to the large volume of production combined with the discharge of effluents that pollute air, water and land. The metallurgical industry is also very capital intensive with the result that "non productive" environmental considerations have often been neglected. Thus the main thrust of technical cooperation activities of UNIDO within the reporting period was on the introduction and/or dissemination of cleaner production technologies, economy in energy, increased environmental management techniques at the individual plant level and for cooperation at the regional level. As a follow-up to the UNIDO Conference on Ecologically Sustainable Industrial Development (ESID) and the United Nations Conference on Environment and Development (UNCED), and at the request of the World Bank, the Metallurgical Industries Branch participated in the preparation of environmental guidelines for the iron and steel industry as well as the copper and nickel industry. [5.82]

53. An environmental monitoring programme was prepared for the most industrialized areas of four adjacent Central European countries. The programme can be implemented as a whole or in self-contained parts. Each programme output will contribute to the alleviation of the environmental impact of heavy industry in the countries themselves and reduce the effects of the carryover of pollution into Austria. In response to inquiries from countries engaged in changing from central planning to market orientation, UNIDO provided short-term advice and awareness in multiple fields of restructuring including possibilities for retraining human resources in ferrous and non-ferrous industries. Advice was also provided by international experts and UNIDO staff members to accelerate commercialization of results achieved and to support sustainability of pilot plants established with UNIDO/UNDP assistance in China, Cuba and India producing lead frame alloys, tungsten wires, ores and amorphous solar cells. [5.82; 5.83]

54. In the area of non-ferrous metals, at the request of the Gulf Investment

Corporation, advice was given for the selection of the most optimum technology for the establishment of a copper tube plant in Saudi Arabia. A report was prepared for Venezuela containing a detailed pre-investment study on the selection of raw materials and the required adaptation of technology for the processing of locally available alumina into refractory grade alumina silicates. In India, a feasibility study was prepared to provide the Department of Mines of India, through the Bharat Aluminium Company Ltd., with technical and economic information on setting up a demonstration unit for the production of super purity aluminium foils for use in the electronics industry and, under the supervision of international experts and consultants, the Jawaharlal Nehru Aluminium Research Development and Design Centre 25/ gave practical advice for improving existing aluminium operations in the country. [5.82; 5.83]

55. The dumping of red mud, the residue of bauxite processing, causes serious environmental problems. To address the complex problems as completely as possible in China, both at the production and waste treatment levels, a large-scale national environment programme for the aluminium industry was under preparation. As a first step, a project was set up to deal with the red mud dumping of the Guizhou alumina plant. The experience acquired is expected to be disseminated to other plants and to be used for the formulation of the national environment programme. A ISS-1 programme was approved for the promotion of technical cooperation between Brazil, Jamaica, Suriname and Venezuela in the bauxite and aluminium industry. For the national experts - future counterparts of that programme - participation was arranged in an international bauxite tailings workshop sponsored by the Australian Bauxite and Alumina Producers at Perth, Australia, in November, to acquaint them with the latest information on the best available cleaner technologies and environmental protection measures in bauxite processing, waste disposal and utilization. In Hungary, a project was implemented to introduce quantitative risk assessment and hazard analysis in the bauxite industry, to improve risk management and also to facilitate privatization. [5.82; 5.83]

56. In the field of precious metals extraction, attention was focused on the ecological risks of gold extraction. The simplicity of the mercury-based technique, with low investment and its comparatively high rate of recovery, are points favouring its use by small-scale miners. However, the extreme damage caused by mercury to the health and to the environment are often not taken into account. Owing to the faulty application of the process, there is massive mercury poisoning in many developing countries. UNIDO addressed this problem

25/ Ibid., para. 94.

during the year *inter alia* in Viet Nam where technical advice was provided to the miners. Similar projects were under preparation for several Latin American countries. In Thailand, assistance was rendered in applying the state-of-the-art treatment of toxic residues deriving from a zinc smelter. The scope of the work includes recommendations for the introduction of cleaner technologies. [5.82]

57. In the iron and steel sector, a number of projects under implementation in Pakistan <sup>26/</sup> aim at reinforcing small- and medium-scale steel plants, through improved energy consumption and capacity utilization as well as production of a viable product mix. In Afghanistan, in order to utilize locally available resources as well as scrap, assistance was rendered to the Omarzay Steel Mill Company in setting up a steel rolling mill by providing technical advice and support in negotiations with equipment suppliers. With a contribution from Austria, assistance was extended to Uganda in assessing the technical and financial inputs required to finalize the rehabilitation of the East African Steel Company at Jinja, Uganda. <sup>27/</sup> With the commissioning of a multi-billion dollar integrated steel plant at Ajaokuta, Nigeria, the UNDP/UNIDO assistance provided through the National Metallurgical Development Centre, Jos, acquired utmost importance in the Nigerian economy. In India, UNDP/UNIDO assistance in the field of computerized maintenance management (CMMS) provided to the Steel Authority of India Limited was extended by a second phase to five other integrated steel plants, aimed at anticipating and thus preventing equipment failure. In Algeria, <sup>28/</sup> know-how gained from pilot implementation and operations was transferred, in a distributed version of CMMS, to a local area network of workstations throughout the SIDER Steel Plant. Under a trust fund agreement, UNIDO assisted the Ryengwang Trading Company of the Democratic People's Republic of Korea in supervising and dismantling a suitable secondhand hot rolling mill and in negotiating an attractive financial package with a long-term buy-back agreement. In Indonesia, UNIDO undertook a bankable feasibility study for the erection of a second generation steel mill. Within the frame of the project activities, the Metallurgical Industries Branch cooperated with the Feasibility Studies Branch in the elaboration and choice of the most suitable technology to determine the optimal alternative from an overall techno-economic, environmental and energy conservation point of view. As a first step towards the establishment of a regional programme for the application of cleaner production technologies and environmental management

techniques in the Latin American and the Caribbean iron and steel industry, a workshop on waste water treatment and management was held at Santiago, Chile, in October. Indigenous raw material was tested for Cuba and found suitable for the production of the ferro-alloys on an industrial scale. Assistance was given to Bulgaria in the form of advice on the techno-economic viability of producing high quality steel, leading to the modernization of an existing mini steel plant. Facing an upsurge of retraining needs as a result of the restructuring of the heavy industry in the Kladno district, former Czechoslovakia, a UNIDO/UNDP project assisted in strengthening the capability of human resource development at the training centre of the biggest iron and steel making company in the region. Within the reorientation programme for the former Czechoslovak industry, activities started on another project aimed at establishing marketing units at the major steel/metallurgical plants to increase the potential commercial success of their products in an open market environment. [5.82; 5.83]

58. Within the area of foundry and metal transformation, the concept of financial sustainability of projects and the involvement of the private sector in the management of projects was strongly pursued. Thus, two foundry projects were implemented in Viet Nam that were designed to provide training and demonstrate technology for the transfer of spare parts production to small- and medium-scale enterprises in order to create an operational environment, with the sale of urgently needed castings to industry. A foundry development and services institute was established by the private sector foundries in Sri Lanka as the active counterpart to a project in support of that subsector. A project designed to assist the private sector foundry industry in Indonesia became operational. Extensive operational and technical assistance to a heavy machining complex in Pakistan covered vital aspects of operation and the establishment of analytical casting procedures. A technical, market and feasibility analysis was under way to design the expansion of an agricultural equipment plant in Nepal. [5.82]

#### Engineering Industries (subprogramme 524)

59. Technical cooperation expenditures in 1992 under the heading of engineering industries (subprogramme 524) amounted to \$16.7 million. About 70 per cent of the total implementation was financed from UNDP resources, while special trust fund arrangements and resources from the Industrial Development Fund represented an increased portion compared to the previous year. A total of 179 projects were implemented or under implementation. [5.96]

60. During the year, developments were concentrated in areas such as computer applications to industrial design, manufacturing,

26/ Ibid.

27/ Ibid., para. 92.

28/ Ibid., para. 96.

maintenance and automation; electronic components and equipment; medical equipment; telecommunication equipment and systems; environmental monitoring and control equipment; industrial process control and automation equipment and systems; and high-precision components. Major efforts were dedicated to product design and prototyping, using computerized techniques, which leads to quicker response to changing market demand, to improvement in product functionality and which facilitates efficient production and adds to the quality of the final product. Emphasis was also placed on production rationalization and automation, since industrial automation is a key to the efficient use of existing capacities as well as a major design parameter in new industrial investment. [5.91; 5.93]

61. The current increasing awareness of environmental problems was highlighted by developing new concepts, that are reflected in the preparation of guidebooks on cleaner technology; application of engineering techniques on noise pollution; remote sensing and/or telemetering of environmental parameters; and design, development and manufacturing of low-cost instruments for pollution monitoring. Also in the field of pollution control and within the framework of the Montreal Protocol on Substances that Deplete the Ozone Layer, was the implementation of projects aimed at eliminating chlorofluorocarbon (CFC)-based solvents from the production processes of electronics industry as well as substituting non-CFC working fluids in refrigeration systems. [5.93]

62. During the reporting period main areas of technical cooperation in engineering activities continued to be the application of appropriate technologies adapted to rural industrial development; assistance to small-scale industries, including the private sector; integration of computer-assisted and processor-controlled machine tools and metalworking; development of energy-related equipment; repair, maintenance and spare parts production; and new process technology and packaging techniques. [5.93]

63. Major technical cooperation activities in metalworking and machine tools continued to be carried out in varying degrees and levels of technological sophistication in different countries. Utilization of installed industrial capacity was improved through diversification of production, improvement of product quality and reduction of product cost. This was accomplished by the progressive introduction of numerically controlled machine tools and improved manufacture, including the introduction of high quality tools. Activities related to preventive maintenance and repair of machinery and equipment - of increasing interest to developing countries - were implemented during the year. In that field, the introduction of computer-controlled scheduling for maintenance and computer-supported inventory control systems

for spare parts, reconditioning of worn parts and components through metal-spraying technologies received considerable attention, with the aim of reducing unexpected breakdown and of extending the lifespan of capital-intensive equipment. Steady progress can be reported on projects such as the Tool Manufacturing and Metalworking Centre in Trinidad and Tobago, the Engineering Design and Tool Centre in Ethiopia, and the Machine Tool Design and Development Centre in Indonesia. 29/ Also planned is the setting up of a Metals and Plastics Industries, Service and Training Centre in India and implementation of activities have commenced. In China five projects of the Machine Tool Programme were initiated, namely in computer numerical control (CNC) development; foundry machinery industry; establishment of a pilot autonomous manufacturing island; development of turrets for numerically-controlled lathes; and introduction of modular design for machining centre. 29/ [5.93]

64. With regard to maintenance and repair major emphasis was placed on the provision of spare parts through local manufacturing and to render the local production capacity utilization more efficient. Assistance continued in Angola and Madagascar in the field of industrial maintenance and spare parts manufacturing, helping small-scale industries to utilize their production equipment and their investments to the maximum extent. In the light of a privatization strategy the marketing departments concerned had to be particularly enhanced. [5.93; 5.95]

65. Assistance was given in the field of agricultural tools, implements and farm machinery for upgrading the skills related to design and production of that equipment. The establishment of the Engineering Development and Service Centre in Kenya is now ready to play an important role in generating progressive autonomy in terms of engineering design, workshop prototype production of machinery parts, components, products and allied tools and accessories. 30/ With respect to instrumentation and advanced systems and methods, technical assistance in the design and manufacture of polarimeters for food analysis and on the application of tensiometry for the stress analysis of automotive vehicles was provided to Cuba. With joint funding from the programme for the Second Industrial Development Decade for Africa (IDDA) and the International Fund for Agricultural Development (IFAD), a project was initiated in the development and dissemination of appropriate food-processing equipment for rural women in sub-Saharan Africa. The aim of the project is to assist in the local production of various kinds of mills and dehullers, taking into full account the women's needs and

29/ Ibid., para. 100.

30/ Ibid., para. 101.



working conditions in cereal processing. In partnership with the former Czechoslovakia, a study tour for selected managers of industrial enterprises from developing countries was organized in the field of computer applications in the design and operation of agricultural machinery. As a follow-up, a project was formulated on a computerized cattle feeding and health monitoring system. Assistance was provided to Poland in upgrading management and modernizing engineering of agricultural machinery, including the provision of expertise and training. The project was carried out in cooperation with the Polish Industrial Institute of Agricultural Engineering and included activities in coordination with agricultural machinery production plants, related existing institutions, universities and end-user organizations. [5.93; 5.95]

66. In the field of high technology, most of the projects dealing with industrial automation and robotics aim at providing services to small- and medium-scale engineering industries to improve their product quality, cost effectiveness, product features and shortened lead time needed for adapting new products. The services incorporated were in the fields of product and tool design; robots applications, adoption, modification and analysis; consultancy on use of advanced techniques; manpower development; and infrastructure development. In India, development of process control systems for specific industries (for example, iron and steel, railways) has been the central issue in one project. Computer-aided techniques and technologies were included in almost all product design, development and manufacturing activities. A standard project was developed to create a centre for computer-aided design/computer-aided manufacturing (CAD/CAM) demonstration, training (both at the centre and in the industry using mobile units) and servicing purposes. Other projects include a computer-integrated manufacturing (CIM) training and demonstration centre and development of graphical information, and CAD/CAM projects developed for mould and die design and manufacturing, a technology without which local manufacturers would be unable to manufacture products of sufficient quality, mainly because of the low quality of the mould and dies used. One important concept in that area is reverse engineering which refers to the combination of activities to analyse and document the design of an existing product. In that field, several projects were designed and/or implemented, such as the production of moulds and dies for the electronics industry in India, and technical moulds and dies in China, the Republic of Korea and Viet Nam. [5.93; 5.95]

67. In the area of electrical and electronic equipment, projects were formulated and/or implemented to improve the quality and reliability of electronic products. The ultimate objective of such projects is to increase the competitiveness of locally

manufactured products in the domestic and world markets. Examples include projects to introduce micro-electronic failure analysis in India; a centre for electronic packaging technology and ergonomic design in Africa; and a regional environmental testing and tropicalization centre also in Africa. In a related field, that of the cottage electronics industry, preparatory activities were initiated to identify needs. Activities worth mentioning are the preparation of a technical guidebook on environmental issues in the electronics industry and the convening of an expert group meeting on the subject in Vienna in October. [5.93; 5.94]

68. In the area of transport systems more emphasis was placed on the upstream and downstream chain of goods delivery, i.e. from agricultural and food stuff producer to the processor and final shipment for export by road, rail and boat, including refrigeration. Among 1992 technical cooperation activities are: (a) a locally manufactured locomotive diesel engine in China that underwent successful endurance testing, with results showing that the performance met or even exceeded the specifications in terms of power-level, exhaust emission standards and specific fuel consumption. The 100-hour test demonstrated the reliability of the complete engine with all its inherent systems and components; <sup>31/</sup> (b) the establishment of a regional network on control and regulatory measures concerning motor vehicle emissions in Asia and the Pacific that was further promoted through development of guidelines, in particular test procedures and emission limits for in-use motor vehicles leading to a common and more appropriate approach for the participating countries; <sup>31/</sup> (c) a project in Zimbabwe for the transfer and application of an appropriate technology for the local manufacture of a simple method of rural transport; (d) the formulation of follow-up to a successfully completed project in Panama, aimed at strengthening the repair and maintenance capabilities of outboard motors by the Indians living on the island of San Blas Comarca; the project was under consideration by the Government authorities and potential donors; and (e) implementation of a regional project in Africa to determine the feasibility of manufacturing road, rail and water transport equipment in Africa. <sup>31/</sup> [5.93; 5.95]

69. Energy-related environmental issues were part of technical cooperation projects, with energy conservation in industry one of the most pressing current issues. In China the national approval and certification laboratory for household electrical appliances completed an air conditioner compressor calorimeter test stand capable of calibrated performance testing of Chinese-made air conditioners, leading to

<sup>31/</sup> Ibid., para. 103.

export potential. 32/ A 10,000-ton meat cold storage plant in Armenia was commissioned and put into operation after certification of qualification and acceptance testing. A one-year training programme in the management, operation and maintenance of the plant was started. The project serves as an example of UNIDO's environmentally sustainable industrial development through the use of non-CFC technology, thus reducing the consumption of ozone-depleting substances as well as designing a highly energy-efficient building. In addition the new plant is seismic-resistant, necessary in that earthquake-prone area. 33/ Implementation continued of the project in Viet Nam aimed at strengthening the mechanical and refrigeration centre. Through that project the availability and maintenance of old stores will be improved, leading to increased use of installed cold store capacity and consequently the export of fresh fish and thus earning foreign currency. In Madagascar, under a technology transfer arrangement 60 solar water heaters for domestic use were locally manufactured and new products, such as wind pumping and photovoltaic systems, were under consideration for local manufacturing. The implementation of projects in the area of new and renewable energy continued. A preparatory assistance mission was fielded to the Syrian Arab Republic in order to evaluate the local conditions and determine the prerequisites to start the manufacture of solar thermal water heaters and photovoltaic equipment. A project was launched in Kenya to carry out energy audits in selected small- and medium-scale industries and to train local staff in the application of the computer-based energy conservation project evaluation and reporting system applying software developed by UNIDO, named Computer Model ENERCOST. Technical cooperation was provided to Mongolia to adapt a design of a portable windmill to generate electricity for local manufacture. The implementation of a regional African project continued with the site verification for the construction of small hydropower stations for demonstration purposes in three countries. 32/ [5.93; 5.95]

70. A main concern of international new trends in packaging is directed toward environmental suitability, with ease of disposal and a minimum of environment pollution as requirements of packaging materials. Therefore, the issues of recyclability and minimal landfills are necessary occupations in relation to used packages. In that connection preparatory assistance was provided to Thailand for the formulation of a technical cooperation project on packaging and the environmental implications - the project included components for research on recycling used

packages and performance testing of packaging dangerous goods. 34/ Within the framework of a Mexican project further work was continued in gathering international pertinent data, and draft appraisal of systems being actually utilized in industrialized and developing countries, for handling and recycling of used packages from the city's large garbage disposals. 34/ Appropriate computer equipment and expertise were provided to China within the framework of a project aimed at the establishment of an international packaging information databank. 6/ Training programmes abroad and complementary testing equipment were provided to Poland for the continuing development of specific capability in pharmaceutical products and medical supplies packaging. 6/ [5.93; 5.95]

#### B. INDUSTRIAL INSTITUTIONS AND SERVICES (Programme 530)

71. The Industrial Institutions and Services Division was responsible for this programme, which provides the components of the major programme dealing with industry-wide strategy and policy, infrastructural and management concerns. Within the Division, the Office of the Director (sub-programme 534) continued to ensure the overall management of the activities carried out under the three component subprogrammes mentioned below as well as their coordination and integration with the activities of other UNIDO programmes in meeting the qualitative and quantitative objectives of the Organization. The Office supported, strengthened and guided the component subprogrammes in order to meet the targets set. It also established all necessary procedures and provided direction for overcoming existing problems, thus ensuring maximum implementation of technical cooperation and other activities undertaken by the programme. [5.165]

72. The Office of the Director also provided the focal point for a number of activities, e.g.: the UNIDO focal point for the Administrative Committee on Coordination Task Force on Rural Development (para. 95 below); the focal point within the Department of Industrial Operations for activities with UNESCO; the UNIDO focal point for small and medium industries and private sector development (para. 86 below). In the latter capacity, the Director participated in high-level meetings with Government officials and top industrialists dealing with small and medium industries and private sector development. [5.165]

73. Through participation in specialized high-level forums, new areas of technical cooperation, new delivery mechanisms and

32/ Ibid., para. 104.

33/ IDB.8/10, chap. II, para. 109; IDB.9/10, chap. II, para. 104.

34/ IDB.9/10, chap. II, para. 105.

other activities of potential interest to the programme and to the Organization were identified. Thus, in India new forms of technical cooperation and mobilization of sources of finance were sought through the preparation of a model trust fund arrangement to be negotiated with the relevant counterparts and UNIDO's administrative services for the promotion of cooperation between Indian enterprises and selected enterprises from developed and developing countries. A Memorandum of Understanding for Cooperation between UNIDO and the Federal Ministry of Industry of the Russian Federation was concluded concerning UNIDO assistance in the fields of strategic management for restructuring, privatization, small and medium industries, conversion of military into civilian production and identification of foreign partners (see also para. 93 below). Negotiations were carried out for the conclusion of a cooperation agreement between the Inter-American Development Bank and UNIDO, which included the submission of relevant cooperation concepts. A paper on possible UNIDO activities for the conversion of military industries into civilian production and a proposed plan of action for their implementation was prepared and presented at the Defence Conversion Seminar held by the North Atlantic Treaty Organization at Brussels, Belgium, in March. Collaboration with UNESCO was enhanced through participation in the UNESCO Task Force and Organizing Committee for the preparation of the International Congress of Engineering Deans and Industrial Leaders to be held in 1993. [5.165]

#### Industrial Strategies and Policies (subprogramme 531)

74. In 1992, technical cooperation expenditures under the heading of Industrial Strategies and Policies (formerly "Industrial Planning") amounted to \$6.4 million. Some 64 per cent of the total implementation was financed from UNDP resources. A total of 97 projects were implemented or under implementation. [5.122]

75. The technical cooperation activities related to strategies and policies concentrated on the industrial restructuring process, driven by increasing global competition and technological as well as political changes. By definition this sets the stage for most of the priority areas of the medium-term plan. As in previous years the emphasis was on: (a) formulation and implementation of strategies and policies for industrial restructuring, with emphasis on the strategic management approach; (b) enhancement of the productive capacity of industrial subsectors; and (c) development of information systems. Priority attention was devoted to developments in Eastern Europe and the environmental policies in those countries. [5.120; 5.121]

76. The services offered under this subprogramme were in great demand for technical

support services at the programme level (TSS-1). Total TSS-1 activities implemented by the Industrial Strategies and Policies Branch amounted to 8.2 work/months in India, Madagascar, Nigeria and Swaziland. Similar services were carried out in Albania and the Philippines. The aim of those activities was within the formulation of industrial strategy and policy, the integration of environmental issues, the promotion of the private sector and the strategic management of industrial development. The resulting studies were being used by Governments and UNDP to identify needs for technical cooperation activities to be included in the next country programmes. All programmed TSS-1 activities were implemented in the second half of 1992, and the demand for such services under this subprogramme is expected to grow in 1993. [5.121]

77. Following a positive thematic evaluation carried out jointly by UNDP and UNIDO on the strategic management of the industrial development approach in Africa and the appreciation expressed of that approach by the General Conference in resolution GC.4/Res.19, 11 technical cooperation projects in this field were continued, three new projects were started (Benin, Niger and the Philippines) and three were developed (Guinea, Nigeria and Tunisia). The approach was recognized increasingly as an efficient tool to identify and meet the needs of the industrial sector in its restructuring and development. The framework it provides for a balanced relationship between the private sector and the State within the context of an open market economy proved to be useful in increasing both the efficiency of industry and the effectiveness of support systems and foreign assistance. [5.120; 5.121]

78. Three subregional projects aimed at subregional integration were under implementation to facilitate the restructuring process in West and Central Africa and countries in the Indian Ocean. The structural adjustment programmes, in opening inward-looking economies to the challenges of external competitive pressures, provide a good basis for integration. Subregional integration programmes should contribute to a smooth transition to global markets by introducing to the local business community the fundamentals and techniques of competitive production patterns in the context of an economy open to a broader, yet manageable, economic space such as the subregion. [5.122]

79. The Governments of Bhutan and Papua New Guinea <sup>35/</sup> were assisted in formulating industrial strategies and policies. In Bhutan, an important contribution was made to the elaboration of the country's seventh five-year plan for industrial development.

<sup>35/</sup> Ibid., para. 110.

with the emphasis on the private sector. A major output of the project in Papua New Guinea was the medium-term programme of action for the development of the industrial sector. In both countries, the UNIDO team assisted the departments of trade and industry in capacity building. In-service training and fellowships provided to the staff were aimed at industrial policy formulation, project identification, appraisal and management as well as the promotion of small-scale industries. Strengthening industrial competitiveness was the focus of a large-scale project in Cyprus, where UNIDO acted as a special adviser to the Government. The project was designed to meet the needs of a country endowed with a thriving private sector: the Government's most effective support for strengthening competitiveness would be to set up an attractive framework and build adequate capacities encompassing institutions and human resources. [5.120; 5.121; 5.123]

80. Continuing the Organization's support to the transformation process taking place in Eastern Europe and the Russian Federation, 36/ a seminar held in Vienna (28-30 October) examined priority issues of industrial restructuring, property rights and privatization within the predetermined macroeconomic parameters. Experts from Albania, Armenia, Bulgaria, Czechoslovakia, Hungary, Lithuania, Poland, Romania and the Russian Federation compared experience gained at the country level and agreed on the necessary measures for an effective transformation. The role of UNIDO and the assistance that the Organization could render was particularly emphasized. The seminar also discussed financial modalities and made recommendations on follow-up actions to be undertaken by Governments and by UNIDO. [5.120; 5.121; 5.124]

81. Financed by the Government of India, a workshop was organized on the use and application of expert systems in industrial policy-making in developing countries. System prototypes were presented in the areas of privatization strategies, transfer of technology, joint ventures, enterprise diagnosis, environmentally sustainable industrial development and others. The seminar recommended that an expert system to formulate alternative competitive strategies be further developed by research institutes in India and Mexico together with UNIDO. The restructuring process in industry requires appropriate decision support and information systems ranging in complexity from simple performance monitoring systems to artificial intelligence products. Information systems to collect and process a core set of explanatory variables of industrial competitiveness are needed for decision support at various levels. Industrial information systems for decision-making were implemented for example at Bhutan,

Nepal, 37/ and in Papua New Guinea, with local information networks becoming fully operational in the respective ministries of industry - in Bhutan, an industrial census was also implemented with the assistance of the project. UNIDO organized a national seminar held in Moscow in March on a computer-aided planning system for the development of agro-based industries in the Russian Federation. The system was presented to agro-industrial organizations and development institutions with the aim of applying it in planning and programming activities of agro-based industries development in transition to a market economy. The UNIDO system was translated into Russian and distributed to the institutions concerned. [5.120; 5.121; 5.123]

82. In collaboration with external experts, the Industrial Strategies and Policies Branch has been developing an approach to define the strategic elements of a methodology for the integration of environmental considerations in industrial policy formulation. This is a follow-up to the 1991 UNIDO Conference for Ecologically Sustainable Industrial Development (ESID), and constitutes the basis of sub-programme II in UNIDO's updated environment programme (IDB.10/17) i.e. integrating environmental considerations in developing countries' industrial development strategies and policies. The need for such a policy integration has also been included as a special programme area of Agenda 21 (chap. 8A "Integrating environment and development at the policy, planning and management levels"), the follow-up programme of the United Nations Conference on Environment and Development. In its areas of competence, the Branch also participated in the development and implementation of the UNIDO environment programme. In cooperation with the Government of Ukraine an expert group meeting, the International Workshop on Integrated Industrial and Environmental Management and Planning, was held at Kiev in May. The experts elaborated a detailed methodology for such integration. The main elements of the formulation of an ESID strategy include a review and environmental impact assessment of existing industrial policies, information collection and decision support systems, formulation of policy measures, both market-based and regulatory, the establishment of institutional mechanisms for implementation and enforcement of the advocated policy measures, as well as the establishment of monitoring and evaluation systems. [5.120; 5.121]

83. The integrated industrial and environmental policy approach was being applied in a number of countries that requested assistance of that nature. Examples are: preparatory assistance for the formulation and implementation of an ESID programme in Mozambique; development

36/ Ibid., para. 112.

37/ Ibid., para. 114.

of an ESID strategy for the Government of Morocco that will serve as a pilot case for a programme of integrated industrial and environmental management and planning for the Maghreb region; assistance to the Government of Nepal in formulating an ESID programme. The approach to integrated environment and industrial management was also applied in TSS-1 studies in India and Madagascar. In that respect, further TSS-1 assistance has been requested by Algeria, Tunisia and the Amazon Co-operation Council. In addition, the organization of three subregional workshops in Asia, Africa and Latin America was under consideration to provide training to decision-makers, government executives and industry managers on the formulation of policy measures and methodologies required to implement an ESID strategy. [5.120; 5.121]

#### Institutional Infrastructure (subprogramme 532)

84. Technical cooperation expenditures under the heading of institutional infrastructure amounted to \$14.4 million. Some 83 per cent of the total implementation was financed from UNDP resources. A total of 223 projects were implemented or under implementation. [5.136]

85. During the reporting period the subprogramme addressed the pressing needs of developing countries as well as countries in transition from a centrally planned economy to a market economy in a global context where private sector development, competitiveness and international cooperation have come to the fore. Technical cooperation continued to follow the comprehensive integrated programme approach and was consolidated in two main areas: (a) small- and medium-scale industries, and (b) institutional support for industrial development.

86. Programmes and activities to support small- and medium-scale industries were implemented in accordance with the integrated programme strategy and involved mutually supportive projects in areas such as institutions and infrastructure for the promotion and development of such industries; entrepreneurship development and privatization; rural industrial development; industrial information services; total quality management; industrial subcontracting; associations of industries and chambers of commerce; both North-South and South-South enterprise-to-enterprise cooperation; privatization; conversion of military industries into civilian production; and commercialization of research results.<sup>38/</sup> The Institutional Infrastructure Branch provided support to the focal point for the promotion and development of small and medium industries, a priority area in the medium-term plan. Activities in that respect were further

developed and consolidated, in cooperation with the small- and medium-scale industries working group, the integrated approach designed for that sector in order to meet the challenges and the new demands of the 1990s. The orientation towards small- and medium-scale industries is the priority area addressed in all the activities carried out under the subprogramme. [5.132]

87. Multidisciplinary teams were organized to respond to technical cooperation needs at the policy, institutional and enterprise levels to promote small- and medium-scale industries, taking into consideration the problems to be addressed in each particular country. At the policy level, technical cooperation aimed at creating and sustaining an environment conducive to the development of small- and medium-scale industries by providing advisory support to Governments in formulating and adopting policy measures to stimulate such industries and the private sector, including measures to increase the flow of finance to small and medium enterprises and rural industries. At the institutional level, innovations were brought about by involving associations of industries and other non-governmental organizations (NGOs) as support service institutions; in addition, technical cooperation needs were identified and assistance provided in selected areas where the support infrastructure was inadequate to address such needs. Thus, in a number of African countries such as Burkina Faso, Burundi, Cameroon, Madagascar, Mauritania, Niger, Rwanda and Senegal, technical cooperation efforts focused, *inter alia*, on enhancing the participation of private sector entrepreneurs themselves so as to organize and support the necessary institutional support mechanisms and the required services. Those projects were instrumental in preparing the base for a new dialogue and sharing of responsibilities between the public and the private sectors. A project initiated in Zaire aims to create local consulting firms for private small- and medium-scale industries in several provinces that will provide services to entrepreneurs and become self-sustaining after three years. [5.132; 5.133]

88. Technical cooperation activities with particular focus on entrepreneurship development programmes continued to be implemented in Bhutan, Costa Rica, Malawi and Turkey, and were initiated in Nepal as a means to establish or expand small- and medium-scale industries. The feed forward and feedback mechanisms of the UNIDO integrated approach were addressed by means of pilot activities catering to specific target groups in priority industrial sectors according to national development plans. In Malawi and Nepal, those activities were directed exclusively towards women in an effort to establish role models of successful women entrepreneurs and of viable new business opportunities. Government interest and support in the above entrepreneurship development programmes were seen in the form of additional inputs to expand the projects through donor cost sharing and

<sup>38/</sup> Ibid., para. 116.

even through the use of scarce UNDP funds. All the above-mentioned projects also addressed the need to enhance linkages with the private sector. In particular, the projects in Turkey specifically addressed private sector needs through direct consultancy inputs, carried out according to concrete requirements identified by an entrepreneurs' association and by university and/or other educational institutions interested in establishing business incubation services. Those incubation services would then be used to support long-term plans for establishing technology incubators and technoparks. [5.132; 5.133]

89. At the request of the Government of Kuwait, a UNIDO interdisciplinary mission visited the country in May to assist in the rehabilitation and restructuring of the industrial sector after the Gulf war. The team visited a number of industrial enterprises and met with representatives of private sector institutions such as chambers of commerce, industrial associations, research and development institutions as well as with government departments. A report submitted to the Government outlined a new approach for a comprehensive policy and an institutional framework for rehabilitation and restructuring of the industrial sector as well as development of human resources to promote industrial development in Kuwait. A major focus of the report was the development of small- and medium-scale industries as part of the overall private sector development. [5.132; 5.135]

90. The ongoing programme on enterprise-to-enterprise cooperation was given an innovative thrust. The programme has brought about substantial results both in North-South and South-South contexts in improving productivity and quality, product diversification and cost reduction with the aim of widening the domestic and export markets. It has continued to provide the critical catalytic support required by the small- and medium-scale enterprises as in the previous year.<sup>39/</sup> The programme received a major fillip recently with the signing of a memorandum of understanding between UNIDO, the Government of India, the provincial Government of Karnataka and the Karnataka Council for international cooperation concerning the creation of a trust fund for the modernization of small- and medium-scale enterprises in the state of Karnataka through links with more modern enterprises in the developed countries. The trust fund also aims at promoting enterprise-to-enterprise cooperation in the South-South context, with the support of UNIDO, by enabling Indian small- and medium-scale enterprises to set up joint ventures and other forms of cooperation with enterprises in other developing countries. With reference to regional cooperation to support economic integration, the regional projects in countries members of the Association of

South-East Asian Nations (ASEAN) and in Central America were also instrumental to support entrepreneurs and artisans in the handicraft sector with a growth potential, thus providing much needed employment to lower income groups and helping to alleviate poverty. [5.132; 5.133; 5.135]

91. As a special support measure to privatization, UNIDO organized and conducted, in cooperation with the Istanbul Chamber of Commerce, a workshop for countries in the early stages of privatization. Participants came from Africa, Asia and Europe, and included several from the Commonwealth of Independent States (CIS). In addition to providing information on the experience of privatization in other countries, UNIDO assisted the participants in elaborating proposals for technical cooperation to meet their pressing needs in that field. The workshop is expected to lead to the development of a regional network for privatization in 1993. Other activities in privatization for the year included technical assistance to Albania, Egypt and Romania, and the development of new technical cooperation projects for Peru and Sudan. [5.133]

92. The large-scale regional programme for industrial automation of the capital goods sector in Latin America and the Caribbean is one of the largest Industrial Development Fund (IDF) programmes (cf. chap. II, para. 133) that UNIDO is undertaking, and is the largest component within the Regional Cooperation Programme for the Industrial Recovery of Latin America and the Caribbean (ibid., para. 106). In 1992, a survey was carried out in some 300 small- and medium-scale enterprises in the region, to identify and analyse their current economic and operational needs for modernization and the industrial strategies and policies that the entrepreneurs intend to set up in the next years for which support is requested from UNIDO. On the basis of the survey results, a detailed programme of technical cooperation activities was designed to provide assistance and advice to small- and medium-scale entrepreneurs as the main target beneficiaries of the programme. The programme was presented at the Regional Consultation on the Restructuring of the Capital Goods Industry in Latin America and the Caribbean, held at Caracas, Venezuela from 9 to 12 November, where it was well received. [5.123; 5.132; 5.135]

93. A newly emerging and significant area of industrial development, for many countries of Central Europe and CIS, is the conversion of military industrial enterprises into civilian production. The conversion is therefore a multifaceted, multidimensional process with far-reaching social and economic implications. Requests for assistance in this respect have been received from a number of countries. The UNIDO approach in this area aims at changing the concept of "performance at any cost" to one characterized by a triple aim "cost, quality, delivery". Activities were being initiated through enterprise development,

<sup>39/</sup> Ibid., para. 124.

based on a modular approach. The necessary modules are drawn from existing programmes and expertise, and the first conversion activities are those characterized by low risk (where markets are available for converted products) and low investment (related to research and development-oriented industries). The approach was discussed at several international forums, such as the Consultative Committee of the Conference for Security and Cooperation in Europe (Bratislava, February), the United Nations International Conference on Conversion (Dortmund, Germany, February) where it was well received and drew the attention and interest of several countries where conversion programmes were under consideration and execution. In a Memorandum of Understanding, signed by the Russian Federation and UNIDO in April, UNIDO is called upon to provide advisory services to the Russian Federation in the general areas of conversion and privatization. As a follow-up, a round table discussion on the subject, organized by the Russian Ministry of Industry and UNIDO with participants representing more than 50 Russian military-oriented industries, resulted in concrete proposals for cooperation activities between UNIDO and a number of those industries and their associations to be financed through trust funds. [5.133; 5.135]

94. An Expert Group Meeting on Export Processing Zones (EPZ) development, management and promotion was conducted in Vienna in December to enable EPZ managers and experts to analyse global trends in manufacturing for exports and recent developments in a selected number of zones, and recommend guidelines on the design, promotion and management of EPZs. The conclusions of the meeting will be circulated widely to ensure that they reach as many policy makers and EPZ managers from developing countries as possible in order to facilitate the establishment of new EPZs and improve performance of existing EPZs. Technical cooperation activities in the area covered advice, pre-feasibility studies and training in the operation, management and promotion of EPZs. For example, a preliminary investigation on viability of an EPZ in Vanuatu was completed; assistance in management, promotion and marketing techniques was provided to the EPZ in Togo; 40/ study tours were organized for EPZ planners such as those from the Democratic People's Republic of Korea and Djibouti. [5.128; 5.135]

95. The Institutional Infrastructure Branch assisted the UNIDO focal point for rural development, and concentrated on providing inputs to the United Nations Administrative Committee on Coordination (ACC) Task Force on Rural Development. In particular, UNIDO again convened the Inter-agency Working Group on Industrial Contribution to Rural Development, 19 to 20 March. A study on

rural industries and poverty alleviation was prepared, which played a catalytic role in sharing the experience of various United Nations agencies at the two forums referred to above. The elaboration of the study for wider dissemination was under way for publication in 1993. Other activities included the contribution to the efforts of the Government of Gambia through participation in the High Level Advisory Committee for a Poverty Alleviation Programme organized by UNDP as well as cooperation with the International Fund for Agricultural Development (IFAD) to develop their programme to promote rural small-scale enterprises. Advisory service was provided to develop a programme to promote small-scale industries in the Tigray Province of Ethiopia. Technical cooperation activities to promote rural industries continued to be carried out in Guinea, Guinea-Bissau, Mozambique, Myanmar, Sierra Leone, Solomon Islands, Uganda and Zambia. 41/ The projects were intended to benefit the private sector through strengthening or developing national capacities at the government and/or at the private-sector level or strengthening the capacities of the entrepreneurs and employees themselves. Projects in Guinea, Mozambique, Sierra Leone, Solomon Islands, Uganda and Zambia established mechanisms for a revolving fund to channel financial resources to rural entrepreneurs for establishing new enterprises or expanding existing production facilities. The problem of collaterals received an innovative treatment in those projects to allow the flow of finance to rural entrepreneurs to increase in real terms. The projects also created national capacities to train entrepreneurs as well as workers in managerial and technical skill upgrading through appropriate institutions. Progress was made in enhancing community participation in rural industry development in Sierra Leone and Zambia. [5.132; 5.135; 5.137]

96. As far as institutional support for industrial development is concerned, outputs and activities focused on the establishment, strengthening and functional improvement of support institutions in order to provide services in research and development, industrial information, standardization, metrology, quality control, total quality management and related disciplines. For example, in the field of industrial information, the capacity of the Central Technical Library in Hungary was strengthened to assist small- and medium-sized companies in establishing their own information units and to train professionals of those companies in utilizing information sources. In the Philippines, assistance continued to be given for the design and establishment of technology information services at the Department of Science and Technology (DOST), and the Department of Trade and Industry and their four regional offices. The assistance encompassed design

40/ Ibid., para. 121.

41/ Ibid., para. 125.

and development of computerized databases and establishment of a network linking the regional offices with the central database at DOST as well as with the international databases. The activities are examples of integration and networking amongst institutions in a national context. As regards quality control, standardization and metrology, the programme continued to assist Governments in developing countries: (a) to develop the infrastructure necessary to promote, establish, ensure and improve the quality of locally produced or imported goods, and (b) to assist businesses in ensuring the quality of their production and in reaping the economic benefits of applying the quality disciplines. During 1992, 36 projects in 30 countries and one region were at various stages of implementation. Two projects provided a combined programme of training and direct consultation with enterprises on the principles and methodologies of total quality management (TQM), involving top managers who have taken the lead to achieve strategic benefits via the quality disciplines. Requests for assistance in TQM and in the application of the International Organization for Standardization (ISO) 9000 series quality systems standards are on the increase and those areas are seen to be extremely important in future programmes of technical cooperation related to quality control, standardization and metrology in order to help developing countries retain existing markets and capture new ones. Significant during the year was a request to formulate a document for a quality discipline programme in Sri Lanka, that was prepared and submitted for approval. [5.134]

97. Special attention was given to industrial subcontracting and similar forms of linkages between small and large industries by launching a special programme for the promotion of industrial subcontracting through specific mechanisms such as subcontracting and partnership exchanges (SPXs). In the framework of that programme, UNIDO surveyed, designed and developed standard instruments and methods. As in the previous year, 42/ related activities included policy issues and industrial legislation (decrees, incentives, tax and custom regulations), subcontracting nomenclatures and terminologies, computer programmes for database management (UNIDOSS), operational manuals, legal guidelines for establishing subcontracting agreements and model contracts, guides on the organization of subcontracting fairs, and brochures and video films on the advantages of subcontracting. The UNIDOSS subcontracting system designed and developed by UNIDO is legally protected by a license agreement that is provided free of charge to those countries benefiting from UNIDO technical cooperation activities in establishing SPXs. By the end of the year,

UNIDO had signed the license agreement with SPXs of 17 countries (11 in Latin America, three in the Arab region, two in Europe and one in Africa). At the national level, UNIDO continued providing assistance for the establishment of national SPXs - in Algeria, Jordan, Kenya, Morocco, Poland and Turkey 43/ - in addition to the 13 countries of Latin America and the Caribbean covered by the two regional programmes in Latin America (see chap. III, paras. 59-65). At the regional level, three programmes for the development of regional subcontracting systems and networks continued to be implemented by UNIDO: the two programmes in Latin America, and a programme for the Arab region covering Algeria, Egypt, Jordan, Morocco and Tunisia. Other regional programmes were initiated in Asia, Central America and in Eastern Europe. At the international level, a programme financed by France for the promotion of international subcontracting and partnership with Algeria, Egypt, Morocco and Tunisia where UNIDO had previously established national SPXs, was pursued with the contribution of French SPXs and chambers of commerce and industry. As in the previous year, 42/ UNIDO played a key role in annual regional subcontracting fairs such as SAMEST (Salon Méditerranéen de la Sous-traitance) at Tunis, Tunisia in April and SUBCONTRATA LATINA AMERICANA at Bogota, Colombia in July. [5.134; 5.135]

98. UNIDO offered technical cooperation to a number of developing countries in establishing chambers, federations and associations of industry such as the Chamber of Commerce, Industry and Agriculture of Guinea and the National Federation of Chambers of Commerce and Industry in Nepal. The UNIDO programme of product adaptation/development for export aims at upgrading and adapting industrial products manufactured in developing countries to match the requirements of selected target markets. Assistance in that respect was provided in establishing the Industrial Design Service of Jamaica. [5.135]

#### Industrial Management and Rehabilitation (subprogramme 533)

99. Technical cooperation expenditures under the heading of industrial management and rehabilitation amounted to \$5.6 million. Some 60 per cent of total implementation was financed from UNDP resources. A total of 60 projects were implemented and/or under implementation. [5.156]

100. The management and rehabilitation programme continued to place emphasis on assistance in the commercialization of industry as well as on increasing the level of direct assistance to the private sector and the transfer of commercially-oriented management technologies and systems. 44/ A

42/ Ibid., para. 122.

43/ Ibid.

44/ Ibid., para. 127.



considerable effort was made to review the programme's content and the type of assistance provided so as to take into account the competitive global marketplace and its realities and to provide inputs to the restructuring and privatization programmes. Emphasis was placed on profitability increase and on such issues as the strategic implications of quality in manufacturing and its effect on cost and competitiveness, the importance of software (methods, systems, work procedures, techniques) in improving productivity before seeking costly hardware solutions, and the primacy of the human element in industry. New ground was broken in the management programme with the inclusion of computer-aided process planning (CAPP). The rehabilitation programme, through wider experience, accentuated self-sustainability with continued emphasis on developing and improving strategy, and implementing commercially viable business plans for restructuring individual enterprises as well as optimizing the use and allocation of resources.

101. Faced with the challenge of market-oriented industrial policies being increasingly implemented in developing countries, the industrial management and rehabilitation programme underscored the importance of manufacturing integration through accurate and well-maintained information systems. Integrating business plans with manufacturing and engineering technology was a core theme. For example, within an ongoing project in China with a large-scale machine tool manufacturer, work was initiated on developing a CAPP system to integrate the plant's computer-aided design (CAD) engineering with the shop floor and utilize its manufacturing resource planning system in driving production. 45/ Another example is the expected continuation of a programme being developed in Indonesia with a heavy engineering group to integrate design engineering and production through a management information system. 45/ Initial inputs were provided in helping China formulate a large-scale enterprise management reform programme. The management and rehabilitation programme in East and Southern Africa (Malawi, Uganda and the United Republic of Tanzania) continued to provide assistance, primarily to agro-based and metal-working industries in productivity improvement, marketing and training 46/ (on-the-job, in-service and group training, workshops and overseas fellowships). [5.151]

102. The rehabilitation programme was directly influenced by recent global, political and economic changes which called for considerable assistance in restructuring and rehabilitating state-owned enterprises and in some instances privatizing them. The assistance required by State-owned enterprises was also provided at the macro- and institutional-levels by the privatization

programme in the Institutional Infrastructure Branch (see para. 91 above). A number of diagnostic studies were carried out in 1992, paving the way for economic and operational improvements in the performance of the enterprises concerned. An initial correct and independent diagnostic (accompanied by ad hoc assistance) is a basic tool for any further action. A manual on enterprise diagnostics was further elaborated to that end. [5.151; 5.152]

103. Technical cooperation at the enterprise level represented the core of the programme's activities. UNIDO sent multi-disciplinary consulting teams to Africa and Asia to help diagnose ailing industrial enterprises and to develop bankable rehabilitation plans. As an example of that type of assistance, 11 public textile mills in Viet Nam were surveyed; in Tunisia 15 small- and medium-sized industrial enterprises in several branches (mechanical engineering, footwear, ceramics and weaving) were diagnosed and advised on their restructuring. A large-scale project in Togo, back-stopped jointly by the Feasibility Studies Branch, and the Industrial Management and Rehabilitation Branch, contributed greatly to the survival and rehabilitation of some 20 enterprises, which would have been otherwise forced to close down because of the current economic crisis affecting Togo. [5.151]

104. Assistance to nine large-scale enterprises in Poland, financed by the United Kingdom Know-how Fund (see chap. III, para. 140), resulted in the preparation of viable restructuring programmes, enabling companies to cope successfully with transformation difficulties, develop a healthy structure for the future and move towards privatization. 46/ Such assistance (regarded as pilot operation) helped in financial restructuring, joint ventures, development of new markets, management and organizational development as well as financial and cost accounting. Since world-wide experience in restructuring centrally-planned industries into market-oriented ones is limited, the UNIDO experience can be seen as a pilot exercise, particularly from a methods development perspective. [5.151]

105. An important regional project developing an energy conservation network in Europe was successfully completed, 47/ and the goal of establishing regional cooperation in energy efficiency was fully achieved. The network is capable of providing information, training and consultancy services. The project also developed the concept of a mobile diagnostic unit tailored to conduct indigenous energy audits. Six energy auditing buses were put into operation in Eastern Europe and more than 100 specialists were trained in the training centres established by the project.

45/ Ibid., para. 128.

46/ Ibid., para. 129.

47/ Ibid., para. 130.

Key industries audited included building materials, food processing as well as iron and steel. UNDP plans to use the established network as the basis for a comprehensive energy environment regional programme. Additionally, the programme produced two internal manuals energy efficiency in the food processing industry and consultancy services in energy conservation. [5.152]

106. A considerable effort was dedicated to in-house cooperation related to rehabilitation, particularly where macro or technological issues were to be considered. A continuous effort was exercised in all projects to foster the involvement of local skills and to develop local consultancy. [5.151]

### C. INDUSTRIAL OPERATIONS SUPPORT (Programme 540)

107. The Industrial Operations Support Division, in spite of the lack of adequate resources, continued to provide operational and logistical complementarity to the other activities of major programme 500 by promoting the development of human resources in support of industry and by contributing to technical cooperation through the efficiency and quality in the recruitment of international and national project personnel. Within the Division, the Office of the Director (subprogramme 544) ensured the overall management of the two component subprogrammes (542 and 543) as well as the integration and coordination of their activities with other programmes throughout the Organization. The activities of subprogramme 541 are reported under programme 420 (see chap. IV, paras. 4 and 28-32).

108. Industrial human resource development at large, the training component included in technical cooperation projects and the recruitment and administration of international and national experts and consultants have a direct impact on the totality of UNIDO technical cooperation programmes. To ensure high quality and timely delivery of those activities the Office of the Director continued to review and analyse the various aspects of the programme, e.g. policies, strategies and methodology with a view to introducing improvements and providing appropriate guidelines. The Office of the Director also continued to provide proposals to decision makers in the UNIDO Secretariat for enhancing UNIDO's effectiveness in the design and implementation of technical cooperation programmes and projects. [5.216]

109. The Director participated actively, within the available resources, in specialized forums such as, the ninth Conference of the International Chamber of Commerce, held at Marrakesh, Morocco, in May, and the international symposium "Engineering Education 92", held at Klagenfurt, Austria, in September. The participation in such international conferences enabled UNIDO to share the experience gained in the two

components of the programme and expand the scope of its cooperation with the participants representing institutions and organizations from developed and developing countries. The Office of the Director also continued to maintain cooperation with the International Labour Organisation, the World Health Organization and the United Nations Environment Programme in connection with related activities and programmes. [5.216]

### Industrial Human Resource Development (subprogramme 542)

110. Expenditures for fellowship and other training components in all technical cooperation projects implemented by UNIDO amounted to \$16.4 million in comparison with \$17.6 million in 1991. Of that total, \$11.3 million was spent on fellowships and study tours and \$5.1 million on group training activities and meetings. Technical cooperation expenditure under the heading of training that received substantive backstopping from the Industrial Human Resource Development Branch amounted to \$3.2 million. Some 7 per cent of that implementation was financed from the United Nations Development Programme (UNDP) resources. A total of 103 projects were implemented or under implementation.

111. During 1992, greater awareness of the importance of the strategies for human resource development was created during the preparations of the fifth programming cycle of UNDP for a number of countries. To enhance human resource development in developing countries, increased attention was paid to the identification and clarification of training needs, as well as to the formulation of policies and strategies for human resource development and the development of effective training systems to execute industrial development programmes and projects at the sectoral, subsectoral and enterprise levels.

112. Special efforts were made to strengthen the linkage between human resource development and the development and transfer of advanced technologies as well as to create awareness of the environmental aspects of industrial development. Thus, assistance was provided in cooperation with the Government of France to the Government of Viet Nam in formulating a strategy for the development of human resources in the electronic sector. Based on the outcome of an assessment of training needs, an in-plant group training programme for maintenance and repair of port equipment was organized in cooperation with the Government of France, the French Agency for Technical, Industrial and Economic Cooperation and the Port of Marseille for participants from West and Central Africa. That programme emphasized the development of national maintenance policies and port maintenance activities. A group training programme, financed by the Government of Saudi Arabia, was held in the United Kingdom for senior policy- and decision-making personnel on

policies and strategies for the development of human resources for industrialization. The objective of the programme was to provide a framework of concepts, ideas and know-how that could be used by the participants in shaping industrial training and the human resource development policies and strategies with a view to ensuring the provision of qualified technical and managerial personnel. [5.191]

113. To enhance the contribution of educational systems to the development of human resources, new approaches were introduced to meet the challenges imposed by new technologies, such as the introduction of computers as an integral part of the production process (CAD/CAM), and the acquisition of technology, skills and know-how for the effective transfer of technology. To this end, a programme was developed that culminated in the holding of four national seminars on computer-based training in the field of production of tools and spare parts for participants from ministries, research institutions, training centres and enterprises in Burkina Faso, Costa Rica, Kenya and Uruguay in 1992. Preparations were carried out for two more seminars - one in Indonesia and one in Thailand - to be held in 1993. The seminars, organized in cooperation with the Government of Belgium, were preceded by an audit carried out in the six countries to assess spare parts and tools production and the manpower required as well as the training needs to use the new techniques. During the seminars, recommendations were elaborated on the introduction of the use of the computer numerical control equipment and computer maintenance management systems as well as on the selection of institutions for training and demonstration purposes. The programme aims at supporting the small- and medium-scale industries and providing them with essential local input. To improve information systems an association was established in North Africa to foster cooperation and exchange of experience and information among former participants of group training programmes organized in the field of building materials for Morocco and Tunisia. The association was fully involved in the preparation of the global Consultation on the construction industry scheduled to take place in Tunisia in May 1993. [5.194]

114. Steps were also taken to collect and analyse information on the experience gained in developed and developing countries on managerial and entrepreneurial skill development and to prepare training materials based on UNIDO's experience and its industrial contacts in the developing countries. Some of the material was produced during a project that provided for specialized training programmes followed by a one-week regional workshop at Kuala Lumpur, Malaysia to summarize all operational activities defined during the training programme. A total of 17 representatives from seven institutes in five countries participated. Based on the recommendations of that workshop, text

materials are compiled and distributed to participating countries and institutions on a regular basis to provide a continuous flow of information on new products processes and technologies for the development of small-scale industries. [5.191]

115. As in 1991, the component "training of trainers" was introduced in a number of programmes. <sup>48/</sup> Among others, two programmes organized within the framework of the Industrial Development Decade for Africa (IDDA) concentrated on the training of trainers, one in the field of establishing and financing small- and medium-scale enterprises for entrepreneurs and consultants from chambers of commerce and industry, and the other for trainers from banks and finance institutions of West African countries. Both programmes were organized in cooperation with the Agence de Cooperation Culturelle et Technique, Bordeaux, France. In a project aimed at promoting technical cooperation among developing countries (TCDC) involving Portuguese-speaking African countries and assisted by Portugal, <sup>49/</sup> seven Mozambican trainers were trained in production management skills including finance. The first stage was held at Lisbon, Portugal in cooperation with Portuguese counterpart institutions (Laboratorio Nacional de Engenharia e Tecnologia Industrial, Instituto de Formacao Technica Profissional, Instituto para Cooperacao Economica) and the second stage at Maputo, Mozambique where test training courses in management skills test acquired were organized and conducted by the newly trained trainers under the supervision of the project's team of experts. The test training courses were held at a local host training institution, Centro do Formacao Industrial (CFI). At the same time, the capacity and capability of CFI were strengthened through the acquisition of necessary training equipment and materials and the training of personnel. It is planned to develop the national training capacity of the four other African Portuguese-speaking countries (Angola, Cape Verde, Guinea-Bissau and Sao Tome and Principe) in the above industrial fields. Similarly, as part of the preparatory assistance for a training programme in maintenance management and transfer of know-how in the organization of maintenance seminars, three Angolan trainers completed their overseas training programme in the field of industrial maintenance. Training equipment had also been acquired and arrangements were being made for the main phase of the project, the actual training activities. [5.191; 5.192]

116. The group training programmes organized annually in Turkey, <sup>50/</sup> have been revised

<sup>48/</sup> Ibid., para. 146.

<sup>49/</sup> Ibid., para. 143.

<sup>50/</sup> Ibid., para. 147.

progressively to meet the changing needs of the developing countries based on the evaluation of the programme and the accumulated experience of both UNIDO and the host training institutions. Among others, the success as an ECDC/TCDC activity of the interregional training programme in the field of iron and steel industry was confirmed by a mission undertaken in 1992 that assessed the impact and training needs of selected countries. With the increased capability of the host training organization and based on the established priorities of UNIDO, the programme has been expanded to four modules covering environment, energy saving, management and training of trainers. In an effort to further utilize the existing training capabilities in developing countries and following the positive evaluation made in 1991 on the possibility of using the textile training and research centre of Sumerbank at Bursa, Turkey, a new training programme was launched and implemented that covers pre-treatment, dyeing, printing and finishing of textiles, with the focus on cotton. [5.194]

117. A successful group training programme on business analysis and industrial restructuring, consisting of two modules, was held in Poland for senior executives and senior policy- and decision-makers from industries and organizations engaged in privatization and industrial restructuring. Financing was secured from the Know-how Trust Funds of the Government of the United Kingdom. Another modular programme was the in-plant group training programme for training of trainers and development of training capabilities for countries of the Preferential Trade Area for Eastern and Southern African States (PTA) on planned maintenance systems for agro-based industry held in Zimbabwe (19 October to 18 December). This demand-oriented regional programme organized within the framework of ECDC/TCDC was developed as a result of an assessment of needs undertaken in 1985 and follow-up mission in 1989 on the impact on previous programmes. In cooperation with donors and the PTA secretariat, UNIDO developed the training capability of PTA member countries at the Zimbabwe Iron and Steel Company Training Centre. The 1992 programme, held for six weeks and financed by the Government of Saudi Arabia, was expanded with the inclusion of a component on training of trainers on systematic training methods and techniques for planned maintenance systems. The programme strengthened the training capability of Zimbabwe as well as of the other participating countries, leading to enhanced self-sufficiency and self-reliance. As a follow-up to the two previous programmes on environmental management for industrial managers and engineers, which were successfully held in 1989-1990 and in 1991-1992 in Finland and the former Soviet Union, a meeting took place in Finland in cooperation with UNIDO, UNEP and the Russian Federation to discuss how to establish local capacities in developing countries by strengthening their training institutions. At the meeting, arrangements were made to conduct the programme for the first time

in 1993 in a developing country, namely in the United Republic of Tanzania. [5.192; 5.194]

118. Owing to lack of funds it was not possible to comply fully with the continued demand from developing countries for an increase in the number of specialized training programmes. For a detailed breakdown of in-plant and other group training programmes held in 1992, see appendix H, tables 1 and 2. The number of fellowships and study tours held in 1992 is given in appendix H, tables 3 and 4, including a detailed breakdown covering the number of female participants and participants from the least developed countries. In support of industrial training, the twenty-first edition was published of the UNIDO Guide to Training Opportunities for Industrial Development (PI/115), as well as substantive work done on the 1993 issue of the UNIDO Industrial Training Offer Programme. [5.194; 5.195]

#### Project Personnel Recruitment and Administrative Service (subprogramme 543)

119. The task of Project Personnel Recruitment and Administration Service is to ensure the timely identification, appointment and administration of all international and national personnel for UNIDO projects. These services are rendered in close cooperation with all units in UNIDO that manage project activities. Under the UNDP Administrative and Operational Services (AOS) scheme recruitment and administrative services have also been increasingly provided directly to and in cooperation with Governments and others implementing projects within the new UNDP arrangements. To be better prepared for this new implementation modality, studies were initiated to expand and adjust the application of existing computer systems in order to further synchronize the cooperation with other administrative services within UNIDO dealing with the recruitment process such as Financial Services, and the Travel, Transportation, Shipment and Insurance Unit.

120. The service appointed 2,323 experts in 1992 which is below the record level of 1991 (2,700); the 1992 level could not be maintained due to the slow-down of technical cooperation activities caused by the continuing delay in the implementation of the UNDP successor arrangements and aggravated by the start-off problems of the fifth UNDP programming cycle 1992-1996, obstacles which could not be fully offset by increases of activities financed by non-UNDP sources. Owing to the shift to an increasing share of the project personnel component in UNIDO projects it was nevertheless possible to limit the adverse effects of the above-mentioned factors. The recruitment of experts during 1992 broken down by categories of professional project personnel was as follows: (a) a total of 362 or 16 per cent of all international experts were appointed under the 200 series of

the UNIDO Staff Rules and Regulations (580 in 1991), including 37 associate experts financed by seven Member States (24 in 1991) and 232 specialists made available under loan agreements for staffing large-scale, self-financed trust fund projects in Egypt, the Libyan Arab Jamahiriya and Nigeria (424 in 1991); (b) a total of 1,521 or 65.5 per cent were consultants recruited as experts on mission under special service agreement for short term assignments (1,761 or 65.2 per cent in 1991); (c) a total of 440 or 19 per cent national professional project personnel were engaged to work on projects in their own countries (359 or 13.3 per cent in 1991). In line with efforts to increase the participation of women in industrial development projects 192 or 8.3 per cent of all recruited experts were women (184 or 6.8 per cent in 1991). The recruitment of 80 local General Service support staff (e.g. secretaries, drivers) was processed for UNIDO field projects (120 in 1991). [5.203; 5.204; 5.205]

121. Expressed in work-months and monetary value, the delivery of experts' services resulting from appointments and extensions of appointments reached 13,235 work-months (13,327 in 1991) and \$69,253 or 51 per cent of the total technical cooperation implementation value (\$74,025 or 48.99 per cent in 1991). The cost of experts continued to be determined, *inter alia*, by market factors, by the generally short duration of missions and the corresponding high travel cost element. The average duration of 2.5 work-months remained at the level of recent years. [5.206]

122. Table 1 of appendix D reflects the success achieved in obtaining experts from the widest possible choice of nationalities and professional background, including from developing countries. Experts from 115 countries were recruited. A total of 921 nationals from developing countries were employed, including 440 national experts. They represent 40 per cent of all experts appointed. [5.205]

123. The technical cooperation activities of UNIDO were effectively supported by the international roster of candidates. Over 10 per cent or 1,333 candidates were added to the roster in 1992 and the names of 1,857 inactive candidates were deleted. Great care was taken to update the professional composition of candidates and maintain a broad choice in terms of geographical and national background. At the end of the year, the roster contained a total

of 11,786 individuals from 135 countries, of which 3,863 were from developing countries. [5.207]

124. UNIDO continued to share the costs of the United Nations Technical Assistance Recruitment and Fellowships Office at Geneva by financing two interviewing officers and General Service support staff. The officers continued to undertake interview missions to identify candidates as in previous years, <sup>51/</sup> without incurring extra travel costs for UNIDO. A UNIDO regional recruitment officer continued to be assigned to the UNDP Office at Cairo, Egypt, and was responsible for the identification, interviewing and briefing of candidates for UNIDO projects.

125. Personnel administration services were provided to international and national project personnel and to locally recruited project support staff. The services covered the administration of 2,676 international experts (2,905 in 1991); 611 national experts (518 in 1991) and 347 local support staff (375 in 1991). Such services included the establishment and administration of entitlements and benefits under the UNIDO Staff Rules and Regulations, the administration of consultants and national experts in accordance with their contractual conditions, as well as briefing and counselling them on matters concerning their contracts and conditions of service. Administrative services were again marked by the need for frequent adjustments of entitlements payable in currencies other than United States dollars, due to exchange rate fluctuations. [5.203]

126. Inter-agency consultations were undertaken in order to design simpler alternatives to the instruments presently available for the appointment of certain categories of staff such as project personnel. The alternatives discussed envisaged the establishment of a new format of appointments for professional project staff combining elements of the present letter of appointment with the more flexible elements of presently used special service agreements. Such appointments could introduce broad bands of freely negotiable pay levels and lump sum compensation instead of the wide variety of benefits and entitlements payable to the regular core staff of the Secretariat.

<sup>51/</sup> Ibid., para. 24.

Table 5  
Distribution of experts by regional groups of countries  
 (1 January to 31 December 1992)

	Number of experts					
	UNIDO roster <u>a/</u>	Percentage of roster <u>a/</u>	Submitted to Government	Selected by Government <u>b/</u>	Appointed <u>c/</u>	Percentage of appoint- ments
Developing countries <u>d/</u>	3,863	33	349	952	921 <u>h/</u>	40
List B countries <u>e/</u>	6,245	53	621	1,285	1,124	48
List D countries <u>f/</u>	1,678	14	249	274	263 <u>g/</u>	11
Countries not included in any list of Annex I to the UNIDO Constitution	-	-	9 <u>i/</u>	23 <u>j/</u>	15 <u>k/</u>	1
<b>Total</b>	<b>11,786</b>	<b>100</b>	<b>1,228</b>	<b>2,534</b>	<b>2,323</b>	<b>100</b>

a/ As of 31 December 1992, excluding roster candidates for Secretariat posts only (2,906).

b/ Including government nominees and national professional personnel.

c/ Including appointment of 440 national professional experts.

d/ States in lists A and C of annex I to the UNIDO Constitution plus Albania, Cyprus, Greece, Malta, Portugal, Romania and Turkey.

e/ States in list B of annex I to the UNIDO Constitution, excluding Cyprus, Greece, Malta, Portugal and Turkey.

f/ States in list D of annex I to the UNIDO Constitution, excluding Albania and Romania.

g/ Including 92 appointments of experts from Poland, Hungary and Czechoslovakia for large-scale trust fund projects.

h/ Including 129 appointments of experts from Romania for large-scale trust fund projects.

i/ Croatia 7, Slovenia 2.

j/ Armenia 2, Bosnia and Herzegovina 3, Croatia 16, Georgia 1, Slovenia 1.

k/ Armenia 2, Bosnia and Herzegovina 2, Croatia 10, Slovenia 1.

Table 6  
Significant performance indicators:  
Project Personnel Recruitment and Administration  
 (subprogramme 543)

	<u>Number of individuals</u>			<u>Work-months c/</u>			<u>Implementation value (million \$)</u>		
	1992	1993	Total	1992	1993	Total	1992	1993	Total
<b>Appointments [5.205]</b>									
(a) International experts and consultants	1,883	-	1,883	10,527.6	-	10,527.6	65.86	-	-
(b) National experts	440	-	440	2,707.8	-	2,707.8	3.40	-	-
Total	2,323	-	2,323 a/	13,235.4	-	13,235.4 d/	69.26	-	- c/
Extensions	1,657	-	1,657 b/	included in above			included in above		
<b>Administration of servicing experts, consultants and support staff</b>									
(a) International experts and consultants	2,676	-	2,676						
(b) National experts	611	-	611	see above			see above		
(c) Local support staff	347	-	347						
Total	3,634	-	3,634						

a/ Total number of appointments under (a) and (b) planned for 1992-1993: 4,600-5,000. (Achievement in 1992: 2,323 or 46.5 per cent).

b/ Total number of extensions under (a) and (b) planned for 1992-1993: 2,400-2,700. (Achievement in 1992: 1,657 or 61.4 per cent).

c/ Work-month figures combine appointments and extensions.

d/ Total number of work-months planned for the biennium combining both appointments and extensions: 18,400-20,000 representing an implementation value of \$110 to \$120 million. [5.206] (Achievement in 1992: 13,235.4 or 66.2 per cent for work-months and \$69.26 million or 57.7 per cent in financial terms).

## CHAPTER VI. EXTERNAL RELATIONS, PUBLIC INFORMATION, LANGUAGE AND DOCUMENTATION SERVICES (700)

1. Within the major programme responsible for maintaining general relations with Governments, United Nations and other inter-governmental organizations, and enlisting public understanding and support for the activities of UNIDO, the Office of the Deputy Director-General (programme 710) ensured coordination and management of the component programmes, as well as cooperation among them and with all other major programmes and programmes.

### A. EXTERNAL RELATIONS (Programme 720)

2. The overall management of the activities of the four subprogrammes mentioned below was ensured by the Office of the Director (subprogramme 725). The output and activities of that Office were achieved as scheduled with the exception of those aimed at reactivating cooperation and coordination with the 63 National Committees for UNIDO, which could not be undertaken as requested in Board decision IDB.5/Dec.8 owing to lack of budgetary resources. [7.54]

#### External Liaison and Protocol (subprogramme 721)

3. The External Liaison and Protocol Section continued to act as reference point for communications with Governments, governmental and intergovernmental organizations as well as organizations and specialized agencies within the United Nations; liaise with the host Government; draft and negotiate cooperation agreements in accordance with Article 19 (a) of the Constitution; and coordinate the activities of the joint programmes and similar cooperation arrangements established with Member States in specific branches of industry. [7.19; 7.54]

4. The Section also coordinated the organization of the Director-General's official visits, as well as high-level visits to United Nations Headquarters, and carried out all protocol-related activities, including the accreditation of Members of Permanent Missions, authorization of related privileges and issuance of the Directory of Permanent Missions. During the reporting period, 29 high-level delegations, including Ministers and Deputy Ministers of Governments as well as Executive Heads of intergovernmental organizations visited UNIDO Headquarters. A total of 27 Permanent Representatives presented their credentials. The Director-General undertook six official visits to Member States. [7.19; 7.20; 7.54]

5. During 1992, six States - Armenia, Australia, Bosnia and Herzegovina, Croatia,

Georgia and Slovenia - became Members of UNIDO, thus bringing the membership of UNIDO as of 31 December 1992 to a total of 160 Member States. At the end of the year, 124 Member States were maintaining Permanent Missions to UNIDO of which 82 were located in Vienna, 20 at Geneva, 15 at Bonn, four at Brussels, and one each at Bern, Paris and Rome.

6. Activities related to inter-agency coordination included UNIDO contributions to reports of other United Nations organizations and specialized agencies. The External Liaison and Protocol Section represented UNIDO at inter-agency meetings as required, monitored follow-up of decisions taken by the General Assembly and the Economic and Social Council, and collated and disseminated information from the United Nations system on matters of interest to UNIDO. [7.20]

7. Concerning cooperation with other intergovernmental organizations, a relationship agreement with the Asian-African Legal Consultative Committee was signed in November, thus bringing to 27 the total number of agreements concluded with such organizations since UNIDO became a specialized agency. Negotiations for concluding relationship agreements with the European Community and the League of Arab States were finalized and it can be expected that those agreements will be signed in 1993. As foreseen in the Memorandum of Understanding concluded between the International Trade Centre UNCTAD/GATT and UNIDO, the second liaison meeting was held at UNIDO Headquarters on 17 November 1992. The meeting identified a number of joint activities to be implemented during 1993. [7.19]

8. Cooperation continued with the United Nations Volunteers programme. In 1992, 10 United Nations volunteers were assigned to UNIDO-executed projects, bringing the total number to 45 volunteers working in 30 UNIDO-executed projects during the year. [7.54]

#### Secretariat of Policy-making Organs (subprogramme 722)

9. The 1992 sessions of the policy-making organs (see chap. II.A) accounted for a total of 14 working days. The Secretariat of Policy-making Organs organized and provided services to those sessions as described in the programme and budgets. A total of 1,700 manuscript pages of documentation was prepared/processed in connection with those sessions. The Secretariat also ensured follow-up action to decisions of policy-making organs and liaised with Governments and Permanent Missions on all related questions. [7.27]



UNIDO Office at New York  
(subprogramme 723)

10. The UNIDO Office at New York continued to serve as the main link with United Nations Headquarters and as the focal point for industrial development inquiries concerning UNIDO from North America. With the overall promotional approach described in last year's report, 1/ special emphasis was placed in 1992 on cooperation with international financial institutions who have their headquarters at Washington, D.C. The outreach programme, which continued to produce an overwhelming response, was again accomplished within the existing constraints of human and financial resources. As part of the important follow-up work to this outreach programme 2/ the Office prepared the groundwork for and assisted in the conclusion of a Memorandum of Understanding between UNIDO and the Environmental Protection Agency in the United States at the United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, in June. Also, as a result of initiatives begun in 1991 with the University of California, 2/ a global preparatory meeting for the first Consultation on the construction industry, scheduled for 1993, (see chap. IV) was held at the University of California, Berkeley, in December. [7.34]

11. Regular briefings were organized for government officials and representatives of the private sector with senior Vienna-based UNIDO staff, in particular on the subjects of feasibility studies, UNIDO activities in Central Europe and the Pacific Rim and special trust funds. The Office also organized and participated actively in high-level meetings with private- and public-sector leaders in Canada, and briefed a large number of visitors from Australia, Canada, the United States of America and various European and Latin American countries on the subject of UNIDO. [7.34]

12. The Office continued to focus its attention on least developed countries and on those UNIDO Member States which do not have representation facilities in Vienna or Geneva, giving them, as appropriate, information and assistance. It also gave special attention to newly independent States to provide them with information on UNIDO and its activities and to encourage them to become members of UNIDO. With the approval of UNIDO Headquarters, the Deputy Director of the Office took advantage of a private visit to Latvia to meet with the Latvian authorities and brief them on the Organization, its activities, the procedures to become a Member State of UNIDO and to establish technical cooperation between Latvia and UNIDO.

13. The Office provided representation, services and active participation on

subjects of interest to UNIDO at meetings held within the framework of the forty-seventh session of the General Assembly, at the 1992 organizational and substantive sessions of the Economic and Social Council, and of the Administrative Committee on Coordination (ACC) as well as the thirty-second session of the Committee for Programme and Coordination. As in previous years, the Office also provided representation at, and reported on, some 200 inter-governmental and inter-agency meetings. In particular, the Office represented UNIDO at the fourth session of the Preparatory Committee for UNCED, held in New York from 2 March to 4 April, cooperating actively with Member States on matters of interest to UNIDO, including the follow-up to recommendations of the UNIDO Conference on Ecologically Sustainable Industrial Development (Copenhagen, October 1991) for consideration at UNCED. [7.34]

14. As it has done for the last 14 years, the Office continued to organize training for students in the activities of the United Nations in general and UNIDO in particular. This year a two-month summer internship was provided for two graduate students from the University of North Carolina and Duke University, with the focus on the restructuring of the Economic and Social Council, women and environment and the financing of development. Training programmes were organized for two graduate students from the Law School of Boston University on legal aspects of sustainable industrial development and for a student from Mount Holyoke College on the activities of UNIDO and on questions of co-ordination within the United Nations system.

15. Concerning cooperation with the United Nations Development Programme (UNDP), the Office continued to carry out the numerous activities described in previous annual reports, 3/ including assistance in the preparation and execution of technical co-operation projects and participation in the United Nations Inter-Agency Working Group on the reconstruction of Lebanon. 4/ The Office continued to participate in the work of the Inter-Agency Task Force on the New Independent States. It assisted in the preparation of the participation of the United Nations system in conferences held on the subject in Washington (January), Lisbon (May) and Tokyo (October). It contributed to the preparation of two documents, the one dealing with the United Nations system's Action in International Assistance to the New Independent States and the other with the Modalities of Accession to the United Nations Specialized Agencies. [7.34]

16. As part of the public information component of the work of the Office, briefings were organized for the press and delegations in coordination with the United Nations

1/ IDB.9/10, chap. VI, para. 27.

2/ Ibid., para. 28.

3/ IDB.8/10, chap. VI, para. 31.

4/ IDB.9/10, chap. VI, para. 33.

Headquarters staff. In addition, the Office arranged for several radio interviews for the Director-General with international broadcasters in New York and issued press releases on various UNIDO programmes and activities. The Office continued to serve as the focal point for UNIDO information for North and South America, providing documentation and responding to queries from Permanent Missions, the private sector, non-governmental organizations, the United Nations Secretariat, specialized agencies, technical experts and academic institutions. As in the previous year, 5/ the Office organized the participation of UNIDO in the United Nations Information Fair held in New York in October. The Office continued to maintain an extensive collection of documentation and information on UNIDO which is widely utilized. More than 4,000 inquiries were processed, with a continued increase in queries on UNIDO work in the areas of environment, private sector development and joint ventures, particularly in Eastern Europe. [7.34]

17. The Office continued to work closely with the UNIDO Office at Geneva on matters pertaining to the General Assembly, Economic and Social Council, ACC, the UNDP Governing Council and their subsidiary bodies, and those meetings which have alternate venues in New York or Geneva.

UNIDO Office at Geneva  
(subprogramme 724)

18. The increase of new challenges and problems facing the United Nations system as a whole has led to the multiplication of initiatives and the organization of technical meetings for coordinated action of the international community. As the United Nations at Geneva has been increasingly called upon to host such events, this has led inevitably to an expansion and intensification of the activities of the UNIDO Office at Geneva; many interventions were prepared and presented at those events to highlight UNIDO's position on the various issues. [7.43]

19. During the year the Office was actively involved in 64 meetings either at the express request of various departments at Headquarters or on its own initiative when the subjects discussed were of relevance to UNIDO's own programmes. Those meetings ranged from governing bodies and policy-making organs of other organizations to expert group consultations, coordination committees and inter-agency working groups. [7.45]

20. At the same time, close and regular contacts were maintained and expanded with the Permanent Missions to UNIDO at Geneva. Frequent briefings were required owing to changes in the staff of those missions. These efforts were made principally to

increase the interest of Permanent Missions in UNIDO programmes and activities as well as their active participation in UNIDO policy-making organs meetings. This objective was achieved to a large extent. [7.44]

21. As an essential part of the close and continued working relations established by the UNIDO Office with the other United Nations organizations at Geneva, substantive as well as logistical assistance was provided to UNIDO headquarters staff as well as experts and consultants on mission to various Geneva-based organizations. Frequent working-level discussions took place with specialized agencies and United Nations organizations such as the International Labour Organisation, World Health Organization, Economic Commission for Europe, United Nations Conference on Trade and Development, International Trade Centre UNCTAD/GATT and the International Telecommunication Union. Knowledgeable information was retrieved from these contacts and transferred to Headquarters for policy orientation and guidance or for programme and project formulation or negotiation. The reverse was also true, when an increasing number of inquiries from these organizations were addressed to the Office. [7.46]

22. Finally, the UNIDO Office at Geneva provided information to an ever-growing number of individuals and organizations including non-governmental organizations, private companies or public institutions willing to cooperate with UNIDO. [7.44]

**B. LANGUAGES AND DOCUMENTATION**  
(Programme 730)

23. Conference services continued to be rendered on a joint basis under the same administrative and financial arrangements in force since 1986. 6/ As in the past, the Meetings Planning and Interpretation Service operated by the United Nations serviced all United Nations meetings in Vienna as well as all UNIDO meetings held in Vienna and elsewhere, while the UNIDO Languages and Documentation Division continued to provide a full range of translation, editorial, printing and other documentation services to both UNIDO and the United Nations entities in Vienna. These services were carried out by the Languages and Documentation Division under the supervision and coordination of the Office of the Director (subprogramme 734).

24. During 1992 the Division continued the implementation of measures aimed at a more efficient use of staff resources, including a decrease in the recruitment of temporary assistance on costly daily terms. Table 1 below provides information on translation, editorial, and other documentation services, while table 2 provides information on the

5/ Ibid.

6/ IDB.3/10, chap. VII, paras. 30-31.

interpretation services provided and on the number of meetings serviced for UNIDO and the United Nations Office at Vienna (UNOV) over the past three years. [7.56; 7.73; 7.81; 7.88]

**Translation**  
(subprogramme 731)

25. Staffing problems persisted because finding suitable candidates for the Spanish and French translation sections continued to be difficult. By the end of 1992, there were 12 vacancies in the Translation Service and two vacancies in the Editorial Control and Publications Section. Nevertheless, the Translation Service continued to improve the quality of the texts translated and to introduce appropriate methods to ensure even prompter delivery. [7.66]

**Editorial Control and Publications**  
(subprogramme 732)

26. The Editorial Control and Publications Section continued to provide editorial, typesetting, reproduction, distribution and other related services to UNIDO and UNOV. Table 7 shows the distribution of the work-

load among UNIDO, UNOV and the International Atomic Energy Agency (IAEA) during the year. [7.73]

**Documents Control**  
(subprogramme 733)

27. The Documents Control Unit, which coordinates the processing of all jobs requiring translation, editing, artwork, presentation, typesetting and printing from UNIDO and the United Nations, handled 13,698 jobs in 1992, 48.2 per cent of which were for UNIDO and 51.8 per cent were for the United Nations. The Unit is also responsible for coordinating the exchange of work between duty stations: in 1992, some 1,610 pages of translation were processed for United Nations Headquarters. While this is only a fraction of the total output for UNOV, it is a first step in a process that should lead to more efficient and cost-effective use of capacity system-wide. The computer-aided documents control system, one of the largest databases in UNIDO, is used to track documents (over 500 under processing at any given time), generate workload statistics and provide the basis for calculating the cost-sharing ratio between UNIDO and the United Nations. [7.81]

**Table 1**  
**Significant performance indicators: Languages and Documentation**  
(Programme 730)

		Total	Share	
			UNIDO	United Nations (per cent)
Translation services (1,000 words) [7.66]	1990	19,514 a/	35.6	64.4
	1991	20,685 b/	41.6	58.4
	1992	16,201 c/	34.3	65.7
Editing services (1,000 words) [7.73]	1990	3,639	58.0	42.0
	1991	3,767	58.0	42.0
	1992	3,697.7	46.8	53.2
Editorial assistance at meetings (days) [7.73]	1990	58	-	100.0
	1991	51	6.0	94.0
	1992	74	-	100.0
Preparation of camera-ready pages [7.73]	1990	6,607	39.0	61.0
	1991	8,470	46.0	54.0
	1992	8,705	37.7	62.3
Jobs processed [7.81]	1990	14,721	48.2	51.8
	1991	17,904	49.6	50.4
	1992	13,698	48.2	51.8
Documents/publications circulated (number of documents)	1990	4.7 million	51.0	49.0
	1991	4.7 million	54.0	46.0
	1992	4.2 million	53.7	46.3

a/ Includes 3,779,800 words for the policy-making organs of UNIDO.

b/ Includes 5,742,000 words for the policy-making organs of UNIDO.

c/ Includes 3,264,000 words for the policy-making organs of UNIDO.

**Table 2**  
**Interpretation services and number of meetings**  
**serviced by UNDOV**

		Total	Share		
			UNIDO	United Nations (per cent)	IAEA
Interpretation services (in work days)	1990	4,126	16.1	83.9	
	1991	4,965	28.3	71.7	
	1992	3,744 a/	17.9	55.6	26.5
Conferences/meetings (No. of half-day meetings)	1990	1,913	56.2	43.8	
	1991	2,349	57.6	42.4	
	1992	1,661 b/	56.9	43.1	

a/ Includes 554 interpreter days for the policy-making organs of UNIDO.

b/ Comprises 945 UNIDO meetings and 716 United Nations meetings, both with and without interpretation.

### C. PUBLIC RELATIONS AND INFORMATION (Programme 740)

28. Public relations and information activities in 1992 focused on the need to increase the exposure of UNIDO among the media, government and private-sector decision-makers and awareness of its services and programmes by emphasizing the Organization's role in key international events and its contribution to recent development trends.

29. Among international events through which UNIDO public relations and information activities highlighted the Organization's role was the United Nations Conference on Environment and Development (UNCED) held at Rio de Janeiro, Brazil, from 3 to 14 June. The event provided an opportunity for promoting the UNIDO environment programme as well as defining the function of UNIDO within the United Nations system in reaching the goal of sustainable industrial development. Activities carried out by the Public Relations and Information Section for UNIDO's contribution to UNCED included publicity for the Director-General's participation in the "Earth Summit" as well as in the International Chamber of Commerce Industry Forum preceding UNCED, the preparation of press releases, radio and video interviews and the contribution to a film on clean industrialization, "Greenbucks", sponsored jointly by the United Nations Environment Programme, UNIDO, Australian Broadcasting Corporation, British Broadcasting Company, Television Trust for the Environment and Business Council for Sustainable Development. In the follow up to UNCED, the Section took an active part in the UNIDO Task Force on Environment, contributing to its strategy paper on the Organization's implementation of Agenda 21 and participating in the ongoing work of that task force. UNIDO was promoted at

other major events through on-location radio interviews and photo reportages, such as Europe's Environmental Technology Fair and Conference held in Vienna from 20 to 22 November. [7.98; 7.99]

30. With East-West economic relations at the forefront of media attention, a full-scale press public relations information operation was mounted for a major industrial trade and investment Conference, entitled "New Frontiers for Trade and Investment for the Post-Soviet Republics", held at UNIDO Headquarters on 8 to 10 November, organized by UNIDO, AWT International Trade and Finance Company, and Austria's *Die Presse* newspaper. The Conference was covered by international journalists from print, television and radio. A comprehensive press kit and press releases were issued, television and radio interview programmes were produced and two press conferences were held on behalf of the Forum. [7.98]

31. To mark Africa Industrialization Day on 20 November, a poster, a special issue of the journal *Industry Africa* and a film were produced on the theme of building materials. The film, "Building the future", distributed in English and French to 43 television stations in Africa, was screened during the tenth session of the Industrial Development Board as well as on Africa Industrialization Day at UNIDO, and at several international conferences. The event was publicized through the Cable News Network (CNN) calendar of events. [7.99]

32. A series of initiatives was launched to strengthen contacts with the news media and create greater public awareness of UNIDO, such as organizing major press conferences, briefings and radio interviews. For instance, in September, press conferences were organized at United Nations Headquarters in New York, during the opening week of the General Assembly, and at

Washington, D.C., where the Director-General played a key role on the organizing board and as a panelist at the Conference on Integrated Global Development sponsored by CNN.

33. Other initiatives included interviews and briefings on current issues given by UNIDO Headquarters and field staff with journalists representing major newspapers as well as specialized trade, finance and development publications and the production of a new series of radio and television programmes - "The world of industry" and "Focus on UNIDO". The Section's staff briefed 27 special-interest groups from the private and public sectors visiting UNIDO. [7.98]

34. Some 130 press releases, features, and other printed information including material for radio were produced during the year as well as four issues of the illustrated quarterly UNIDO Update in English, French and Spanish. As in previous years, press coverage was arranged for major UNIDO meetings. [7.98 (iv)-(vii)]

35. The audio-visual, radio and photo services continued to serve the United Nations bodies based at the Vienna

International Centre. The following activities were undertaken for UNIDO: (a) the promotion of "Sun and salt", a video on solar technology in salt production in Nigeria, produced by Terra Media in cooperation with UNIDO; (b) the co-production of two promotional videos on "The ASPF advantage", on the setting up of a UNIDO-assisted hand tools factory in Ethiopia; (c) the production of six video vignettes, the provision of video services in response to 220 requests, and the distribution of 180 copies of UNIDO films on video cassettes; (d) the production of 170 radio programmes, several through direct telephone/radio links with international broadcasting stations and others for the United Nations radio service at New York; (e) the distribution of more than 1,200 photographs covering 50 events; (f) the preparation of a photo exhibition for World Environment Day (June 5) at the Vienna International Centre; and (g) the organization of film screenings at the Sections's video theatre and media activities at the media centre such as press interviews, press and public relations briefings. Owing to lack of funds it was not possible to carry out the activities planned for Seville Expo '92. [7.98(ii), (iii), (viii); 7.99(i)]

## CHAPTER VII. ADMINISTRATION (800)

1. Within the major programme of administration, the Office of the Deputy Director-General (programme 810) was directly responsible for subprogramme 812, thus providing direction and overall management for the Department of Administration and ensuring that administrative, financial, general and common services were provided to all major programmes in a timely, effective and economical manner. [8.21; 8.22]

2. Following the organizational changes in the UNIDO Secretariat in July 1992 (see chap. I, para. 21; chap. II, para. 38), the staff training and development functions under subprogramme 811 were transferred to the Personnel Services Division (see paras. 16-20 below), while the classification function continued to be part of the Office of the Deputy Director-General. A total of 117 jobs were analysed and classified to determine the level of the functions, 41 in the Professional category and above, and 76 in the General Service category. In addition, a database to assist in the management of the classification files was created and became fully operational. [8.14]

#### A. PERSONNEL SERVICES (Programme 820)

3. During the period under review, the work of Personnel Services, as in the rest of the Organization, was adversely affected by the financial situation of UNIDO. In compliance with conclusion 92/5 of the Programme and Budget Committee concerning measures to balance the operational budget, the main priority established by the Office of the Director (subprogramme 825) was to preserve the capacity of the Organization for technical cooperation delivery and the equitable geographical distribution of the staffing of the Secretariat. Those efforts were successful despite the serious cash flow problems, which included a significant decrease in overhead earnings and required a high vacancy factor to be maintained. External recruitment of staff at the Professional and higher levels could not be entirely avoided in cases where the specific qualifications required for a post were not available in the Secretariat. [8.65]

4. In order to make the best possible use of available human resources both currently and in the future, a working group was established to follow up on the preliminary internal study carried out in 1991 on human resource planning for the UNIDO Secretariat. 1/ It is expected that by

mid-1993 a human resource database will have been completed to provide comprehensive information on skills possessed by serving staff members which could be applied to the Organization's priority activities. In addition to facilitating the reassignment of staff, the database will allow the identification of areas in which additional training is needed. [8.14]

5. Table 1 below gives the composition of the staff of the UNIDO Secretariat as at 31 December 1992, according to category and sex, and with comparable figures for 1991. Tables 2 and 3 provide details of the distribution by gender since 1990. Table 4 shows significant performance indicators for the full range of Personnel Services activities. As at 31 December 1992, the number of staff from developing countries serving on posts subject to geographical distribution at the senior level was 37, or 31.4 per cent.

#### Recruitment (subprogramme 821)

6. The number of Professional staff recruited during the year for posts subject to geographical distribution numbered 26, of whom 10 (38.5 per cent) were women. Two of the women were General Service staff who advanced to the Professional category. A total of nine, or 34.6 per cent were recruited from developing countries. [8.37]

7. The roster of external candidates continued to be updated, bearing in mind the changing needs of the Organization, the specialization of staff and the priority areas established under the medium-term plan. The total number of candidates in the updated roster is shown in table 4 which also indicates the number of women and candidates from developing countries. Of the 2,870 (1991: 2,793) candidates on the roster, 57.1 per cent (1991: 55.1 per cent) were from developing countries. [8.37]

8. Table 4 also provides statistical information on the applications received during the year, external vacancy announcements issued, staff recruited, short-term and consultant contracts and contracts issued to individual contractors. [8.37]

#### Personnel Administration (subprogramme 822)

9. As of 31 December 1992 the total staff of UNIDO numbered 1,343 (1991: 1,386), which included nine staff members temporarily serving as UNIDO Country Directors (UCDs). In addition, 40 UCDs (1991: 40), together with their local support staff, were administered by the subprogramme.

1/ IOB.9/10, chap. VII, para. 13.

10. Every effort was made to meet the requests of the General Conference (GC.4/Res.29) with regard to the career development, training and performance appraisal of staff members, including measures to ensure that they were placed in areas where their experience would be of greatest benefit to the Organization. Thus considerable redeployment of serving staff took place, which ensured the timely filling of some of the vacant posts and provided more opportunities for career development. Due attention was paid to the equitable treatment of staff, regardless of the source from which their posts were funded. [8.44]

11. In response to decisions by the Industrial Development Board (IDB.7/Dec.22) and the General Conference (GC.4/Dec.24), a Sub-Committee on Women in the UNIDO Secretariat 2/ was established within the Joint Advisory Committee (JAC) for the purpose of reviewing procedures and advising the Director-General on any special measures required (see UNIDO/DA/PS/INF.1201 for terms of reference). In 1992, the Sub-Committee, in collaboration with the Coordinator for the Improvement of the Status of Women in the Secretariat (Director-General's Bulletin UNIDO/DG/B.97/Amend.2), elaborated a set of recommendations for submission to JAC in early 1993. Furthermore, UNIDO participated in the Working Group established by the International Civil Service Commission (ICSC) to review the status of women in the United Nations common system and make recommendations thereon for submission to the General Assembly at its forty-seventh session.

12. Within UNIDO, the representation of women in posts subject to geographical distribution reached the level of 24.4 per cent (1991: 21.5 per cent), which constituted significant progress towards achieving the 25 per cent target for 1993 set by the Board in its decision IDB.7/Dec.22. Two women were appointed to senior posts and four were assigned to Chief of Section positions during the reporting period.

13. A working group consisting of members of the Personnel Services Division and the Evaluation Staff in the Office of the Director-General 3/ completed its review of the performance appraisal system that was introduced in 1989. A total of 25 senior managers and other supervisors drawn from the entire Secretariat provided their views and suggestions for changes in the reporting system. The report of the working group contains recommendations for adjustments intended to address weaknesses in the appraisal system and to meet the changing needs of the Organization. These findings will be forwarded to ICSC which, at the request of the General Assembly (resolution 46/191), is undertaking a study

of performance appraisal systems in use throughout the United Nations common system. [8.44]

14. The maintenance of harmonious staff/management relations continued to receive high priority and all the statutory bodies foreseen in the Staff Regulations of UNIDO were active during the reporting period. The members of the staff/management bodies are appointed by the Director-General following consultation with the Staff Council which nominates 50 per cent of the membership. [8.44]

#### Social Security (subprogramme 823)

15. The matter of pensions for staff in the Professional and higher categories became a crucial issue following the expiration on 31 March 1992 of the transitional measures for the calculation of the initial local currency pension of such staff. 4/ In addition, the United Nations Joint Staff Pension Board and ICSC reviewed during the year the pensionable remuneration of General Service staff. UNIDO took an active part in the negotiations on both matters and also undertook a large number of individual briefings with staff members who felt that the impending changes might affect them. Under the auspices of the ACC Consultative Committee on Administrative Questions (CCAQ), the fourth Staff Counsellors meeting took place at the Vienna International Centre (VIC) to discuss common system issues in the fields of staff welfare and employee assistance. The recommendations that emanated from that meeting would be reviewed at the spring 1993 session of CCAQ. In October 1992, a pre-retirement seminar was held for VIC staff aged 54 and above and a series of lunchtime lectures on healthy living was launched by the VIC Working Group on Wellness. [8.51]

#### Staff Development and Training (subprogrammes 811 and 824)

16. During the reporting period the former Human Resource Planning Unit and the Language Training Unit [former 824] were merged to provide a consolidated training programme, details of which are given in table 4.

17. Despite budgetary constraints, the systematic approach to staff development that began in 1988 continued to be applied, with particular emphasis on the upgrading of technical and managerial skills. In total, 650 participants attended 79 courses. The training programme on the use of computers was expanded, with 503 staff at all levels attending 67 basic or advanced courses. The Assisted Self-Learning programme, a cost-

2/ Ibid., para. 9.

3/ Ibid., para. 4.

4/ Ibid., para. 11.

effective concept designed to assist staff members to upgrade their basic skills in computer applications, continued successfully. A total of 123 middle and senior managers participated in ten workshops designed to improve interpersonal/inter-cultural, negotiation and presentation skills and the link between leadership styles and effective management. A special programme on presentation skills was held for scientific personnel of the International Institute for Applied Systems Analysis (IIASA). The urgent need to improve teamwork in UNIDO led to the design of a new programme, Cross Cultural Team Building for Managers, which was developed to assist members of established groups or teams in improving their teamwork and effectiveness. In addition, the managerial assistance programme provided training for 24 General Service staff members in two courses. [8.14]

18. During the year, 26 staff members participated in individual programmes outside UNIDO and received a total of 128 days of external training. The emphasis on

external training continued to be on updating and upgrading technical skills. [8.14]

19. Language training was provided in the six official languages of the United Nations and in German and was also available to staff of the Permanent Missions accredited to them and adult dependants. A total of 110 classes were held in 1992, attended by 679 persons in the spring semester and 656 in the autumn semester. In addition, a total of five post-proficiency classes were held in English and French, one workshop on French grammar, two on office communication skills in French, two language maintenance workshops in Russian and one in Spanish. Language proficiency examinations were administered for 276 candidates. [8.58]

20. During the year 42 university graduates were accepted for the UNIDO ad hoc internship programme, which gave them the opportunity of obtaining practical experience, both by doing research and providing assistance on matters of direct relevance to the work of the Organization. [8.58]

Table 1  
Composition of the UNIDO Secretariat a/

Category	As at 31 December 1991		As at 31 December 1992	
	Male	Female	Male	Female
P-5 and above	152)	7)	133)	10
P-1 to P-4	216) 368	89) 96	200) 333	94) 104
General Service	295	620	290	609
Language teachers	2	5	2	5
Subtotal	665	721	625	718
TOTAL	1,386		1,343	

a/ Figures include 11 interregional and special technical advisers attached to UNIDO Headquarters but not short-term staff or UNIDO Country Directors (with the exception of nine staff members serving temporarily in the latter capacity).

Table 2 (a)  
Composition of Professional staff, by gender, 1990-1992  
(Number)

Grade	MALE			FEMALE			TOTAL		
	1990	1991	1992	1990	1991	1992	1990	1991	1992
DOG	5	5	5	0	0	0	5	5	5
D-2	5	5	4	1	1	1	6	6	5
D-1	28	33	30	1	1	0	29	34	30
P-5	100	109	94	8	5	9	108	114	103
P-4	129	124	117	34	35	39	163	159	156
P-3	68	66	61	31	30	32	99	96	93
P-2/1	28	26	22	20	24	23	48	50	45
TOTAL	363	368	333	95	96	104	458	464	437
Per cent	79.3	79.3	76.2	20.7	20.7	23.8	100	100	100



Table 2 (b)  
Composition of Professional staff, by gender, 1990-1992  
 (Percentage)

Grade	MALE			FEMALE		
	1990	1991	1992	1990	1991	1992
DDG	100	100	100	0	0	0
D-2	83	83	80	17	17	20
D-1	97	97	100	3	3	0
P-5	93	96	91	7	4	9
P-4	79	78	75	21	22	25
P-3	69	69	66	31	31	34
P-2/1	58	52	49	42	48	51

Table 3 (a)  
Composition of Professional staff subject to geographical distribution,  
by gender, 1990-1992  
 (Number)

Grade	MALE			FEMALE			TOTAL		
	1990	1991	1992	1990	1991	1992	1990	1991	1992
DDG	5	5	5	0	0	0	5	5	5
D-2	5	5	4	1	1	1	6	6	5
D-1	25	27	25	1	1	0	26	28	25
P-5	83	85	79	7	5	9	90	90	88
P-4	105	106	98	28	31	33	133	137	131
P-3	48	45	46	23	22	27	71	67	73
P-2/1	12	15	13	15	19	17	27	34	30
TOTAL	283	288	270	75	79	87	358	367	357
Per cent	79.0	78.5	75.6	21.0	21.5	24.4	100	100	100

Table 3 (b)  
Composition of Professional staff subject to geographical distribution,  
by gender, 1990-1992  
 (Percentage)

Grade	MALE			FEMALE		
	1990	1991	1992	1990	1991	1992
DDG	100	100	100	0	0	0
D-2	83	83	80	17	17	20
D-1	96	96	100	4	4	0
P-5	92	94	90	8	6	10
P-4	79	77	75	21	23	25
P-3	68	67	63	32	33	37
P-2/1	44	44	43	56	56	57

**Table 4**  
**Significant performance indicators: Personnel Services**  
 (Subprogramme 820)

Activities	1991	Female	Male	1992	Female	Male
<b>Applications received and responded to</b>						
Professional	5,773	966	4,807	4,913	990	3,923
General Service	1,843			1,507		
<b>Total number of Professional candidates rostered</b>						
	2,793	589	2,204	2,870	609	2,261
From developing countries	1,539	308	1,231	1,640	322	1,318
<b>Vacancy announcements</b>						
Professional	25			25		
General Service	31			36		
<b>Staff recruited</b>						
Professional	61	14 <sup>a/</sup>	47	47	16 <sup>a/</sup>	31
Short-term advisory services	37	4	33	8	0	8
UNIDO Country Directors	4	1	3	5		5
General Service	34 <sup>b/</sup>			22 <sup>c/</sup>		
<b>Short-term contracts issued</b>						
Conference service staff	624			593		
Secretariat staff	158 <sup>d/</sup>			131 <sup>e/</sup>		
<b>Contract contracts issued</b>						
	345			140		
<b>Individual contractors</b>						
	114			185		
<b>Staff administered</b>						
Headquarters	1,386			1,343		
UCDs, and UNIDO staff in field						
offices <sup>f/</sup>	40			40		
Support staff in the field	72			76		
<b>Language training enrolment</b>						
of which UNIDO	1,782			1,335		
	594			579		
<b>Participants in UNIDO internship programme</b>						
	48			42		
<b>Staff training</b>						
Computer-assisted learning	257			92		
Management development	143			123		
Managerial assistance	61			24		
External training	36			26		
Computer skills	653			503		

<sup>a/</sup> Includes two females who advanced from the General Service to the Professional category.

<sup>b/</sup> Includes two transfers from United Nations Office at Vienna.

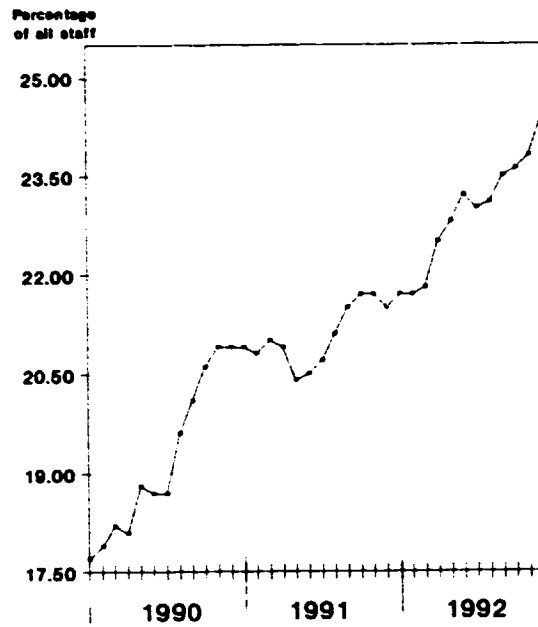
<sup>c/</sup> Includes two transfers from United Nations Office at Vienna and one recruitment for EPI./REL/NYK.

<sup>d/</sup> Includes 52 short-term advisory services staff.

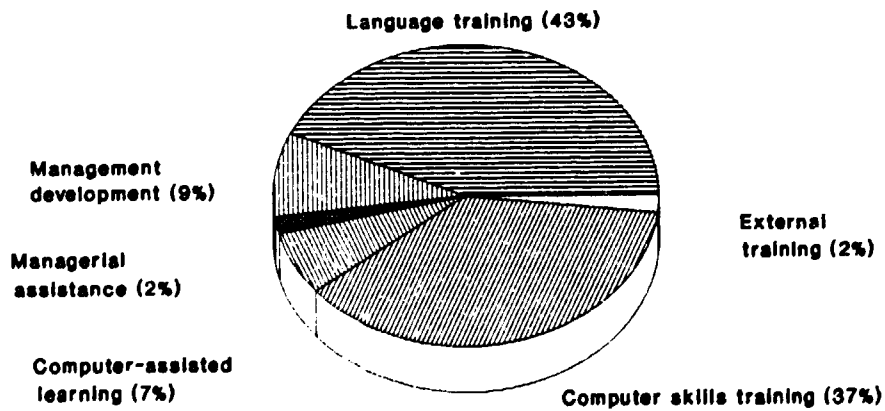
<sup>e/</sup> Includes 22 short-term advisory services staff.

<sup>f/</sup> Other than project personnel.

**Female Professional staff  
subject to geographical  
distribution, 1990-1992**



**Staff Development and Training, 1992**



**B. FINANCIAL SERVICES**  
(Programme 830)

21. The work of the various subprogrammes under the Financial Services programme was guided, supervised, controlled and coordinated by the Office of the Director (subprogramme P35), which also served as the main channel of liaison with the External Auditors. [8.106]

22. The Division of Financial Services had to cope with a number of financial problems that continued to hamper its smooth functioning. The continued delay in payments by Member States of their assessed contributions to the regular budget caused the Division to hold back a significant level of approved appropriations which in turn led to a serious delay in the implementation of the programme of work during the first year of the biennium. The financial situation was further aggravated as a result of the decrease in technical cooperation delivery and the corresponding loss of support cost income, part of which relates to the delay in the implementation of the United Nations Development Programme (UNDP) successor arrangements for agency support costs. While the Organization as a whole suffered from the weakened financial environment, some progress was made in improving internal financial systems. Contingency measures to stabilize the regular and operational budgets were implemented; however, it was clear that the process of stabilization of these budgets would require concrete measures in order to minimize the financial problems extending into the next few years and to ensure over time that the financial infrastructure of UNIDO supports the implementation of its programmes effectively. [8.106]

Budget  
(subprogramme 831)

23. The work of the Budget Section was concerned mainly with the allotment and control of regular and operational budget resources for the first year of the 1992-1993 biennium and the preparatory work for the 1994-1995 programme and budgets. The levels of regular and operational budget allotments were subject to constant review in the light of the need to hold expenditure levels within available cash resources. A number of documents were prepared for submission to the policy-making organs including financial situation reports for the regular and operational budgets, expenditure report for the electronic data-processing programme, financial performance report for the biennium 1990-1991, follow-up of the External Auditor's reports, draft medium-term plan 1994-1999, indicative ceiling for 1994-1995, practice of zero real growth budgets and application of the split-currency system of assessment. An advance draft of the proposed programme and budgets for the 1994-1995 biennium was prepared in cooperation with the Strategy, Policy and Planning Office and made available to

Member States in December. The fixed-dollar budget allotment control, which became operational in 1992, simplified the control and reporting of budgetary expenditures. A briefing seminar to explain the system was held for certifying officers. Improvements were made to the computerized project allotment document (PAD) system and preliminary work was undertaken on improvements to the staffing tables and reports. The Budget Section participated in the internal resource management meetings, and assistance was also provided in the preparatory activities related to the fifth session of the General Conference. Ongoing activities included the issuance of PADs for the regular and operational budgets and United Nations accounts, control of allotments, financial management of the UCD programme, apportionment of conference service costs between the United Nations Office at Vienna (UNOV) and UNIDO, certification and administration of UNIDO staffing tables, preparation of financial reports for the Task Force on the Industrial Development Decade for Africa, certification functions and the drafting of responses to the observations of the External Auditors. [8.76]

Financial Management of Technical Cooperation  
(subprogramme 832)

24. The financial management of technical cooperation activities of an ongoing nature continued, consisting of the financial implementation and control of the technical cooperation programme, reporting and analysis of technical cooperation delivery, including related systems and procedures as reflected in table 5. At the end of 1992, 2,380 projects were under financial implementation of which some 1,473 were substantively operational. [8.83]

Accounts and Payments  
(subprogramme 833)

25. The computerization of several main accounting functions was finalized and implemented. That exercise included fixed-dollar allotment control, on-line control of accounting input and systems for non-cash transactions. In conjunction with the other departments and divisions, continuing analyses and reviews were made during the year of all reporting requirements: modifications and improvements were agreed upon, and systems and procedures were updated accordingly. In complying with the financial implementation and accounting procedures for the UNDP successor arrangements for agency support costs (TSS-1, TSS-2, AOS), conceptual work was introduced through on-line accounting treatment.

26. In addition to its own accounts, UNIDO continued to maintain the accounts of UNOV, to effect all payments made in Vienna to staff and suppliers of the two organizations as well as pre-auditing charges received from field offices and other

organizations. The total number of transactions processed increased by 7 per cent while staff resources remained severely limited. Measures introduced during the biennium to improve the control and management of financial resources and to speed up processing transactions included the maintenance and updating of existing systems and the introduction of an automated pension fund reporting system for local staff administered by UNIDO. [8.90]

**Treasury**  
(subprogramme 834)

27. Cash management, including the control of the receipt, custody, disbursement and investment of all sources of funds of the Organization, continued in 1992. To the extent possible, efforts were made to ensure that regular budget assessed contributions were received on time to meet the cash flow requirements of the Organization. In addition, all other sources of funds of the Organization were properly managed, secured and invested. UNIDO's Investment Committee met six times during 1992 to

discuss investment policies, which included the strengthening of bank credit analysis controls and the review of short-term investments made during the period in line with UNIDO portfolio needs. Up to 31 December, 398 short-term investments had been placed with 31 authorized banks in 10 countries. With few exceptions, time deposits in any one bank did not exceed \$10.0 million with a view to maximizing the security of funds. As of 31 December, UNIDO had some \$113.8 million invested in time deposits. About 20 per cent of this amount was invested in Austrian banks. At year end, some 56 per cent of the portfolio was invested in United States dollars, 20 per cent in Italian lire, 15 per cent in Austrian schillings and the remainder in other major currencies. Some 70 bank accounts were managed and operated worldwide during the year. [8.99]

28. New activities undertaken during the year included the development of a concept to set up a special account to cover unforeseen liabilities and miscellaneous investment expenses related to trust funds and special accounts.

**Table 5**

**Significant performance indicators: Financial Management of Technical Cooperation**  
(Subprogramme 832)

Activities	1990	1991	1992
Projects in database (year end) <sup>a/</sup>	2,518	2,542	2,380
Group training programmes/workshops implemented	111	129	107
Travel authorizations implemented	2,652	2,748	2,968
Recruitment actions implemented	4,505	4,423	4,904
Purchase orders implemented	3,240	3,129	2,629
Fellowships/study tour actions implemented	2,335	2,002	2,130
Number of mandatory revisions prepared for UNDP projects	952	930	668
Number of "Letters of Authorization" raised for field offices for UNDP-funded projects	424	428	297

<sup>a/</sup> The percentage of UNDP/IPF projects was: 1990 - 52 per cent; 1991 - 47 per cent; and 1992 - 32 per cent.

**Table 6**

**Significant performance indicators: Accounts and Payments**  
(Subprogramme 833)

Number	1990	1991	1992	1991-1992 increase (decrease) %
Accounts transactions	299,293	350,182	375,200	7.14
Incoming invoices processed:				
Suppliers	24,133	22,633	23,417	3.46
Training	11,993	10,465	11,333	8.29
Travel claims paid	10,999	11,282	10,364	(8.14)
Travel advances paid	2,461	2,949	2,323	(21.23)
Inter-office voucher transactions recorded	42,767	42,067	70,916	68.58
Outgoing invoices issued	871	905	774	(14.48)
Donor reports prepared	5,517	5,819	6,408	10.12
Imprest accounts maintained	16	17	25	47.06
Payroll documents processed	14,881	14,731	17,373	17.93
Special services agreement payments paid	4,159	4,117	3,829	(7.00)
Manual actions undertaken	10,686	10,534	15,281	45.06

### C. GENERAL SERVICES (Programme 840)

29. The work of the subprogrammes mentioned below was supervised and controlled by the Office of the Director (subprogramme 845), which thus provided direct administrative and operational support to the implementation of the Organization's technical and industrial cooperation activities. [8.152]

30. Concerning subprogrammes 841 and 842, a draft manual on policies, procedures and rules governing the activities of the Contracts and Purchase Sections and Inventory Control and Property Management Unit were prepared and reviewed by the External Auditor and the Internal Audit Unit. [8.119; 8.128; 8.152]

#### Purchase (subprogramme 841)

31. Equipment and supplies totalling \$27.3 million were purchased for technical cooperation projects (1991: \$36 million). Detailed comparative figures for these and other activities are given in table 7. In addition, the Purchase Section acquired equipment, supplies and materials for the operation, maintenance and repair of the Vienna International Centre (VIC) complex to a total value of \$4.02 million in 1,352 individual orders (1991: \$6.2 million in 1,398 individual orders). Of this total, 1,055 orders for \$2.8 million (1991: 1,057 orders for \$4.1 million) were for UNIDO and cost-shared procurement, with the balance of 297 orders for \$1.24 million (1991: 341 orders for \$2.04 million) for the other United Nations offices at the VIC. The Purchase Section re-established the roster of vendors in 1992; 1,070 companies were contacted of which 680 have responded and provided updated information. The roster has been developed as a computer mainframe program with products coded according to the United Nations Common Coding System (UNCCS). [8.117; 8.118; 8.119]

#### Contracts (subprogramme 842)

32. In 1992, 209 new contracts were awarded by the Contracts Section for technical cooperation projects (228 in 1991) to a total value of \$15.5 million (1991: \$18.3 million). Detailed comparative figures are given in table 7. The reduction as compared with 1991 was due mainly to a lower number of projects approved following the transition to the new UNDP successor arrangements. For UNIDO Headquarters and the United Nations Office at Vienna (UNOV), 239 contracts were awarded to a total value of \$10.5 million. The new Contract Management Information System (CMIS) was successfully installed and made operational. By the end of the year, the system was being used daily by staff to process requisitions and contracts and

administer the 720 contracts under implementation. This EDP-based management tool has enhanced the quality and timeliness of the services provided. Furthermore, data on some 740 consulting companies listed in the UNIDO roster of consulting firms was updated. [8.117]

#### Buildings Management (subprogramme 843)

33. Regular activities in buildings operation and engineering including all approved major repair fund projects were carried out as scheduled without major impediments. The consumption of utilities was kept in check and, in spite of increased prices of electricity, heating, energy and garbage disposal, costs have been contained. In fact, savings of approximately 5 per cent were achieved thanks to energy-saving measures coupled with a mild winter. Despite an increase in cooling consumption as a result of the hot summer, cost increases were negligible, thanks to favourable contractual arrangements. [8.135; 8.136]

34. In addition to day-to-day operations, maintenance and service activities in electronics engineering and office space management included: the installation of computer networks for all VIC-based organizations; the installation of digital telephone exchanges for parts of UNOV and the United Nations Relief and Works Agency for Palestine Refugees in the Near East; video, sound and telecommunication arrangements for the UNIDO Conference of Commonwealth of Independent States (CIS) to accommodate some 600 participants in the UNIDO and IAEA boardrooms and the formulation of proposals for the reorganization and redistribution of space in the VIC and in the former federal police station to which some United Nations offices will soon be relocated. The fire detectors and the fire alarm system replacement programme in building C was completed as scheduled and the interconnection plugs replacement programme for the conference rooms was continued. [8.135; 8.137]

#### Other General Services (subprogramme 844)

35. At the end of the year, the non-expendable property records of UNIDO consisted of 10,513 discrete items with a value of \$17.8 million, the expendable property records of 37,485 identified items with a value of \$4.9 million and the records of in-house held property purchased from project funds of 240 items amounting to \$0.36 million. A total of 852 requests for furniture and/or equipment were received and processed. Work was completed on 1,310 orders which involved 7,815 movements of furniture/equipment. Recording and control of the property of the United Nations offices at the VIC involved 3,213 non-expendable and special items totalling \$4.2 million, 5,255 expendable items totalling \$1.36 million and 464 records for

items held in-house (even though purchased from project funds) totalling \$0.9 million. A total of 473 requests for furniture and/or equipment were received from the United Nations offices at the VIC. By the end of the year, 752 work orders and 4,062 movements of furniture and/or equipment were completed. Records were kept of 384 items of non-expendable and/or special property belonging to 39 UCDS and the offices of two Junior Professional Officers.

36. There were a total of 121 cases reported to the Property Survey Board of which 34 originated at Headquarters, 22 from UCD offices and 65 from technical cooperation projects. A total of 790 technical cooperation project inventories were maintained and 114 transfer of title documents amounting to \$15.1 million were finalized. Some 29 service contracts were arranged for UNIDO and 19 for the United Nations offices at the VIC. Repairs completed, excluding those of computer equipment, were 3,814 for UNIDO and 1,163 for UNOV. The recorded value of catering items was \$4.3 million. A total of 4,843 consignments were received and 65 consignments were dispatched by the central receiving area.

37. Centralized registry services continued to be provided to UNIDO and the United Nations Centre for Social Development and Humanitarian Affairs by processing, routing, filing and following up on all incoming, outgoing and internal communications on

substantive matters. Although new activities resulted in an increased volume of communications (especially facsimile transmissions), the centralized registry system and files enabled the provision of reliable and fast service to all departments of the two organizations.

38. Archive services were provided for UNIDO and UNOV/Personnel and Telex, the Centre for Social Development and Humanitarian Affairs, the United Nations International Drug Control Programme, and the United Nations Conference for the Promotion of International Cooperation in the Peaceful Uses of Nuclear Energy. UNIDO accessions amounted to 229 linear metres (1991: 389.5 linear metres), while 147.5 linear metres (1991: 194.5 linear metres) were disposed of. United Nations accessions represented 38.5 linear metres (1991: 23.5 linear metres) while disposals totalled 24.5 linear metres (1991: 28 linear metres).

39. Over 11,153 travel authorizations were processed for UNIDO and UNOV, representing an air ticket value of approximately \$30.2 million including inter-office voucher charges. In that connection, 2,211 visas were obtained for staff members. A total of 2,412 shipments of equipment, household goods, personal effects and documents were arranged for UNIDO and UNOV, and 83 insurance claims were filed with the insurance broker, of which 62 were settled.

Table 7

Significant performance indicators: General Services  
(Programme 840)

Activities	1991				1992			
	No.	%	Value (\$)	%	No.	%	Value (\$)	%
<u>Purchase orders placed (841)</u>								
Technical cooperation (all funds) whereof	2,651		36,031,325		2,183		27,280,000	
(a) Developing countries	674	(25.4)	7,090,464	(19.7)	536	(24.6)	5,078,000	(18.7)
(b) Underutilized major donor countries	224	(8.4)	1,340,907	(3.6)	155	(7.1)	2,072,000	(7.7)
Headquarters and others	1,398		6,157,182		1,342		4,016,525	
<u>Contracts awarded (842)</u>								
Technical cooperation (all funds) whereof	228		18,301,687		209		15,533,326	
(a) Developing countries	87	(38.1)	3,017,731	(16.4)	82	(39.2)	3,971,433	(25.2)
(b) Underutilized major donor countries	5	(2.0)	1,494,114	(8.2)	9	(4.3)	700,470	(4.5)
Headquarters and others	261		13,013,893		239		10,449,941	

Activities	1991				1992			
	No.	%	Value (\$)	%	No.	%	Value (\$)	%
<b>Buildings Management (843)</b>								
Cables laid by contractor			-				128.7 km	
Carpets laid			14,276 sq.m				17,688 sq.m	
Cables laid by in-house staff			98 km				20.5 km	
Cable trays placed			25 units				100 m	
Walls moved			236				265	
Staff relocated			410				415	
Electricity costs			AS24,637,296				AS23,981,360 (20,650 MWh)	
Heating costs			AS15,818,590				AS15,465,416 (28,415 MWh)	
Cooling costs			AS14,945,634				AS15,898,545 (8,032 MWh)	
Water costs			AS 3,222,017				AS 3,343,799 (181,850 cu.m)	
Fluorescent light tubes replaced			-				24,000	
<b>Travel, transportation, shipment and insurance items processed (844)</b>								
Travel authorizations processed			13,530				11,153	
Cables/telexes processed			2,176				2,764	
Total visas secured			2,801				2,211	
Austrian visas			935				518	
International visas			1,866				1,693	
Shipments arranged/insured			2,797				2,412	
Total value of tickets issued (in US dollars)			14,300,000				30,177,000 a/	

a/ Since 1992, the basis for calculation of tickets issued includes UNIDO telex authorizations through UNDP offices and tickets issued for UNOV.

#### D. MANAGEMENT INFORMATION SERVICES (Programme 850)

40. The Management Information Services Division formed in 1991 5/ is responsible for planning, implementing and operating the computerization programme of UNIDO (Director-General's Bulletins UNIDO/DG/B.142 and UNIDO/DG/B.156). Following reorganization in July 1992, the Division comprises the following Sections: Computer Operations (subprogramme 851), the Computing Information Centre (subprogramme 852), Application Services (subprogramme 853) and the Office of the Director (subprogramme 854).

41. During the first half of the year a major activity of both the Information Centre and Application Services was the support to phase two of the Strategic Automation Plan for UNIDO formulated with the assistance of Andersen Consulting, as a follow-up to the recommendations of Touche Ross Management Consultants which

constituted the first phase of the Plan. The final report of the second phase included a description of the strategic information areas in the Organization and the requirements associated with those as they pertain to the implementation of the UNIDO application systems portfolio. Implementation was expected to continue in the form of workplans beginning with 1993. The second phase also included the selection and implementation of an information systems development methodology and an associated computer-aided software engineering (CASE) tool. The recommendations for the establishment of such a methodology were presented to the Information Technology Steering Committee (ITSC) 6/ in June.

42. In addition to the maintenance and upgrading of over 70 existing information systems and subsystems, which required approximately seven work-years during 1992, the following components were implemented: job classification in support of personnel management, on-line exchange rate, post

5/ IDB.9/10, chap. VII, para. 47.

6/ IDB.9/12, annex I, para. 3.



adjustments, year-end pension fund, fixed-dollar reporting, automatic accounting transfer, trust fund interest calculation, and on-line voucher processing in support of substantive projects and financial management. [8.159; 8.160; 8.161; 8.162; 8.163; 8.167]

43. At the same time all staff assigned to programming-related tasks underwent training in the fourth generation programming language NATURAL, which is closely linked with the UNIDO main database management system ADABAS. The training was recommended both by Touche Ross and Andersen Consulting and must be viewed as an investment in future development efficiency.

44. With the reorganization as of July 1992, the Computing Information Centre took over the support of end-users, desktop equipment and networks. The main activities comprised operation of the help desk to receive and dispatch calls (over 2,000 in 1992) for assistance, troubleshooting and problem solving related to mainframe applications, networks and personal computing and software. Starting from the existing inventory of 679 workstations (576 end-user personal computers (PCs) and 103 terminals) with 602 local printers, 15 new PCs were installed and a plan for providing additional equipment (71 PCs and printers) for the biennium 1992-1993 and software required by all Departments was adopted by ITSC in September. Equipment evaluation and acquisition was completed before the end of the year. Since April, about 250 PCs and 130 printers were moved and re-installed. [8.164]

45. The cancellation of standard maintenance contracts for PC equipment as recommended by Touche Ross Management Consultants took place as scheduled. That cancellation created, however, an additional workload of approximately one work-year within the Division to determine on a case-by-case basis whether repair service was required. Since April over 300 service requests (repair/maintenance) were handled. [8.164]

46. An information systems portfolio document was completed for issuance in 1993 as part of an overall management information

services (MIS) manual, to provide all users with information on existing systems and points of contact.

47. Along with the introduction of the new and more efficient development technology, a set of procedures was developed: (a) to increase the efficiency of systems maintenance by introducing the "release" concept for system upgrades; (b) to manage development projects in line with the new methodology and its tools; and (c) to implement the Strategic Automation Plan by establishing and maintaining annual workplans, and procedures for their updating.

48. With the beginning of the year a new facility management contract took effect, which brought a significant reduction in cost, albeit with a concomitant reduction of service. The agreed service level, however, was maintained. The IBM mainframe achieved 99.71 per cent system and 99.65 per cent user availability during prime time. The utilization of the central processing unit has increased in such a way that it is expected that the 50 per cent utilization mark will be exceeded in January 1993 (see diagram). The number of jobs processed exceeded 241,000 and the number of on-line sessions for time-sharing option (TSO) exceeded 47,000, or some 4,000 a month. Almost 14 million TSO transactions were processed and 278 million lines were printed. [8.165; 8.166]

49. A total of 14 meetings were held by ITSC in 1992. The main accomplishments of that committee were the establishment of a UNIDO desktop equipment and software policy (February), the presentation and discussion of results from the Andersen consultancy (May and June), a briefing on the draft programme and budget for the Division, 1994-1995 (September), the finalization of the 1992-1993 PC requests (September), and the adoption of the Division's workplan for 1993 (November).

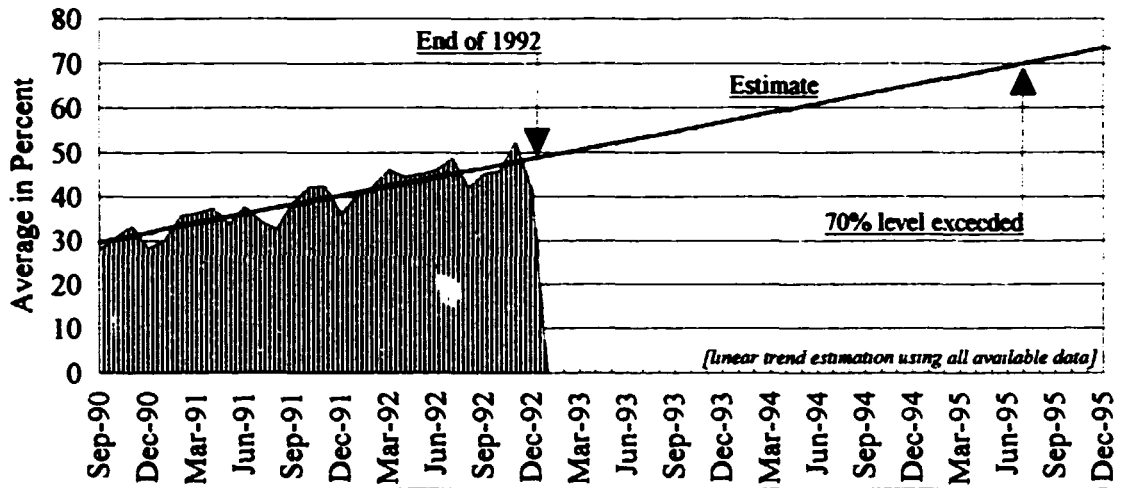
50. In response to General Conference decision GC.4/Dec.18, the Secretariat held three briefings on the electronic data-processing programme for representatives of Member States in March, June and October.

Table 8

Significant performance indicators:  
Management Information Services  
(Programme 850)

Activities	1988	1989	1990	1991	1992
Programs maintained	880	1,110	1,523	2,058	2,454
Programs written	240	265	413	445	510
Databases	27	36	52	56	66
Data entry (million key-strokes)	17.6	19.5	15.3	12.4	14.6
Printed lines (million)	147	155	193	261	278
Workstations installed	76	226	139	25	15
Printers installed	32	187	131	25	10

**UNIDO Mainframe Server Utilization  
Monthly Average, Sep. 1990 - Dec. 1992  
Estimation Until Dec. 1995**



## CHAPTER VIII. SOURCES OF FUNDS

## A. REGULAR BUDGET

1. For the biennium 1992-1993, the General Conference approved an appropriation of \$181,013,400 at an exchange rate of \$1 = AS 12.90, to be financed from payments of assessed contributions amounting to \$179,262,600 consisting of \$19,718,900 plus the equivalent in United States dollars of AS 2,058,116,310 and from estimated miscellaneous income amounting to \$1,750,600 representing \$1,325,300 plus the equivalent in United States dollars of AS 5,486,370.

2. The regular budget provides for expenditures for the mandated activities such as research, studies, industrial promotion, administration and other regular expenses of the Organization. Furthermore, as mandated in Part B of Annex II of the Constitution of UNIDO, the regular budget also finances other activities which, until UNIDO became a specialized agency, were financed out of Section 15 of the United Nations regular budget in the amount of 6 per cent of the total of the regular budget. These activities comprise the Regular Programme of Technical Cooperation, which includes technical assistance activities related to the Industrial Development Decade for Africa (IDDA).

3. For the Regular Programme of Technical Cooperation (programme 610) - including IDDA - the General Conference, by resolution GC.4/Res.27, appropriated a sum of \$10,755,700 for the biennium 1992-1993 at an exchange rate of \$1 = AS 12.90. The distribution of the regular programme allocation by components and the corresponding delivery during the year are shown in appendix C. In the programming of the resources available under the Regular Programme care was taken to achieve as far as possible equitable geographical distribution, especially taking into consideration the needs of the African and least developed countries.

4. The Conference allocated \$8.6 million (at 1991 rates) in the 1992-1993 budget to be used as "seed" money to mobilize additional financial resources for technical assistance and investment needs in the context of the Second IDDA. Of that budget appropriation, \$3.85 million (at 1991 rates) was earmarked for the technical cooperation component of the Decade (programme 610), and \$4.75 million (at 1991 rates) for the supplementary activities component (programme 620). Concerning technical cooperation, the 1992 allotment of \$1,446,200 was fully programmed, while for supplementary activities, the amount of \$4.75 million budgeted for the biennium was entirely programmed (see chap. III, paras. 47-55).

5. During 1992, the actual United Nations operational rates of exchange varied from

\$1 = AS 10.00 to \$1 = AS 11.60. The average exchange rate for the year was \$1 = AS 10.95 (as opposed to \$1 = AS 12.90).

6. The delay in payments of assessed contributions by Member States to the regular budget continued to cause severe cash-flow difficulties for the Organization during 1992. The financial situation remained critical. As of 31 December 1992, total unpaid assessed contributions for 1992 represented 40 per cent of the 1992 assessment, a decrease compared with 1991 (34.6 per cent of the 1991 assessment). In order to cope with the cash shortfall experienced during the first year of the biennium, contingency measures were introduced. These included restrictive recruitment, thereby increasing the vacancy rate for Professional-level posts, and the holding back of allotments from the approved appropriations for other major objects of expenditure. The immediate impact of the contingency measures was a delay in the implementation of certain programmed activities. The continued imposition of such measures could have a negative impact on programme implementation and lead to a decrease in the quality of outputs of the Organization.

## B. OPERATIONAL BUDGET

7. As stipulated in financial regulation 3.4(b), the operational budget shall show the expected income and expenditures in respect of voluntary contributions to the Industrial Development Fund, such trust funds, reserve and special accounts as established by the Director-General and in respect of support costs of technical assistance activities. In compliance with Board decision IDB.4/Dec.26(f), information on the activities financed from these sources of funds is provided under the respective headings of the present chapter.

8. Within the operational budget, two separate components can be distinguished. The first one relates to programme support costs, i.e. income arising from reimbursement of the costs of the support that the Organization provides to technical assistance projects by the source of financing of such projects, as well as the expenditures financed by such income. The second component relates to the cost of the projects themselves.

(a) Operational budget - Support expenditures

9. Under the first component of the operational budget the General Conference at its fourth session approved estimates of expenditure totalling \$49,234,900 (calculated at

the exchange rate of \$1 = AS 12.90) for the biennium 1992-1993 to be financed from voluntary contributions and such other items as might be provided for in the financial regulations (GC.4/Res.27).

10. During 1992, the Organization faced a reduced level of income due to the slowdown in the United Nations Development Programme (UNDP)-financed technical cooperation activities and the serious delay in the implementation of the new UNDP successor arrangements. Accordingly, both the scale and timing of operational budget income were adversely affected on account of the low rate of approvals of UNDP-financed projects. The Organization continued to pursue new and innovative sources of income by developing projects in cooperation with financial institutions in the United Nations system or through financing from trust-fund contributions. In fact, the value of delivery of technical cooperation projects other than UNDP-financed activities increased by 7.4 per cent (from \$71.4 million to \$76.7 million).

11. As a result of an early review of operational budget expenditures and in order to offset, to the extent possible, the negative impact of the income shortfalls, the initial allotments issued for 1992 under the operational budget were 17 per cent lower than the estimates included in the 1992-1993 programme and budgets. A series of resource management meetings were held in mid-1992 with programme managers to update and verify technical cooperation delivery estimates and to review staffing needs in the light of the deteriorating financial situation. Further cost control measures were taken throughout 1992 in response to falling incomes. Expenditures under the operational budget were held below the budgeted levels by maintaining a higher than budgeted number of vacancies for Professional and General Service-level posts and by restricting allotments for all other major objects of expenditure. The cost reductions achieved because of the increasing vacancy factor were, to some extent, offset by the negative impact of exchange rate fluctuations experienced in 1992, which varied from \$1 = AS 10.00 to \$1 = AS 11.60.

12. The Programme and Budget Committee, after considering measures to stabilize the operational budget, requested the Director-General (conclusion 92/5) to take necessary measures to balance the operational budget as soon as possible but at the latest by the end of 1993 through, *inter alia*, (a) economies and greater efficiency; (b) reduction of staff through normal attrition, in compliance with staff regulation 10.2, or separation, or other appropriate measures; (c) appropriate utilization of the accumulated uncommitted reserve under the operational budget; and (d) the establishment of a system of regular monitoring in line with financial regulation 4.1(c), as endorsed in General Conference resolution GC.4/Res.23, and only authorized allotments to be issued if there

was a reasonable assurance of resources available to support it. When taking measures to balance the operational budget, the Director-General was requested to preserve the capacity of the Organization for technical cooperation delivery and to take due account of the need for equitable geographical distribution of the staffing of the Secretariat. The Industrial Development Board in its decision IDB.10/Dec.6, *inter alia*, endorsed Programme and Budget Committee conclusion 92/5 and called for a plan of action with options for balancing the operational budget.

13. There were 291.5 staff (68 Professional, 223.5 General Service) on board financed from the operational budget in December 1992, as compared with 303 staff (77 Professional and 226 General Service) on board in December 1991. The vacancy factor for Professional-level posts under the operational budget stood at 26.9 per cent as of 31 December 1992. The General Service-level post vacancy rate was 8.4 per cent at the same date. Expenditure incurred in 1992 amounted to \$22.8 million (at an average United Nations rate of exchange of \$1 = AS 10.95), while 1992 income from technical cooperation activities and other income amounted to \$17.5 million. The deficit arising from the excess of expenditure over income was financed from reserves carried over from prior financial periods.

14. The General Conference in its resolution GC.4/Res.23, while deciding to adopt the proposed amendments to financial regulation 4.1 related to the budgetary approval of operational budget income and expenditure, requested the External Auditor to submit a report to the Programme and Budget Committee at its eighth session on his views and comments on the proposed paragraphs (d) and (e) of financial regulation 4.1 concerning the authority to incur obligations and to make payments in excess of budgetary limitations. It also requested the Committee to reconsider paragraphs 4.1(d) and (e) and report to the Conference at its fifth session through the Board at its tenth session. After taking into account the new developments in the UNDP successor arrangements for support costs and the resulting future uncertainties as regards the operational budget financial resources, the External Auditor concluded: (a) that the actual implementation of any new operational budget expenditure flexibility system should best be postponed until the evolving new situation in respect of UNDP successor arrangements could be assessed more accurately in all aspects; and (b) that the Secretariat should then propose to the policy-making organs of the Organization, if deemed necessary, a new coherent set of financial regulations (and rules) for the budgetary and financial management and control of its operational budget. <sup>1/</sup> Having taken note of the Committee's conclusion 92/12, the Board at

<sup>1/</sup> For the report of the External Auditor on the subject, see PBC.8/14.

its tenth session (IDB.10/Dec.10) endorsed the opinion expressed by the External Auditor, and decided to bring it to the attention of the General Conference. The proposed paragraphs (d) and (e) of financial regulation 4.1 remained inoperative.

(b) Financing of technical cooperation activities

15. Technical cooperation for the benefit of the developing countries continued to be the main activity of UNIDO with the value of net approvals of projects amounting to \$113.6 million in 1992 (of which \$100.7 million represents non-UNDP funded activities) (1991: \$130.4 million (of which \$82.9 million represents non-UNDP funded activities)). As in the past, the sources of financing for UNIDO technical cooperation activities were again the indicative planning figures (IPFs) of UNDP, the Special Industrial Services (SIS) programme of UNDP, the Industrial Development Fund (IDF), the UNIDO regular programme of technical cooperation (RP) including the technical cooperation component of IDDA within the regular budget of UNIDO, trust funds and self-financing arrangements with developing countries as well as a number of United Nations funds. In addition, UNIDO provided technical support services at the programme level (TSS-1) under the new UNDP-financed arrangements.

UNDP indicative planning figure and cost sharing\*

16. In the first year of the fifth programming cycle (1992-1996) the net approvals reached \$9.6 million (1991: \$48 million). The delivery in 1992 reached \$55.6 million (1991: \$75.3 million). These are the consequences of the slow-down in the UNDP programming process as well as the difficult start of the successor cost arrangements

\* Including government counterpart cash contributions and special measures.

applicable to the five major executing agencies of UNDP, including UNIDO. Details on the geographical distribution of project approvals under IPF are provided in chapter III, paragraphs 74 to 96, while the statistical annex, tables 4 to 8, provides details on project expenditure in 1992.

Technical support services at the programme level (TSS-1)

17. Under the successor arrangements for agency support costs the UNDP Governing Council approved in its decision 91/32 a new facility to finance specialized agency activities of an "upstream" nature. This facility is essentially aimed at funding sectoral and subsectoral studies and surveys, activities in support of aid coordination, and the development of integrated programmes. Activities are to be identified at the field level and two-year work plans are approved by the UNDP Governing Council. For the UNDP fifth programming cycle (1992-1996) an amount of \$64 million was approved to finance eligible activities of the Food and Agriculture Organization of the United Nations, the International Labour Organisation, the United Nations Educational, Scientific and Cultural Organization, the United Nations Department of Economic and Social Development and UNIDO. For the first biennium (1992-1993) some 60 activities were approved for UNIDO with a total value of nearly \$5 million. In view of the innovative nature of these activities, they are presented separately in table 9 of the statistical annex.

Special Industrial Services Programme

18. The SIS allocation for the fifth UNDP programming cycle (1992-1996) was approved in 1990 by the UNDP Governing Council at a resource level of \$15 million (decision 90/34). During 1992 UNIDO approved new projects for \$2.1 million, while striving to maintain an equitable geographical distribution of resources as shown in the table below.

Value of new approvals in 1992 for the SIS programme by area

Area	Number of projects	Value of approvals	Percentage of total value
Africa (incl. African Arab States)	3	232,759	10.8
Arab States	6	369,400	17.2
African Arab States	3	210,900	9.8
West Asia Arab States	3	158,500	7.4
Latin America and the Caribbean	12	800,360	37.3
Asia and the Pacific	7	355,040	16.6
Europe	7	390,430	18.2
<b>Total</b>	<b>35</b>	<b>2,147,989</b>	<b>100.0</b>

19. The level of SIS resources, as determined by the Governing Council of UNDP, has been far from sufficient to meet adequately the needs of developing countries for this type of service. The allocation for the first programming cycle (1966-1971) was \$17.4 million. Despite fluctuations during the following cycle and a specific recommendation made by a UNDP evaluation in 1985 to raise the total allotment for the fourth cycle to \$30 million, the Governing Council decided to keep the allocation for the fourth cycle at the level of \$15 million and again set a ceiling of \$15 million for the fifth programming cycle (1992-1997). As the demand for SIS projects is sharply increasing while the real value of the fund continues to decrease, an increase of the SIS allocation for future programming cycles would be justified. Concerning the orientation of the SIS programme, proposals based on an evaluation of the programme have been sent to UNDP for consideration (see chap. III, para. 127).

#### Industrial Development Fund

20. After the introduction of the UNDP successor arrangements on 1 January 1992, the Industrial Development Fund (IDF) has become the only major predictable source of technical cooperation funds under the operational budget. Experience has shown that UNIDO can rely on the flow of voluntary contributions provided by Member States in the amount of approximately \$30 million per year. This enables the Secretariat to deliver IDF-financed technical cooperation to developing countries with a degree of stability.

21. In 1992 IDF received \$30.3 million in pledges compared to \$28.9 million in 1991. These resources were programmed in close cooperation with recipient and donor countries and resulted in net project approvals of \$32.1 million (1991: \$27.4 million). Net project approvals include project budget revisions and exclude agency overhead costs. As the above figures show, the approvals increased by 17 per cent and pledges increased by 5 per cent over 1991. This increase, which took place in a period of limited development cooperation funds, is a sign of the confidence that donor countries place in the Fund. Tables 1 to 4 in appendix G provide details on the Industrial Development Fund pledges, the status of the Fund and its use in 1992 by region and programme component, while the following paragraphs as well as chapter III give details concerning the management of the Fund.

##### a. The general-purpose convertible segment

22. The Industrial Development Fund general-purpose convertible segment (UC) is the only segment of the Fund that is freely programmable by the Secretariat and thus provides the flexibility required to react promptly to requests from developing countries, as mandated by the United Nations General Assembly when it established the

Fund. The resources of the UC segment (approximately \$2 million in 1992) have been administered in a complementary manner with the other UNIDO-managed funds for technical cooperation. In document GC.4/28, new programming criteria for the general-purpose convertible segment were proposed in order to provide UNIDO with updated guidelines for the identification and selection of projects to be financed by this segment. These criteria were approved by the General Conference in decision GC.4/Dec.21 as follows: preparatory activities; preparatory assistance projects; and general-purpose contributions towards medium-term plan programme frameworks. In 1992 the implementation of that decision was closely monitored in order to ensure proper follow-up.

23. Out of 50 projects approved under the UC segment in 1992, 19 were preparatory activities and 31 were preparatory assistance projects. All the preparatory activities or preparatory assistance projects financed under UC support at least one priority area of the medium-term plan. The total value of the 50 new UC projects approved in 1992 was \$2.1 million; the average size of the UC projects was thus \$42,000. The small budgets of the UC projects reflect the fact that preparatory activities and preparatory assistance do not demand large investments, as well as the fact that the size of the Fund is very limited, and the coverage in terms of recipient countries is broad.

24. The longer-term objective of using general-purpose contributions for medium-term programme frameworks could not be achieved in 1992 because it would require a sharp increase in general-purpose contributions. Important steps in that direction were however the umbrella contributions of Norway relating to the environment and women in industry and of Italy relating to least developed countries.

##### b. The special-purpose and general-purpose non-convertible segments

25. In 1992 the total value of projects approved under the special-purpose and general-purpose non-convertible segment of IDF was \$2.6 million. Projects financed under these segments were concentrated in the areas of economic cooperation among developing countries, development and transfer of technology and human resource development. A positive trend was seen in the additional pledges of convertible currency by donors of non-convertible currencies to facilitate the utilization of the latter contributions.

##### c. The special-purpose convertible segment

26. The special-purpose convertible segment was consistently programmed according to the IDF programming lines. During 1992 the Secretariat exerted selectivity in submitting projects for special-purpose financing; an increasing number of projects were discussed with potential donors as

project ideas or concepts so as to verify possible donor interest at an early stage of project development and thus avoid raising undue expectations in the recipient countries. As a result, an approval rate of 80 per cent could be achieved for the projects submitted to special-purpose donors during the year.

#### Trust funds and self-financing arrangements

27. The total value of project budgets newly approved and under implementation in 1992 under special trust fund schemes was \$45.5 million (40 per cent of UNIDO total approvals), while expenditure on technical cooperation activities was \$34.8 million (26 per cent of UNIDO total expenditure). The corresponding figures for 1991 were \$40.6 million (31 per cent) for project budgets newly approved and under implementation, and \$31.2 million (21.1 per cent) for project expenditures.

28. The statistical annex, tables 4 to 8, provides details on project expenditure under trust fund schemes, while details on the types of projects financed under trust funds and self-financing arrangements are provided in chapter III, paragraphs 138 to 146.

#### Regular Programme of Technical Cooperation (Programme 610)

29. As explained in paragraphs 2 to 4 above, in addition to the above-mentioned activities financed from the operational budget, a number of technical cooperation activities are financed from the regular budget under the Regular Programme of Technical Cooperation which also includes the technical cooperation component of the allocation for IDDA.

### C. PROGRAMME SUPPORT COSTS

30. The new system of reimbursement for programme support costs related to UNDP-financed technical cooperation activities - also known as the UNDP successor arrangements for agency support costs - was outlined in the 1991 Annual Report. 2/ Originally foreseen for the beginning of 1992, the introduction of the new system was seriously delayed as the issuance of guidelines to UNDP field offices and the joint training of UNDP/agency staff did not keep to schedule. Even though UNDP continued up until 30 June 1992 to approve projects under the old system of reimbursement (i.e. at a rate of 13 per cent), the development and approval of projects were seriously hindered owing to: (a) the uncertainty created by the delay noted above; and (b) the lack of understanding in

the field regarding the application of the new arrangements. Delivery was also affected to some extent.

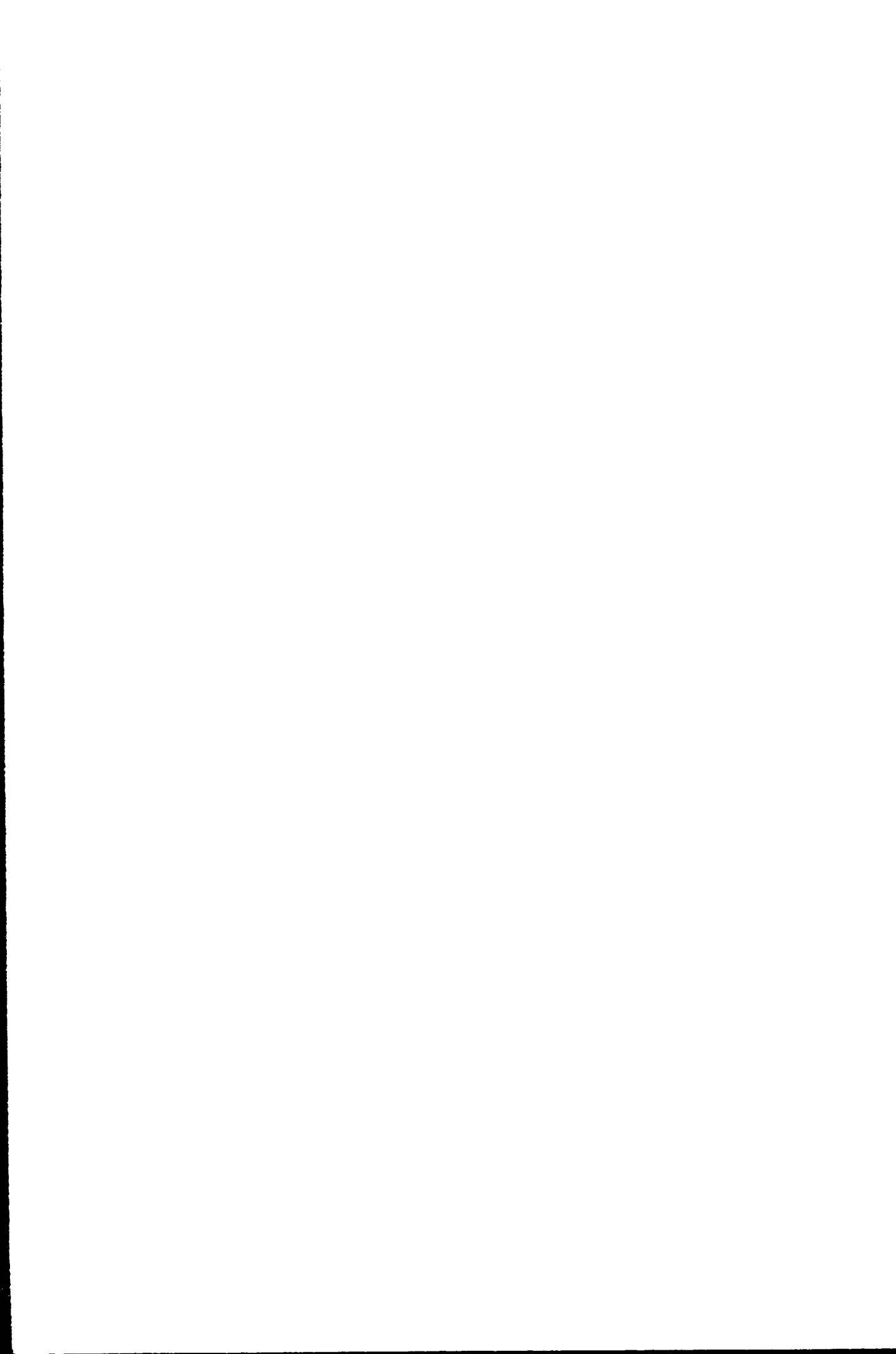
31. Beginning with the second half of the year, UNDP approved a very limited number of projects under the new arrangements. However, there were very few activities relating to the TSS-2 facility (technical support services at the project level) and AOS (administrative and operational support). As mentioned in paragraph 17 above, 26 activities were under implementation under the TSS-1 facility (technical support services at the programme level).

32. As reported in chapter I, technical cooperation delivery in 1992 amounted to \$135.6 million (of which \$58.9 million were UNDP funded and \$76.7 million were non-UNDP funded), representing a decrease of 8 per cent as compared to 1991 (\$147.5 million (of which \$76.1 million were UNDP funded and \$71.4 million were non-UNDP funded)) and a decrease of 15 per cent as compared to 1990 (\$159.6 million). Under the old system of support costs, technical cooperation delivery in 1992 yielded revenue for the operational budget of \$15.3 million. However, in so far as the UNDP-financed component of technical cooperation is concerned, traditional delivery figures will assume less importance in terms of programme support cost income. Income will be increasingly derived from specific specialized services to countries, the provision of which is not directly related to project volume. In 1992, TSS-1 activities generated a net income of \$468,000 that was in no way related to technical cooperation projects in the traditional sense, and \$1,700 was earned through the provision of AOS services.

33. Given these changes it is also no longer possible to report on support costs as a percentage of total delivery as was the practice in the past. Activities such as those paid for by TSS-1 funds provide for income in the operational budget, yet they cannot be compared with traditional support costs. They are important stand-alone activities in their own right. Similarly, technical support services to technical cooperation projects (TSS-2) are not of an "overhead cost" nature. The only component directly comparable with the old support costs are the implementation services to be financed from AOS funds.

34. The new support cost system requires that an outside consulting firm conduct a biennial cost measurement study, covering the five main agencies involved in the new arrangements. This study measures the actual cost to each agency of providing the three distinct categories of services. The results of the cost measurement study for the biennium 1990-1991 were reported in detail to the Board in 1992 (IDB.10/7). The next such study will be carried out in early 1994 for actual costs in the biennium 1992-1993.

2/ IDB.9/10, chap. VIII, paras. 30-37.





## STATISTICAL ANNEX

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Table 1. Expenditures, 1972 to 1992

(In millions of US dollars)

	1972-1976	1977-1981	1982-1986	1987	1988	1989	1990	1991	1992
Technical cooperation programmes	141.8	334.4	451.2	97.7	119.8	133.8	159.6	147.5	135.6
United Nations regular programme/ UNIDO regular budget	8.7	15.2	23.6	2.1	2.5	6.3	4.5	5.8 a/	2.4
UNDP/IPF and cash counterpart	98.7	229.9	291.3	66.5	74.0	76.8	88.7	75.3	55.6
UNDP/SIS	14.3	17.2	14.4	2.8	3.0	3.0	5.2	1.0	1.8
UNDP/special programme resources and special measures	3.1	5.3	3.1	0.3	0.0	0.2	0.4	b/	
UNDP-administered trust funds	0.0	3.4	12.9	1.1	1.0	2.3	1.7	(0.2)	1.5
Other trust funds	6.2	17.9	34.7	6.1	14.2	16.5	25.7	31.2	34.8
UNIDF/IDF	10.8	41.9	63.4	16.6	19.8	23.0	27.9	27.7	29.3
United Nations International Drug Control Programme (UNDCP)	0.0	0.0	2.2	0.6	2.8	1.2	2.2	2.6	4.4
Non-UNIDO funds	0.0	3.6	5.6	1.6	2.5	4.5	3.3	4.1	5.8
Headquarters	100.5	202.4	258.2	76.1	71.7	97.7	95.9	106.8	103.8
Regular budget	85.2	160.7	199.8	60.7	56.9	82.1	76.3	85.1	81.4
Overheads	15.3	41.7	58.4	15.4	14.8	15.6	19.6	21.7	22.4
<b>Total expenditure</b>	<b>242.3</b>	<b>536.8</b>	<b>709.4</b>	<b>173.8</b>	<b>191.5</b>	<b>231.5</b>	<b>255.5</b>	<b>254.3</b>	<b>239.4</b>

a/ Includes regular programme and Industrial Development Decade for Africa (see appendix C).

b/ Special measures expenditure included in UNDP/IPF and cash counterpart.

Table 2. Technical cooperation programmes: project budget approvals and expenditures, 1972 to 1992

(In millions of US dollars)

	1972-1976	1977-1981	1982-1986	1987 a/	1988	1989	1990	1991	1992
<b>A. All sources of funds</b>									
1. Residual value of projects brought forward	37.4	72.8	136.4	155.9	175.4	217.0	252.5	255.6	238.5
2. Value of project budgets approved in the year (net)	177.2	398.0	470.6	117.2	161.4	169.3	162.7	130.4	113.6
3. Total of approved projects under implementation	214.6	470.8	607.0	273.1	336.8	386.3	415.2	386.0	352.1
4. Expenditures in the year	141.8	334.4	451.1	97.7	119.8	133.8	159.6	147.5	135.6
5. Residual value of projects carried forward	72.8	136.4	155.9	175.4	217.0	252.5	255.6	238.5	216.1
<b>B. United Nations regular programme b/ / UNIDO regular budget</b>									
1. Residual value of projects brought forward	0.0	0.0	0.0	1.2	0.0	4.6	0.0	3.8	0.0
2. Value of project budgets approved in the year (net)	8.7	15.2	24.8	0.9	7.1	1.7	8.3	2.9	7.3
3. Total of approved projects under implementation	8.7	15.2	24.8	2.1	7.1	6.3	8.3	6.7	7.3
4. Expenditures in the year	8.7	15.2	23.6	2.1	2.5	6.3	4.5	5.8	2.5
5. Residual value of projects carried forward	0.0	0.0	1.2	0.0	4.6	0.0	3.8	0.0	4.8
<b>C. UNDP/IPF, cash counterpart and special measures</b>									
1. Residual value of projects brought forward	29.7	59.8	105.8	99.3	116.0	151.5	153.3	146.0	118.7
2. Value of project budgets approved in the year (net)	128.8	275.9	284.8	83.2	109.5	78.6	81.4	48.0	9.6
3. Total of approved projects under implementation	158.5	335.7	390.6	182.5	225.5	230.1	234.7	194.0	128.3
4. Expenditures in the year	98.7	229.9	291.3	66.5	74.0	76.8	88.7	75.3	55.6
5. Residual value of projects carried forward	59.8	105.8	99.3	116.0	151.5	153.3	146.0	118.7	73.1
<b>D. UNDP/SIS c/</b>									
1. Residual value of projects brought forward	5.3	5.8	2.8	3.1	2.1	2.5	4.7	4.8	2.7
2. Value of project budgets approved in the year (net)	14.8	14.2	14.7	1.8	3.4	5.2	5.3	(1.1)	1.9
3. Total of approved projects under implementation	20.1	20.0	17.5	4.9	5.5	7.7	10.0	3.7	4.6
4. Expenditures in the year	14.3	17.2	14.4	2.8	3.0	3.0	5.2	1.0	1.8
5. Residual value of projects carried forward	5.8	2.8	3.1	2.1	2.5	4.7	4.8	2.7	2.8
<b>E. UNDP/special programme resources and special measures</b>									
1. Residual value of projects brought forward	0.0	1.7	0.9	0.3	0.0	0.0	0.5	d/	d/
2. Value of project budgets approved in the year (net)	4.8	4.5	2.5	0.0	0.0	0.7	0.3		
3. Total of approved projects under implementation	4.8	6.2	3.4	0.3	0.0	0.7	0.8		
4. Expenditures in the year	3.1	5.3	3.1	0.3	0.0	0.2	0.5		
5. Residual value of projects carried forward	1.7	0.9	0.3	0.0	0.0	0.5	0.3		
<b>F. UNDP-administered trust funds e/</b>									
1. Residual value of projects brought forward	0.0	0.0	4.7	1.5	0.1	0.1	0.6	0.2	1.0
2. Value of project budgets approved in the year (net)	0.0	8.1	9.7	(0.1)	1.0	2.8	1.3	0.6	1.4
3. Total of approved projects under implementation	0.0	8.1	14.2	1.4	1.1	2.9	1.9	0.8	2.4
4. Expenditures in the year	0.0	3.4	12.9	1.3	1.0	2.3	1.7	(0.2)	1.5
5. Residual value of projects carried forward	0.0	4.7	1.5	0.1	0.1	0.6	0.2	1.0	1.1

Table 2 (continued)

	1972-1976	1977-1981	1982-1986	1987 a/	1988	1989	1990	1991	1992
<b>G. Other trust funds f/</b>									
1. Residual value of projects brought forward	0.4	1.3	5.7	28.7	26.4	24.0	48.8	50.3	59.1
2. Value of project budgets approved in the year (net)	7.1	22.3	57.7	3.7	11.8	41.3	27.2	40.6	45.5
3. Total of approved projects under implementation	7.5	23.6	63.4	32.3	38.2	65.3	76.0	90.9	104.6
4. Expenditures in the year	6.2	17.9	34.7	6.0	14.2	16.5	25.7	31.2	34.7
5. Residual value of projects carried forward	1.3	5.7	28.7	26.4	24.0	48.8	50.3	59.1	70.3
<b>H. UNIDF/IDF g/</b>									
1. Residual value of projects brought forward	2.0	4.2	14.6	17.6	22.3	28.9	37.6	40.5	40.3
2. Value of project budgets approved in the year (net)	13.0	52.3	66.4	21.3	26.4	31.7	30.8	27.4	32.1
3. Total of approved projects under implementation	15.0	56.5	81.0	38.9	48.7	60.6	68.4	67.9	72.4
4. Expenditures in the year	10.8	41.9	63.4	16.6	19.8	23.0	27.9	27.7	29.3
5. Residual value of projects carried forward	4.2	14.6	17.6	22.3	28.9	37.6	40.5	40.3	43.0
<b>I. UNDCP</b>									
1. Residual value of projects brought forward	0.0	0.0	0.0	0.3	0.1	0.9	1.4	1.4	2.2
2. Value of project budgets approved in the year (net)	0.0	0.0	2.5	0.4	3.6	1.7	2.2	3.4	6.0
3. Total of approved projects under implementation	0.0	0.0	2.5	0.7	3.7	2.6	3.6	4.8	8.2
4. Expenditures in the year	0.0	0.0	2.2	0.6	2.8	1.2	2.2	2.6	4.4
5. Residual value of projects carried forward	0.0	0.0	0.3	0.1	0.9	1.4	1.4	2.2	3.8
<b>J. Non-UNIDO funds h/</b>									
1. Residual value of projects brought forward	0.0	0.0	1.9	4.0	8.4	4.5	5.6	8.2	13.5
2. Value of project budgets approved in the year (net)	0.0	5.5	7.6	6.0	(1.4)	5.6	8.7	8.5	9.8
3. Total of approved projects under implementation	0.0	5.5	9.5	10.0	7.0	10.1	11.4	16.7	23.3
4. Expenditures in the year	0.0	3.6	5.5	1.6	2.5	4.5	3.2	4.1	5.8
5. Residual value of projects carried forward	0.0	1.9	4.0	8.4	4.5	5.6	8.2	13.5	17.2

a/ Some of the 1987 figures differ slightly from those reflected in document IDB.4/10 owing to minor accounting adjustments.

b/ Excludes the value of projects approved but not implemented within the year (prior to 1978) or within the biennium (after 1977) as appropriate.

c/ Includes SIS trust funds prior to 1973.

d/ Included in UNDP/IPF, cash counterpart and special measures.

e/ Includes United Nations Trust Fund for Sudano-Sahelian Activities, United Nations Financing System for Science and Technology for Development, UNDP trust fund for projects financed by the United Nations Development Fund for Women, United Nations Capital Development Fund, and third-party trust funds.

f/ Includes special-purpose trust funds financed by recipient or third parties, government cash counterpart contributions paid to UNIDO, United Nations Population Fund and projects financed from World Bank loans.

g/ Includes UNIDO General Trust Fund.

h/ Includes projects executed by other agencies for which UNIDO is the associated or cooperating agency.

Table 3A. Technical cooperation activities: projects approved in 1991 and 1992, by source of funds

Source of funds	New projects approved			Existing projects revised			Total net value of approvals/revisions (\$000)
	Number of projects	Net value of approvals (\$000)	Average value of approvals (\$000)	Number of projects	Net value of revisions (\$000)	Average value of revisions (\$000)	
<b>1991</b>							
UNIDO regular budget	95	2,992	31	87	(83)	(1)	2,909
UNDP/IPF and cash counterpart	61	24,074	395	665	23,949	36	48,023
UNDP/SIS	8	214	27	145	(1,285)	(9)	(1,071)
UNDP-administered trust funds	14	631	45	7	(15)	(2)	616
Other trust funds	103	27,850	270	176	12,744	72	40,594
IDF	151	23,147	153	328	4,277	13	27,424
UNDCP	25	4,195	168	20	(818)	(41)	3,377
Non-UNIDO funds	25	8,762	350	30	(219)	(7)	8,543
<b>TOTAL</b>	<b>482</b>	<b>91,865</b>	<b>191</b>	<b>1,458</b>	<b>38,550</b>	<b>26</b>	<b>130,415</b>
<b>1992</b>							
UNIDO regular budget	158	7,280	46	0	0	0	7,280
UNDP/IPF and cash counterpart	40	10,812	270	615	(1,184)	(2)	9,628
UNDP/SIS	36	2,148	60	102	(246)	(2)	1,902
UNDP-administered trust funds	2	2,120	1,060	42	(679)	(16)	1,441
Other trust funds	79	8,835	112	222	36,666	165	45,501
IDF	175	25,994	149	339	6,098	18	32,092
UNDCP	30	6,573	219	17	(602)	(35)	5,971
Non-UNIDO funds	32	11,603	298	54	(1,773)	(33)	9,830
<b>TOTAL</b>	<b>559</b>	<b>75,365</b>	<b>135</b>	<b>1,391</b>	<b>38,280</b>	<b>28</b>	<b>113,645</b>

Table 3B. Technical cooperation activities: comparison of the value of projects  
as at 31 December 1991 and 31 December 1992, by source of funds

Source of funds	Number of projects		Total value of projects (\$000)		Average value of projects (\$000)	
	1991	1992	1991	1992	1991	1992
UNIDO regular budget	257	158	11,229	7,282	44	46
UNDP/IPF and cash counterpart	822	769	563,123	524,116	685	682
UNDP/SIS	211	147	11,229	9,236	53	63
UNDP/special programme resources and special measures	a/		a/		a/	
UNDP-administered trust funds	54	52	5,191	4,509	96	87
Other trust funds	378	391	151,674	194,751	401	498
IDF	640	665	135,540	153,879	212	231
UNDCP	61	72	10,015	13,885	164	193
Non-UNIDO funds	<u>98</u>	<u>126</u>	<u>28,053</u>	<u>37,421</u>	<u>286</u>	<u>297</u>
<b>TOTAL</b>	<b>2,521</b>	<b>2,380</b>	<b>916,054</b>	<b>945,079</b>	<b>363</b>	<b>397</b>

The following is a breakdown by status of projects:

	Number of projects		Total value of projects (\$000)	
	1991	1992	1991	1992
New and ongoing	1,611	1,473	740,909	724,869
Operationally completed	341	295	60,579	61,538
Financially completed	<u>569</u>	<u>612</u>	<u>114,565</u>	<u>158,673</u>
<b>TOTAL</b>	<b>2,521</b>	<b>2,380</b>	<b>916,054</b>	<b>945,079</b>

a/ Special measures expenditure included in UNDP/IPF and cash counterpart.

Table 4. Expenditure on technical cooperation activities in 1991 and 1992, by source of funds and project component

Source of funds	Project personnel		Subcontracts \$000	Fellowships & training \$000	Equipment \$000	Miscellaneous expenses \$000	Total \$000
	Number of experts <sup>a/</sup> work-months	\$000					
<b>1991</b>							
UNIDO regular budget	334.4	2,871	1,035	1,105	540	232	5,784
UNDP/IPF and cash counterpart and special measures	4,286.6	32,612	8,344	9,856	22,390	2,109	75,310
UNDP/SIS	75.4	688	157	61	90	(3)	993
UNDP-administered trust funds	2.0	50	(6)	(204)	(36)	(47)	(243)
Self-financed trust funds	5,183.5	10,596	95	147	326	63	11,227
Third party-financed trust funds	1,004.4	6,920	2,447	409	478	(11)	10,243
Other trust funds	763.1	5,094	815	1,083	2,444	319	9,755
IDF	1,503.4	13,124	5,733	4,701	2,942	1,200	27,700
UNDCP	0.0	4	0	85	2,498	18	2,605
Non-UNIDO funds	<u>174.2</u>	<u>2,065</u>	<u>527</u>	<u>406</u>	<u>1,090</u>	<u>22</u>	<u>4,111</u>
<b>TOTAL</b>	<b>13,327.0</b>	<b>74,024</b>	<b>19,147</b>	<b>17,649</b>	<b>32,762</b>	<b>3,903</b>	<b>147,485</b>
<b>1992</b>							
UNIDO regular budget	66.4	952	186	996	73	251	2,459
UNDP/IPF and cash counterpart and special measures	3,532.0	25,683	6,648	7,335	13,806	2,121	55,594
UNDP/SIS	75.1	1,004	350	213	165	74	1,806
UNDP-administered trust funds	11.6	136	1,405	(93)	0	85	1,533
Self-financed trust funds	5,775.3	10,894	266	113	2,148	90	13,512
Third party-financed trust funds	930.7	6,844	1,039	546	487	152	9,068
Other trust funds	701.2	5,823	1,339	1,772	2,826	432	12,192
IDF	1,862.2	14,792	4,489	4,912	3,774	1,355	29,322
UNDCP	6.8	71	104	71	4,115	7	4,369
Non-UNIDO funds	<u>273.1</u>	<u>3,063</u>	<u>822</u>	<u>491</u>	<u>1,290</u>	<u>112</u>	<u>5,777</u>
<b>TOTAL</b>	<b>13,234.4</b>	<b>69,263</b>	<b>16,648</b>	<b>16,356</b>	<b>28,686</b>	<b>4,680</b>	<b>135,632</b>
<sup>a/</sup> Categories are as follows:	<u>Work-months</u>						
International experts and consultants	10,520.6						
Operational assistance experts	5.0						
National experts	<u>2,708.8</u>						
<b>TOTAL</b>	<b>13,234.4</b>						

Table 5. Expenditure on technical cooperation activities in 1992, by source of funds and Department/programme component

(In thousands of US dollars)

Department/programme component	Regular budget	UNDP/IFP and cash counterpart	SIS	Trust funds			Other	IDF	UNDCP	Non-UNIDO funds	Total
				UNDP-administered	Self-financed	Third-party financed					
Executive Direction and Management	0	0	0	0	0	77	(0)	339	0	0	415
Programme and Project Development	367	242	18	0	36	3,489	125	1,536	0	78	5,891
Industrial Promotion, Consultations and Technology											
Industrial Investment	83	3,932	106	0	308	1,495	169	9,365	0	1,242	16,700
System of Consultations	32	0	0	0	0	(17)	0	136	0	0	152
Technology Development & Promotion	182	741	15	0	0	183	11,312	3,400	0	24	15,857
Subtotal	<u>297</u>	<u>4,673</u>	<u>121</u>	<u>0</u>	<u>308</u>	<u>1,661</u>	<u>11,481</u>	<u>12,902</u>	<u>0</u>	<u>1,265</u>	<u>32,709</u>
Industrial Operations											
Agro-based Industries	212	3,874	217	0	457	422	0	4,329	(20)	817	10,308
Chemical Industries	289	10,921	602	201	12,264	387	20	3,431	0	398	28,512
Metallurgical Industries	163	4,303	149	(33)	334	109	0	1,016	0	0	6,041
Engineering Industries	126	11,920	313	1,436	41	457	0	1,196	0	1,260	16,749
Industrial Institutions and Services	142	4,078	73	0	0	392	(0)	687	0	988	6,360
Institutional Infrastructure	136	11,941	209	1	0	858	0	1,275	0	15	14,435
Industrial Management and Rehabilitation	67	3,423	104	0	6	877	566	327	0	191	5,561
Industrial Human Resource Development	528	221	0	(72)	56	140	0	2,281	0	0	3,154
Subtotal	<u>1,664</u>	<u>50,680</u>	<u>1,667</u>	<u>1,533</u>	<u>13,158</u>	<u>3,642</u>	<u>586</u>	<u>14,541</u>	<u>(20)</u>	<u>3,668</u>	<u>91,119</u>
External Relations, Public Information, Language and Documentation Services											
	3	0	0	0	0	0	0	3	0	0	6
Other	<u>129</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>10</u>	<u>200</u>	<u>0</u>	<u>1</u>	<u>4,389</u>	<u>765</u>	<u>5,492</u>
TOTAL	2,459	55,594	1,806	1,533	13,512	9,068	12,192	29,322	4,369	5,777	135,632



Table 6. Expenditure on technical cooperation activities in 1992, by Department/programme component and geographical area

(In thousands of US dollars)

Department/programme component	Africa a/	Arab States b/	Asia and the Pacific	Europe	Latin America and Caribbean	Global and interregional	Total	
Executive Direction and Management	0	0	0	0	0	415	415	
Programme and Project Development	555	144	(20)	1,073	370	519	3,249	5,891
<b>Industrial Promotion, Consultations and Technology</b>								
Industrial Investment	4,155	1,389	(441)	2,009	171	984	8,434	16,700
System of Consultations	23	1	0	24	0	8	95	152
Technology Development & Promotion	<u>379</u>	<u>(15)</u>	<u>64</u>	<u>213</u>	<u>(11)</u>	<u>166</u>	<u>14,361</u>	<u>15,857</u>
Subtotal	4,556	1,375	(377)	2,946	160	1,159	22,890	32,708
<b>Industrial Operations</b>								
Agro-based Industries	4,336	556	(504)	3,762	144	1,741	272	10,308
Chemical Industries	14,576	10,402	(10,245)	10,811	835	578	1,556	28,512
Metallurgical Industries	1,283	244	(244)	4,052	359	216	131	6,041
Engineering Industries	6,456	475	(464)	9,065	495	529	193	16,749
Industrial Institutions and Services	3,820	586	(26)	974	56	775	175	6,360
Institutional Infrastructure	6,244	1,480	(405)	4,117	677	2,019	303	14,435
Industrial Management and Rehabilitation	2,905	163	(96)	678	920	992	0	5,561
Industrial Human Resource Development	<u>1,172</u>	<u>152</u>	<u>(80)</u>	<u>433</u>	<u>338</u>	<u>138</u>	<u>1,000</u>	<u>3,154</u>
Subtotal	40,792	14,058	(12,064)	33,891	3,824	6,988	3,630	91,119
External Relations, Public Information, Language and Documentation Services	3	0	0	3	0	0	0	6
Other	<u>620</u>	<u>121</u>	<u>(121)</u>	<u>783</u>	<u>970</u>	<u>2,791</u>	<u>330</u>	<u>5,493</u>
<b>TOTAL</b>	<b>46,527</b>	<b>15,698</b>	<b>(12,581)</b>	<b>38,695</b>	<b>5,324</b>	<b>11,457</b>	<b>30,514</b>	<b>135,633</b>

a/ Includes figures related to country projects in African Arab States.

b/ Figures in parentheses relate to country projects in African Arab States only and are deducted from the column "Total" since they are already included under "Africa".

Table 7. Expenditure on technical cooperation activities, by geographical area, 1983 to 1992

(In thousands of US dollars)

Area	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
<b>Africa</b>										
Country projects a/	25,683	25,300	31,431	31,674	29,102	34,042	40,802	47,849	46,252	39,734
Regional projects	1,773	4,713	5,791	4,069	2,468	4,389	8,323	7,832	6,171	6,792
Subtotal	27,456	30,013	37,222	35,743	32,570	38,431	49,125	55,681	52,423	46,526
<b>Arab States</b>										
Country projects	11,274	11,807	11,448	11,153	11,934	17,714	19,107	21,071	18,869	15,119
Regional projects	593	1,104	532	731	616	299	172	527	437	579
Country projects (African Arab States) b/	(7,030)	(8,806)	(9,123)	(8,505)	(9,560)	(12,753)	(13,725)	(14,824)	(15,347)	(12,581)
Subtotal	4,837	4,105	2,857	3,379	2,990	5,260	5,554	6,774	3,959	3,117
<b>Asia and the Pacific</b>										
Country projects	23,599	29,795	29,313	35,419	36,620	41,974	41,506	46,621	40,540	35,516
Regional projects	1,062	1,437	1,088	1,654	1,311	1,953	2,099	2,763	3,717	3,179
Subtotal	24,661	31,232	30,401	37,073	37,931	43,927	43,605	49,384	44,257	38,695
<b>Europe</b>										
Country projects	2,513	3,609	3,047	3,022	2,307	3,845	3,776	4,837	4,321	5,172
Regional projects	248	49	39	208	318	432	515	399	592	152
Subtotal	2,761	3,658	3,086	3,230	2,625	4,277	4,291	5,236	4,912	5,324
<b>Latin America and the Caribbean</b>										
Country projects	9,168	7,987	11,082	9,402	8,463	9,653	11,029	9,356	7,212	8,997
Regional projects	877	1,013	936	1,148	839	1,137	1,046	1,847	2,619	2,460
Subtotal	10,045	9,000	12,018	10,550	9,302	10,790	12,075	11,203	9,831	11,457
Global and interregional projects	8,259	9,183	8,884	9,625	12,308	17,095	19,132	31,280	32,103	30,513
TOTAL	78,019	87,191	94,468	99,600	97,726	119,780	133,782	159,558	147,485	135,632

a/ Includes African Arab States.

b/ Figures deducted since already included under "Africa".

Table 8. Technical cooperation activities: project expenditure in 1992, by geographical area

(In thousands of US dollars)

	Africa a/		Arab States		Asia and the Pacific		Europe		Latin America and Caribbean		Global and interregional		Total		
A. By source of funds															
		%		%	b/	%		%		%		%			
UNIDO regular budget															
RP	301	0.6	101	0.6	(0)	0.0	429	1.1	115	2.2	269	2.4	694	2.3	1,910
IDDA	549	1.2	98	0.6	(98)	0.8	0	0.0	0	0.0	0	0.0	0	0.0	549
UNDP/IPF, cash counterpart and special measures	20,222	43.5	3,709	23.6	(1,293)	10.3	27,867	72.0	1,790	33.6	3,299	28.8	0	0.0	55,594
UNDP/SIS	527	1.1	217	1.4	(132)	1.0	377	1.0	449	8.4	369	3.2	0	0.0	1,806
UNDP-administered trust funds	1,636	3.5	0	0.0	0	0.0	10	0.0	1	0.0	0	0.0	(114)	(0.4)	1,533
Self-financed trust funds	12,120	26.0	10,148	64.7	(10,149)	80.7	840	2.2	6	0.1	546	4.8	0	0.0	13,512
Third party-financed trust funds	1,104	2.4	44	0.3	(30)	0.2	1,487	3.8	1,877	35.3	760	6.6	3,826	12.5	9,068
Other trust funds	581	1.2	15	0.1	(15)	0.1	17	0.0	0	0.0	4	0.0	11,591	38.0	12,192
IDF	6,846	14.7	1,105	7.0	(742)	5.9	4,637	12.0	115	2.2	2,899	25.3	14,462	47.4	29,322
UNDCP	620	1.3	121	0.8	(121)	1.0	18	0.0	970	18.2	2,761	24.1	0	0.0	4,369
Non-UNIDO funds	<u>2,022</u>	4.3	<u>140</u>	0.9	<u>(1)</u>	0.0	<u>3,012</u>	7.8	<u>1</u>	0.0	<u>549</u>	4.8	<u>54</u>	0.2	<u>5,777</u>
TOTAL	46,527		15,697		(12,581)		38,695		5,324		11,457		30,514		135,632
B. By project component															
		%		%		%		%		%		%			
Project personnel	27,966	60.1	13,029	83.0	(10,620)	84.4	14,228	36.8	1,369	25.7	5,862	51.2	17,429	57.1	69,263
Subcontracts	5,859	12.6	764	4.9	(588)	4.7	5,917	15.3	1,368	25.7	514	4.5	2,813	9.2	16,648
Fellowships and training	3,381	7.3	416	2.6	(261)	2.1	6,636	17.2	840	15.8	1,118	9.8	4,225	13.8	16,356
Equipment	7,623	16.4	1,275	8.1	(968)	7.7	11,007	28.4	1,657	31.1	3,585	31.3	4,506	14.8	28,686
Miscellaneous	<u>1,697</u>	3.6	<u>214</u>	1.4	<u>(145)</u>	1.2	<u>906</u>	2.3	<u>90</u>	1.7	<u>378</u>	3.3	<u>1,540</u>	5.0	<u>4,680</u>
TOTAL	46,527		15,697		(12,581)		38,695		5,324		11,457		30,514		135,632

a/ Includes figures related to country projects in African Arab States.

b/ Figures in parentheses in this column relate to country projects in African Arab States only and are deducted from the column "Total" since they are already included under "Africa".

Table 9. Technical support services at the programme level (TSS-1) in 1992,  
by geographical area

	Number of activities initiated	Work-months allotted	Work-months provided		
			Headquarters staff	International staff	Total work-months
<b>Africa</b>					
Country a/	15	38.4	12.4	10.8	
Regional	<u>1</u>	<u>7.0</u>	<u>1.0</u>	<u>0.9</u>	
Subtotal	16	45.4	13.4	11.7	25.1
<b>Arab States</b>					
Country	2	2.1	2.1	0.0	
Regional	0	0.0	0.0	0.0	
Country (African Arab States) b/	<u>0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	
Subtotal	2	2.1	2.1	0.0	2.1
<b>Asia and the Pacific</b>					
Country	6	24.5	7.0	8.5	
Regional	<u>0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	
Subtotal	6	24.5	7.0	8.5	15.5
<b>Europe</b>					
Country	0	0.0	0.0	0.0	
Regional	<u>1</u>	<u>4.0</u>	<u>2.3</u>	<u>1.0</u>	
Subtotal	1	4.0	2.3	1.0	3.3
<b>Latin America and the Caribbean</b>					
Country	0	0.0	0.0	0.0	
Regional	<u>1</u>	<u>4.0</u>	<u>1.5</u>	<u>0.5</u>	
Subtotal	1	4.0	1.5	0.5	2.0
<b>TOTAL</b>	<b>26</b>	<b>80.0</b>	<b>26.3</b>	<b>21.7</b>	<b>48.0</b>

a/ Includes African Arab States.

b/ Figures deducted since already included under "Africa".

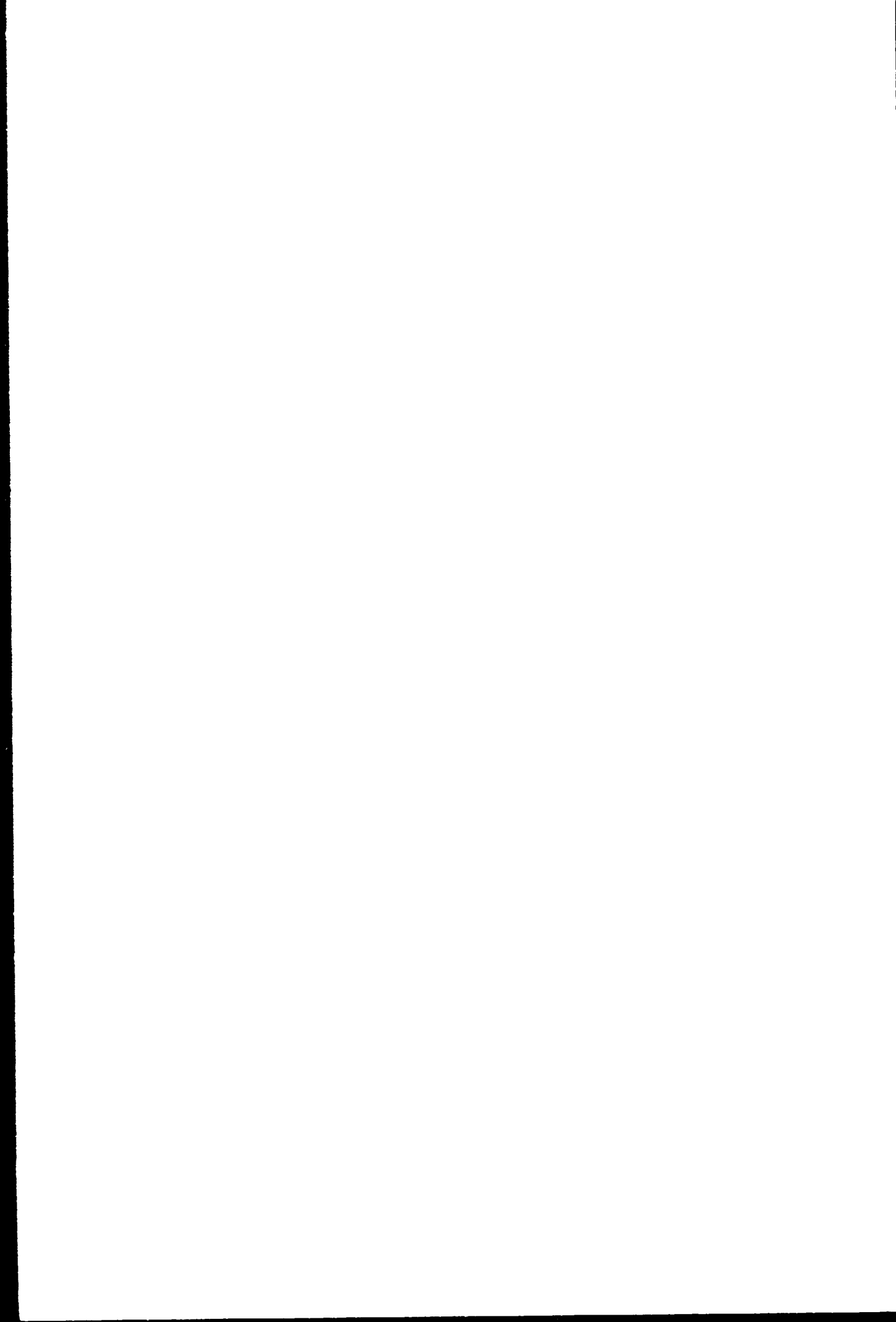
**Table 10. Expenditure of regular and operational budgets in 1992,  
by programme and object of expenditure a/**

(In thousands of US dollars)

	Staff costs	Consultants	Expert group meetings	Other	Total
100 Policy-making Organs	86	0	0	909	994
210 Executive Direction and Management	3,221	12	41	199	3,472
<b>Programme and Project Development</b>					
310 Office of the Deputy Director-General	1,292	18	0	620	1,930
320 Special Measures and Activities	1,763	40	0	64	1,867
330 Area Programmes	8,330	25	0	706	9,061
340 Industrial Policy and Perspectives	5,272	193	20	241	5,726
350 Industrial Cooperation/Funds Mobilization	2,872	68	0	80	3,019
	19,529	343	20	1,711	21,603
<b>Industrial Promotion, Consultations and Technology</b>					
410 Office of the Deputy Director-General	556	12	0	201	769
420 Industrial Investment	3,606	52	0	59	3,717
430 System of Consultations b/	2,193	116	106	109	2,524
440 Technology Development and Promotion	4,211	120	53	231	4,614
	10,565	300	159	600	11,625
<b>Industrial Operations</b>					
510 Office of the Deputy Director-General	2,161	0	0	779	2,940
520 Industrial Operations Technology	8,779	15	2	254	9,050
530 Industrial Institutions and Services	5,129	43	14	81	5,266
540 Industrial Operations Support	6,448	23	5	89	6,566
	22,517	81	21	1,203	23,822
620 Industrial Development Decade of Africa	389	132	149	214	883
<b>External Relations, Public Information, Language and Documentation Services</b>					
710 Office of the Deputy Director-General	545	0	0	258	804
720 External Relations	2,285	0	0	251	2,536
730 Languages and Documentation	6,722	0	0	156	6,878
740 Public Relations and Information	552	0	0	91	643
	10,103	0	0	756	10,860
<b>Administration</b>					
810 Office of the Deputy Director-General	517	0	0	2,940	3,457
820 Personnel Services	3,624	0	0	568	4,192
830 Financial Services	4,790	0	0	21	4,811
840 General Services	6,345	0	0	9,285	15,630
850 Management Information Services	2,073	0	0	2,657	4,729
	17,348	0	0	15,471	32,820
900 Miscellaneous income				(2,207)	(2,207)
<b>TOTAL</b>	<b>83,758</b>	<b>869</b>	<b>390</b>	<b>18,856</b>	<b>103,874</b>

a/ Net of cost reimbursement income. Excludes Regular Programme of Technical Cooperation (programme 610).

b/ Reflects the organizational changes effected 1 July 1992 (UNIDO/DG/B.156).



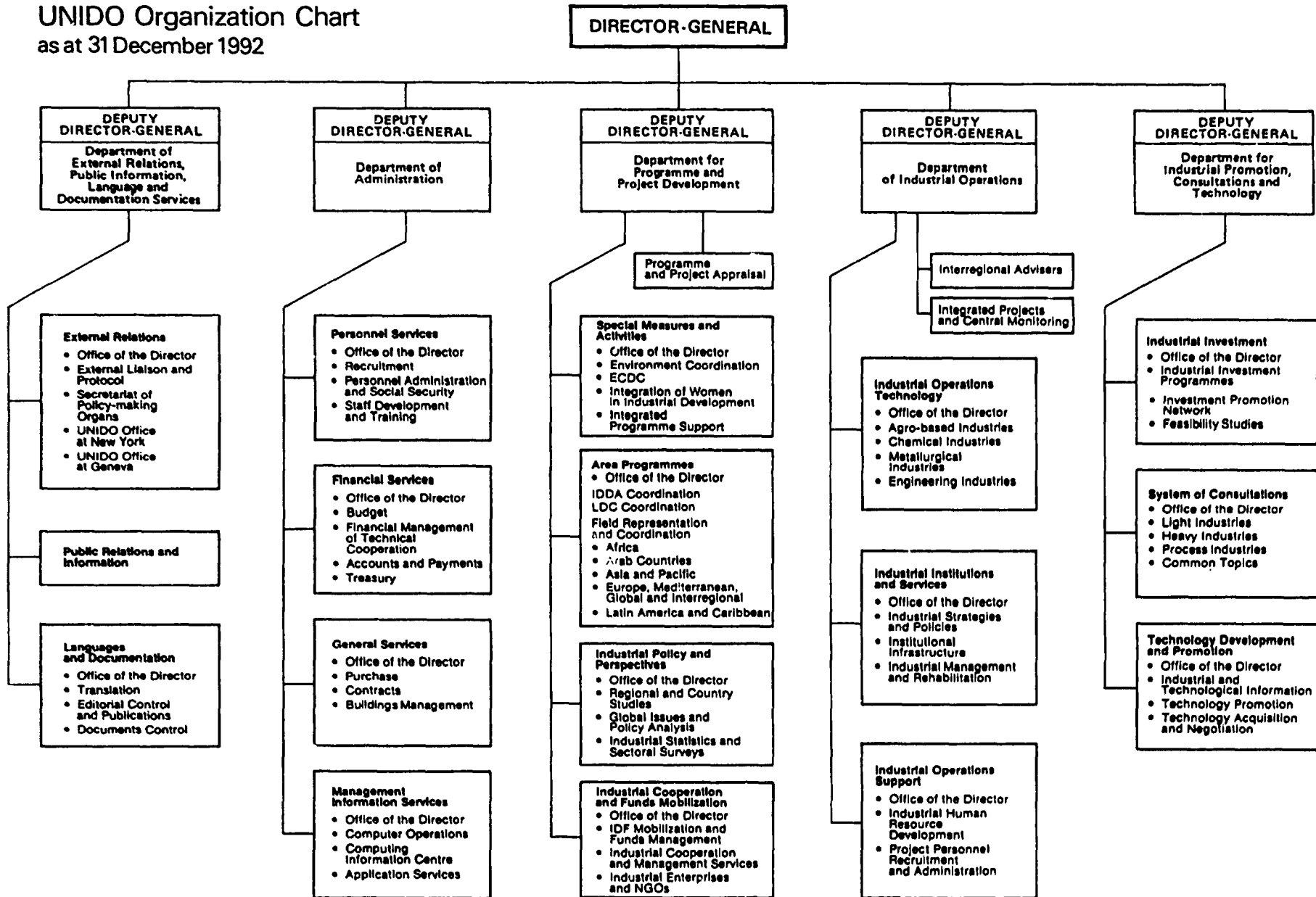
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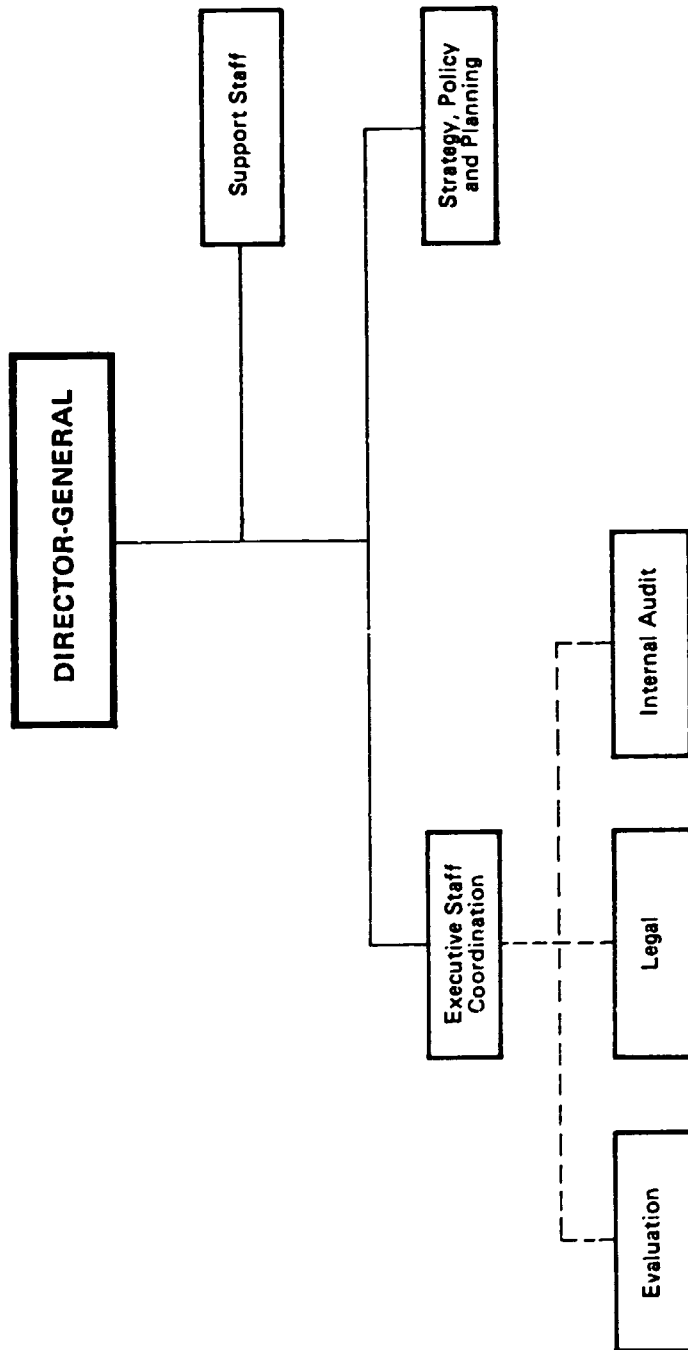
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# UNIDO Organization Chart

as at 31 December 1992







## APPENDIX B

EXPERT GROUP MEETINGS, SYMPOSIA, SEMINARS, WORKSHOPS, COURSES AND  
OTHER MEETINGS OF A NON-TRAINING CHARACTER HELD DURING 1992 <sup>a/</sup>

Date		Place
<b>OFFICE OF THE DIRECTOR-GENERAL</b>		
11-13 May	Special Advisory Group to the Director-General, sixth session	Vienna Austria
<b>DEPARTMENT OF EXTERNAL RELATIONS, PUBLIC INFORMATION, LANGUAGE AND DOCUMENTATION SERVICES</b>		
18-22 May	Industrial Development Board, ninth session	Vienna Austria
29 June - 3 July	Programme and Budget Committee, eighth session	Vienna Austria
2-6 November	Industrial Development Board, tenth session	Vienna Austria
<b>DEPARTMENT FOR PROGRAMME AND PROJECT DEVELOPMENT</b>		
<u>Special Measures and Activities Division</u>		
19-21 February	Appraisal workshop on improving design and construction technology of energy source transportation vessels	Shanghai China
9-14 March	Meeting on industrial cooperation on production and application of advanced machine tools among selected developing countries	New Delhi India
15-19 June	Appraisal workshop on the restructuring of the Ministry of Industry	Lomé Togo
30 August - 4 September	Meeting on economic and technical cooperation among selected developing countries in man-made fibre technology	Beijing China
5-10 October	International seminar cum workshop on petrochemical technology transfer and cooperation among developing countries	Pitesti Romania
25-30 October	Meeting for cooperation among selected developing countries in the field of metalworking industry and its related technologies	Bandung Indonesia
30 October	Briefing for IPF recipient countries on financing and quality of technical cooperation	Vienna Austria
2-7 December	Workshop on objectives-oriented project planning	Dhaka Bangladesh
<u>Area Programmes Division</u>		
4-8 May	Workshop on the promotion of the traditional textiles industry in West African least developed countries	Ségou Mali
11-12 May	First meeting of the Bureau of the tenth meeting of the Conference of African Ministers of Industry	Dakar Senegal
8-11 September	ECCAS-UNIDO meeting on economic integration	Libreville Gabon

<sup>a/</sup> Includes meetings sponsored jointly with other organizations.

Date		Place
19-20 October	First meeting of the Committee of Ten on the Monitoring of the Implementation of the Programme for the Second IDDA	Dakar Senegal
22-23 October	Second meeting of the Bureau of the tenth meeting of the Conference of African Ministers of Industry	Dakar Senegal
24 October - 1 November	Mini-show on traditional textiles (in conjunction with the Third International African Arts and Crafts Shop)	Ouagadougou Burkina Faso
24-27 November	Regional workshop on agro- and food-processing industries in Asia and Pacific LDCs	Bangkok Thailand
<u>Industrial Policy and Perspectives Division</u>		
17-18 March	Regional forecasting workshop	Vienna Austria
18-20 March	Expert group meeting on the implications of the single European market for industrialization in developing countries	Vienna Austria
30 March - 7 April	Meeting on industrial statistics in ASEAN countries	Vienna Austria
12-13 October	Workshop on industrial policies in the economies in transition	Budapest Hungary
<u>Industrial Cooperation and Funds Mobilization Division</u>		
28-30 April	Workshop on promotion of industrial cooperation between the Republic of Korea and Eastern European countries	Seoul Republic of Korea
1-5 June	Workshop on consumer protection and product standardization in developing countries	San Juan Puerto Rico
<b>DEPARTMENT OF INDUSTRIAL OPERATIONS</b>		
16-22 February	Joint UNIDO/Arab School of Science and Technology workshop on composites and advanced materials development and technology	Damascus Syrian Arab Republic
<u>Industrial Operations Technology Division</u>		
24 February - 6 March	Expert group meeting to develop integrated safety guidelines for pesticide formulation in developing countries	Brussels Belgium
9-14 March	Meeting on industrial cooperation in production and application of advanced machine tools among selected developing countries	New Delhi India
8-11 June	Regional seminar on pollution control in the leather industry	Nairobi Kenya
7-10 September	Regional workshop on re-refining waste oil technology, Asian region	Karachi Pakistan
14-17 September	National project coordinators workshop on industrial utilization of medicinal and aromatic plants	Eskisehir Turkey
26-30 September	Seminar on export potentials of ores and metals	Havana Cuba
5-16 October	Workshop on CAD/CAM application of personal computers in basic engineering industries	Prague, Bruno Czechoslovakia
11-20 October	Workshop on energy saving and management in glass industry	Bengbu China

Date		Place
12-17 October	Workshop on impurities in technical grade pesticide material	Suwon Republic of Korea
19-21 October	Expert group meeting on environmental aspects of the electronics industry	Vienna Austria
20-22 October	Expert group meeting on in-use motor vehicle inspection for emission control in the Asia and Pacific region	Seoul Republic of Korea
2-6 November	Export promotion and joint venture meeting for selected African leather and leather products manufacturers	Pirmasens Germany
9-14 November	Workshop on industrial water treatment through partial desalination by ion exchange using carbon dioxide as regenerant	Beijing China
9-10 December	Seminar on results achieved through transferring high quality ladies shoe manufacturing technology	Cairo Egypt
14-17 December	Regional workshop on re-refining waste oil technology, Latin American region	Quito Ecuador
<u>Industrial Institutions and Services Division</u>		
25-29 May	International workshop on integrated industrial and environmental management and planning	Kiev Ukraine
28-30 October	Seminar on industrial restructuring within the context of macroeconomic stabilization and property rights reform in Eastern European countries and the Russian Federation	Vienna Austria
23-27 November	Workshop on industrial applications of expert systems in developing countries	Hyderabad India
8-11 December	Expert group meeting on export processing zones development, management and promotion	Vienna Austria
<b>DEPARTMENT FOR INDUSTRIAL PROMOTION, CONSULTATIONS AND TECHNOLOGY</b>		
<u>System of Consultations Division</u>		
24-27 February	Preparatory meeting for the first Consultation on the construction industry	Tunis Tunisia
24-27 March	Workshop on the industrial utilization of medicinal and aromatic plants	Milan Italy
25-27 March	Preparatory meeting for the Consultation on the restructuring of the capital goods industry in Latin America and the Caribbean	Sao Paulo Brazil
25-28 May	First general meeting of the Latin American Advisory Committee on Environment in Iron and Steel	Rio de Janeiro Brazil
22-25 June	Regional Consultation on the Petrochemical Industry in the Arab Countries	Innsbruck Austria
6-10 July	Workshop on quality and hygiene regulations in the fisheries industry	Shetland United Kingdom
24-27 August	Seminar ILAFA-UNIDO-IAS on total quality in the iron and steel industry	Buenos Aires Argentina
28-29 August	First general meeting of the Environmental Working Group for the Iron and Steel Industry in the ASEAN countries	Kuala Lumpur Malaysia

Date		Place
29 September - 2 October	Round-table discussion on the restructuring of small- and medium-scale enterprises with special focus on African/Asian cooperation	New Delhi India
5-6 October	Regional meeting ILAFA-UNIDO on liquid effluents in the iron and steel industry	Santiago Chile
25-30 October	Meeting on cooperation between African and Asian fisheries specialists	Singapore
9-12 November	Regional Consultation on the Restructuring of the Capital Goods Industry in Latin America and the Caribbean	Caracas Venezuela
18-20 November	Global preparatory meeting for the regional Consultation on the industrial utilization of medicinal and aromatic plants in Asia and the Pacific	Vienna Austria
1-3 December	Global preparatory meeting for the first Consultation on the construction industry	Berkeley United States
15-17 December	Regional preparatory meeting on animal feed and related industries in Africa	Bamako Mali
<u>Technology Development and Promotion Division b/</u>		
23-24 January	Seminars on energy conservation in the steel and textile industries	Kuala Lumpur Malaysia
28-29 January	Seminars on energy conservation in the steel and textile industries	Jakarta Indonesia
25-28 May	Expert group meeting on appropriate technologies for Central America and Panama	Managua Nicaragua
25-29 May	Joint UNIDO/UNESCO/IAS workshop on advanced information technology applications and networks integration	Odessa Ukraine
23-24 July	ISO 9000 workshop	Tokyo Japan
8-12 September	Regional seminar/workshop for the development of a plan of action for science and technology for the Caribbean	Saint Lucia
21-24 September	UNIDO/ESCWA regional workshop on new and advanced materials and their impact on the economy of the Middle Eastern countries	Damascus Syrian Arab Republic
24-27 September	Workshop for Asia and Pacific region representatives from the telecommunications industry participating in Electronics '92	New Delhi India
23-27 November	Workshop on hydropower policy in conjunction with meeting of the Technical Advisory Group of the Regional Network for Small Hydropower Asia/Pacific	Kuala Lumpur Malaysia
7-10 December	Meeting of experts to draft the guidelines on development, negotiation and contracting of BOT projects	Vienna Austria
7-10 December	Meeting of the Consultative Group on Solar Energy Research and Applications (COSERA)	Perth Australia
16-18 December	Expert group meeting on hydrogen as an energy alternative for countries of the Caribbean region	Havana Cuba
<u>Industrial Investment Division</u>		
25-26 March	Sectoral investment meeting on the tourism industry between Argentina and American partners	Buenos Aires Argentina

b/ Includes former Technology Development and Technology Promotion Divisions.

Date		Place
22-26 June	Sectoral investment meeting on the tourism industry between Argentina and American partners	Washington United States
23-26 June	Multi-sectoral investment meeting between Andean Group and Italian partners	Milan Italy
3-4 August	Seminar on the investment promotion of mining projects between Argentina and American partners	Buenos Aires Argentina
7-9 September	Round-table of African investment promotion centres	Bulawayo Zimbabwe
14-20 September	China Northwest investment and business forum	Xian China
26-28 October	Third investors forum	Warsaw Poland
8-10 November	Conference on new frontiers for trade and investment for the post-Soviet republics	Vienna Austria
30 November	Multi-sectoral investment meeting between Spanish and Latin American partners	Madrid Spain
30 November - 4 December	Nepal investment forum	Kathmandu Nepal
1-4 December	Forum for investment project promotion for West African countries	Dakar Senegal

## APPENDIX C

TECHNICAL COOPERATION - REGULAR BUDGET ALLOCATIONS FOR  
THE BIENNIUM 1992-1993 AND DELIVERIES IN 1992

(In thousands of US dollars)

Component	Allocation for the biennium 1992-1993	Delivery in 1992
Cooperation among developing countries	902.1	419.7
Consultations with Governments	214.4	40.2
Special needs of the least developed countries	<u>2,136.3</u>	<u>368.5</u>
Subtotal	3,252.8	828.4
Industrial Development Decade for Africa	4,054.5	548.6
Special programmes for:		
Arab Countries	163.2	32.8
Asia and the Pacific	163.2	139.1
Latin America and the Caribbean	<u>163.2</u>	<u>28.2</u>
Subtotal	489.6	200.1
Training:		
Individual fellowships	674.6	173.7
Group training	1,723.7	571.5
Establishment and strengthening of training facilities in developing countries	<u>560.5</u>	<u>136.4</u>
Subtotal	2,958.8	881.6
TOTAL	10,755.7	2,458.7

## APPENDIX D

GEOGRAPHICAL DISTRIBUTION OF EXPERTS  
(Listed in descending order)

Table 1

Appointments of experts, 1 January - 31 December 1992

Country/area/territory	Number of appointments	Country/area/territory	Number of appointments
United Kingdom	228	Viet Nam	7
France	223	Bulgaria	6
Romania	139	Honduras	6
United States of America	125	Ireland	6
Poland	119	Malawi	6
India	117	Sri Lanka	6
Italy	104	Uganda	6
Germany	94	United Republic of Tanzania	6
Hungary	72	Zambia	6
Austria	63	Zimbabwe	6
Netherlands	42	Ethiopia	5
Belgium	41	Guatemala	5
Russian Federation	33	Malaysia	5
Denmark	32	New Zealand	5
Czechoslovakia	31	Uruguay	5
Argentina	30	Benin	4
Japan	28	Ghana	4
Canada	25	Iraq	4
Colombia	25	Israel	4
Nigeria	25	Nepal	4
Egypt	24	Sierra Leone	4
Brazil	23	El Salvador	3
Spain	22	Greece	3
Australia	20	Iran (Islamic Republic of)	3
Finland	20	Mali	3
Peru	20	Mauritania	3
Kenya	19	Zaire	3
Philippines	19	Afghanistan	2
Sweden	19	Armenia	2
Venezuela	19	Bosnia and Herzegovina	2
Yugoslavia	19	Cape Verde	2
Portugal	18	Cyprus	2
Republic of Korea	17	Indonesia	2
Senegal	17	Jordan	2
Turkey	16	Lebanon	2
Mexico	15	Lesotho	2
Algeria	14	Sao Tome and Principe	2
China	14	Sudan	2
Ecuador	14	Swaziland	2
Switzerland	14	Belarus	1
Chile	13	Bhutan	1
Nicaragua	13	Botswana	1
Cameroon	12	Central African Republic	1
Haiti	12	Chad	1
Norway	12	Cuba	1
Tunisia	12	Democratic People's Republic of Korea	1
Burkina Faso	11	Jamaica	1
Niger	11	Lithuania	1
Pakistan	11	Luxembourg	1
Thailand	11	Morocco	1
Croatia	10	Myanmar	1
Madagascar	10	Panama	1
Togo	10	Paraguay	1
Bangladesh	9	Singapore	1
Bolivia	9	Slovenia	1
Costa Rica	8	Yemen	1
Côte d'Ivoire	7		
Guinea	7		
Mozambique	7	Total (115 countries)	2,323



Table 2

Cumulative list of appointments of experts, 1986-1992

Country/area/territory	Number of appointments	Country/area/territory	Number of appointments
United Kingdom	1,481	China	55
Poland	1,474	Costa Rica	54
France	1,287	Côte d'Ivoire	52
United States of America	1,035	Zambia	50
Germany	766	Togo	48
India	674	Nepal	46
Hungary	653	Thailand	43
Italy	594	Pakistan	42
Austria	395	Nicaragua	41
Belgium	308	Tunisia	41
Czechoslovakia	306	Guinea	39
Netherlands	263	New Zealand	39
Canada	248	Uganda	39
Peru	231	Malaysia	38
Brazil	225	Bangladesh	36
Russian Federation	218	Sudan	36
Japan	213	Indonesia	34
Yugoslavia	213	Morocco	34
Denmark	206	Israel	33
Egypt	187	Sierra Leone	29
Argentina	184	Madagascar	28
Philippines	184	Zaire	28
Spain	176	Guatemala	27
Mexico	172	Iran (Islamic Republic of)	27
Romania	168	Jordan	27
Sweden	168	Uruguay	27
Colombia	143	Zimbabwe	26
Australia	140	Somalia	25
Chile	121	Guyana	24
Finland	120	Ethiopia	23
Venezuela	117	Ghana	23
Ireland	111	Iraq	22
Cameroon	100	Malawi	22
Portugal	100	United Republic of Tanzania	21
Nigeria	99	Burkina Faso	20
Norway	95	Niger	20
Ecuador	83	Haiti	19
Sri Lanka	76	Jamaica	18
Algeria	75	Rwanda	18
Switzerland	75	Honduras	17
Republic of Korea	74	Viet Nam	17
Bulgaria	72	El Salvador	15
Turkey	65	Lebanon	15
Kenya	61	Syrian Arab Republic	14
Senegal	56	Cuba	13
Bolivia	55	Mozambique	12

Table 2 (continued)

Country/area/territory	Number of appointments	Country/area/territory	Number of appointments
Botswana	11	Congo	3
Croatia	10	Dominican Republic	3
Mauritius	10	Lesotho	3
Paraguay	10	Libyan Arab Jamahiriya	3
Benin	9	Yemen	3
Greece	9	Armenia	2
Mali	9	Bosnia and Herzegovina	2
Sao Tome and Principe	9	Liberia	2
Trinidad and Tobago	8	Luxembourg	2
Fiji	7	Myanmar	2
Afghanistan	6	Namibia	2
Stateless	6	Papua New Guinea	2
Angola	5	Solomon Islands	2
Cyprus	5	Antigua and Barbuda	1
Democratic People's Republic of Korea	5	Belarus	1
Panama	5	Bhutan	1
Saudi Arabia	5	Cambodia	1
Singapore	5	Central African Republic	1
Burundi	4	Comoros	1
Djibouti	4	Gabon	1
Mauritania	4	Iceland	1
Palestine	4	Lithuania	1
Swaziland	4	Montserrat	1
Barbados	3	Slovenia	1
Cape Verde	3	Tonga	1
Chad	3	Total (143 countries)	15,450

## APPENDIX E

## MAJOR PUBLICATIONS ISSUED IN 1992

A. Major studies, reports and series publications

SYMBOL	TITLE	LANGUAGE
ID/SER.M/30 a/	Industry and development No. 30	E
ID/SER.M/31 a/	Industry and development No. 31	E
ID/SER.0/2 a/	Value analysis in the furniture industry	E
ID/SER.0/3 a/	Production management for small- and medium-scale furniture manufacturers. A manual for developing countries	E
ID/SER.0/4 a/	Documentation and information systems for furniture and joinery plants	E
ID/SER.0/5 a/	Low-cost prefabricated wooden houses. A manual for developing countries	E
ID/SER.0/11 a/	Technical criteria for the selection of woodworking machines	E
ID/377 a/	African industry in figures 1990	F
ID/378 (ID/WG.514/7)	Fourth Consultation on the Capital Goods Industry with Emphasis on Machine Tools. Prague, Czechoslovakia, 16-20 September 1991. Report	A C E F R S
ID/379 (ID/WG.518/3)	Regional Consultation on the Fisheries Industry for Asia and the Pacific Island Countries. Vienna, Austria, 2-6 December 1991. Report	E F S
ID/380 (ID/WG.510/5)	Second Consultation on the Building Materials Industry. Athens, Greece, 4-8 November 1991. Report	A C E F R S
ID/382 a/	Industry and development. Global report 1992/93	E F
ID/383 (ID/WG.524/3)	Regional Consultation on the Petrochemical Industry in the Arab Countries. Innsbruck, Austria, 22-25 June 1992. Report	A C E F R S

a/ Sales publication.

B. Co-publications\*

TITLE (ISBN NUMBER)	PUBLISHER/DISTRIBUTOR	LANGUAGE
Immunodiagnostic Approaches in Schistosomiasis (0-471-93401-1)	John Wiley & Sons Ltd., UK	E
The World's Pharmaceutical Industries: An International Perspective on Innovation, Competition and Policy (1-85278-646-9)	Edward Elgar Publishing Ltd., UK	E
Handbook of Industrial Statistics 1992 (1-85278-792-9)	Edward Elgar Publishing Ltd., UK	E
Czechoslovakia: Industrial Transformation and Regeneration (0-631-18446-5)	Basil Blackwell Ltd., UK	E
Thailand: Coping with the Strains of Success (0-631-17522-9)	Basil Blackwell Ltd., UK	E

\* These publications can only be ordered from the publisher, not from UNIDO.

## UNIDO TECHNICAL ASSISTANCE TO THE LEAST DEVELOPED COUNTRIES, 1 JANUARY TO 31 DECEMBER 1992

Table 1  
 Delivery, by country and source of funds a/

(In US dollars)

Region/country	Regular budget	UNDP/IPF b/	SIS	Trust funds	IDF c/	Other sources d/	Total
<b>Africa</b>							
Benin	0	101,732	0	0	0	(3,595)	98,137
Botswana	40,931	305	0	19,258	3,424	0	63,918
Burkina Faso	46,570	270,264	0	0	0	0	316,834
Burundi	18,711	422,385	0	0	0	0	441,096
Cape Verde	6,957	189,412	0	0	(6,463)	0	189,906
Central African Republic	0	0	0	0	0	83,630	83,630
Chad	0	283,353	0	61,484	0	1,774	346,611
Comoros	0	77,437	0	0	0	0	77,437
Equatorial Guinea	0	34,070	0	0	0	0	34,070
Ethiopia	41,627	2,198,309	80,046	0	721,806	0	3,041,788
Gambia	0	31,544	15,000	0	0	0	46,544
Guinea	96,265	86,196	(2,902)	0	0	15,512	195,071
Guinea-Bissau	0	260,861	0	67,623	0	0	328,484
Lesotho	0	131,456	(53)	318	0	0	131,721
Liberia	0	0	0	(1,557)	0	0	(1,557)
Madagascar	0	1,171,714	102,802	147,500	(1,961)	5,106	1,425,161
Malawi	0	532,823	(563)	104,194	76,922	28,776	742,152
Mali	20,209	724,600	0	0	85,344	837	830,990
Mauritania	0	328,082	0	0	106,023	45,626	479,731
Mozambique	0	1,045,484	1,169	19,980	135,341	0	1,201,974
Niger	0	632,252	5	0	4,030	17,907	654,194
Rwanda	0	27,927	0	(1,948)	7,296	0	33,275
Sao Tome and Principe	0	66,023	0	0	0	0	66,023
Sierra Leone	0	244,087	0	138	0	0	244,225
Togo	0	1,332,707	(1,859)	85,685	0	23,230	1,439,763
Uganda	0	1,098,282	0	2,003,271	77,844	0	3,179,397
United Republic of Tanzania	7,454	1,569,255	0	85,035	318,565	7,179	1,987,488
Zaire	0	281,642	80,629	0	0	0	362,271
Zambia	1,297	535,863	0	51,086	161,915	77,086	827,247
Subtotal	280,021	13,678,065	274,274	2,642,067	1,690,086	303,068	18,867,581
<b>Latin America and the Caribbean</b>							
Haiti	0	27,045	0	0	(1,248)	0	25,797

Table I (continued)

Region/country	Regular budget	UNDP/IPF b/	SIS	Trust funds	IDF c/	Other sources d/	Total
<b>Arab States</b>							
Djibouti	24	220,587	0	0	0	0	220,611
Somalia	0	(26,479)	0	0	0	0	(26,479)
Sudan	1,350	33,347	15,000	70,394	140,239	0	260,330
Yemen	0	<u>194,162</u>	0	<u>(2,159)</u>	0	0	<u>192,003</u>
Subtotal	1,374	421,617	15,000	68,235	140,239	0	646,465
<b>Asia and the Pacific</b>							
Afghanistan	0	214,426	0	0	0	0	214,426
Bangladesh	12,229	775,750	0	16,970	71,031	0	875,980
Bhutan	0	273,550	67,290	0	452	0	341,292
Cambodia	0	7,175	0	0	0	0	7,175
Kiribati	0	(7,551)	0	0	0	0	(7,551)
Lao People's Democratic Republic	0	0	0	0	0	0	0
Maldives	750	0	0	0	0	0	750
Myanmar	0	723,549	0	0	0	0	723,549
Nepal	69,099	1,225,512	0	0	139	18,000	1,312,750
Samoa	0	0	0	0	0	0	0
Solomon Islands	0	366,532	(4,883)	0	0	0	361,649
Tuvalu	0	6,056	0	0	0	0	6,056
Vanuatu	<u>30,090</u>	<u>68,725</u>	0	0	0	0	<u>98,815</u>
Subtotal	112,168	3,653,724	62,407	16,970	71,622	18,000	3,934,891
<b>Regional, interregional and global projects especially designed for LDCs</b>							
	197,611	0	0	0	53,881	0	251,492
<b>TOTAL</b>	<b>591,174</b>	<b>17,780,451</b>	<b>351,681</b>	<b>2,727,272</b>	<b>1,954,580</b>	<b>321,068</b>	<b>23,726,226</b>

a/ The table does not include regional, interregional and global projects or individual fellowships and group training programmes in which LDCs have been involved together with other developing countries; such activities are usually financed from non-least developed countries funds.

b/ Includes UNDP special measures.

c/ Excluding 13 per cent overhead costs.

d/ Other sources include the Fund of the United Nations International Drug Control Programme.

**Table 2**  
**New project approvals, by country and source of funds. a/**  
(In US dollars)

Region/country	Regular budget	UNDP/IPF b/	SIS	Trust funds	IDF c/	Other sources d/	Total
<b>Africa</b>							
Benin	0	0	0	0	0	0	0
Botswana	91,304	0	0	0	0	0	91,304
Burkina Faso	316,411	0	0	0	0	0	316,411
Burundi	63,720	0	0	0	0	0	63,720
Cape Verde	17,168	0	0	0	0	0	17,168
Central African Republic	0	0	0	0	0	92,000	92,000
Chad	0	0	0	0	0	12,000	12,000
Comoros	0	126,800	0	0	0	0	126,800
Equatorial Guinea	31,500	0	0	0	0	0	31,500
Ethiopia	165,765	0	0	0	0	0	165,765
Gambia	169,155	0	15,200	0	0	0	184,355
Guinea	190,240	2,233,320	0	0	0	30,900	2,454,460
Guinea-Bissau	0	0	0	0	0	0	0
Lesotho	0	0	0	0	0	0	0
Liberia	0	0	0	0	0	0	0
Madagascar	0	690,000	117,000	0	75,000	47,000	929,000
Malawi	0	0	0	92,146	0	35,238	127,384
Mali	26,071	54,000	0	0	0	0	80,071
Mauritania	0	0	0	0	0	83,500	83,500
Mozambique	146,000	0	0	0	0	0	146,000
Niger	50,000	86,000	0	0	0	18,000	154,000
Rwanda	0	0	0	0	0	0	0
Sao Tome and Principe	0	0	0	0	0	0	0
Sierra Leone	13,020	0	0	0	0	0	13,020
Togo	220,000	788,600	0	91,619	0	23,100	1,123,319
Uganda	12,404	0	0	1,969,000	824,100	0	2,805,504
United Republic of Tanzania	33,760	330,000	0	107,078	1,089,000	10,000	1,569,838
Zaire	0	0	0	0	0	0	0
Zambia	<u>1,700</u>	<u>577,200</u>	<u>0</u>	<u>0</u>	<u>288,100</u>	<u>114,300</u>	<u>981,300</u>
<b>Subtotal</b>	<b>1,548,218</b>	<b>4,885,920</b>	<b>132,200</b>	<b>2,259,843</b>	<b>2,276,200</b>	<b>466,038</b>	<b>11,568,419</b>
<b>Latin America and the Caribbean</b>							
Haiti	0	0	0	0	0	0	0

Table 2 (continued)

Region/country	Regular budget	UNDP/IPF b/	SIS	Trust funds	IDF c/	Other sources d/	Total
<b>Arab States</b>							
Djibouti	70,221	0	0	0	0	0	70,221
Somalia	0	0	0	0	0	0	0
Sudan	1,400	0	75,000	32,854	0	0	109,254
Yemen	0	<u>257,333</u>	0	0	0	0	<u>257,333</u>
Subtotal	71,621	257,333	75,000	32,854	0	0	436,808
<b>Asia and the Pacific</b>							
Afghanistan	0	0	0	0	0	0	0
Bangladesh	15,400	920,146	0	15,200	0	0	950,746
Bhutan	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0
Kiribati	0	0	0	0	0	0	0
Lao People's Democratic Republic	0	0	0	0	0	0	0
Maldives	28,000	0	0	0	0	0	28,000
Myanmar	0	20,900	0	0	0	0	20,900
Nepal	91,100	395,000	0	0	0	185,000	671,100
Samoa	0	0	0	0	0	0	0
Solomon Islands	0	0	0	0	0	0	0
Tuvalu	0	0	0	0	0	0	0
Vanuatu	<u>35,925</u>	0	0	0	0	0	<u>35,925</u>
Subtotal	170,425	1,336,046	0	15,200	0	185,000	1,706,671
Regional, interregional and global projects especially designed for LDCs	412,771	0	0	0	334,333	0	747,104
<b>TOTAL</b>	<b>2,203,035</b>	<b>6,479,299</b>	<b>207,200</b>	<b>2,307,897</b>	<b>2,610,533</b>	<b>651,038</b>	<b>14,459,002</b>

a/ The table does not include regional, interregional and global projects or individual fellowships and group training programmes in which LDCs have been involved together with other developing countries; such activities are usually financed from non-least developed countries funds.

b/ Includes UNDP special measures.

c/ Excluding 13 per cent overhead costs.

d/ Other sources include the Fund of the United Nations International Drug Control Programme.

**Table 3**  
**Total project approvals (new projects, plus additional allocations to ongoing projects,**  
**minus cancellations), by country and source of funds a/**

(In US dollars)

Region/country	Regular budget	UNDP/IPF b/	SIS	Trust funds	IDF c/	Other sources d/	Total
<b>Africa</b>							
Benin	0	370,853	0	0	0	(47,088)	323,765
Botswana	91,304	(890)	(11,623)	0	418	0	79,209
Burkina Faso	316,411	171,874	0	0	0	0	488,285
Burundi	63,720	(1,236,115)	0	(624)	0	0	(1,173,019)
Cape Verde	17,168	(5,045)	0	0	(8,046)	0	4,077
Central African Republic	0	0	0	0	0	92,000	92,000
Chad	0	221,704	0	21,608	0	12,000	255,312
Comoros	0	126,800	0	(223)	0	0	126,577
Equatorial Guinea	31,500	0	0	0	0	0	31,500
Ethiopia	165,765	737,536	(13,300)	0	542,533	0	1,432,534
Gambia	169,155	25,499	15,200	0	0	0	209,854
Guinea	190,240	2,542,131	(1)	0	0	25,486	2,757,856
Guinea-Bissau	0	401,957	0	59,050	0	0	461,007
Lesotho	0	44,045	(1,312)	0	0	0	42,733
Liberia	0	67,838	0	8,433	(30,000)	0	46,271
Madagascar	0	1,128,169	117,000	197,669	74,143	47,000	1,563,981
Malawi	0	71,987	(1,025)	159,182	0	(12,375)	217,769
Mali	26,071	594,809	0	0	(61,896)	(67,300)	491,684
Mauritania	0	(24,107)	0	0	0	83,500	59,393
Mozambique	146,000	(975,385)	0	(14,970)	317,530	0	(526,825)
Niger	50,000	737,250	0	0	0	18,000	805,250
Rwanda	0	48,498	0	0	0	0	48,498
Sao Tome and Principe	0	(29,500)	0	0	0	0	(29,500)
Sierra Leone	13,020	95,757	0	(13,769)	0	0	95,008
Togo	220,000	446,749	0	91,619	0	23,100	781,468
Uganda	12,404	556,162	0	1,936,246	824,100	0	3,328,912
United Republic of Tanzania	33,760	1,221,330	0	103,216	1,089,000	(557)	2,446,749
Zaire	0	(2,240,528)	0	0	0	0	(2,240,528)
Zambia	<u>1,700</u>	<u>682,574</u>	<u>0</u>	<u>0</u>	<u>292,633</u>	<u>101,779</u>	<u>1,078,686</u>
Subtotal	1,548,218	5,781,952	104,939	2,547,437	3,040,415	275,545	13,298,506
<b>Latin America and the Caribbean</b>							
Haiti	0	10,148	0	0	(7,709)	0	2,439



Table 3 (continued)

Region/country	Regular budget	UNDP/IPF b/	SIS	Trust funds	IDF c/	Other sources d/	Total
<b>Arab States</b>							
Djibouti	70,221	0	0	0	0	0	70,221
Somalia	0	0	0	0	0	0	0
Sudan	1,400	0	75,000	38,393	0	0	134,793
Yemen	0	<u>104,656</u>	0	0	<u>(898)</u>	0	<u>103,758</u>
Subtotal	71,621	104,656	75,000	38,393	(898)	0	308,772
<b>Asia and the Pacific</b>							
Afghanistan	0	0	0	0	0	0	0
Bangladesh	15,400	852,850	0	234	0	0	868,484
Bhutan	0	6,221	0	0	(25,451)	0	(19,230)
Cambodia	0	2,500	0	0	0	0	2,500
Kiribati	0	(178,001)	0	0	0	0	(178,001)
Lao People's Democratic Republic	0	0	0	0	0	0	0
Maldives	28,000	0	0	0	0	0	28,000
Myanmar	0	(94,661)	0	0	0	(3,999)	(98,660)
Nepal	91,100	423,250	0	0	(14,673)	185,000	684,677
Samoa	0	0	0	0	0	0	0
Solomon Islands	0	2,903	0	0	0	0	2,903
Tuvalu	0	(4,264)	0	0	0	0	(4,264)
Vanuatu	<u>35,925</u>	<u>60,084</u>	0	0	0	0	<u>96,009</u>
Subtotal	170,425	1,070,882	0	234	(40,124)	181,001	1,382,418
Regional, interregional and global projects especially designed for LDCs	412,771	0	0	0	323,668	0	736,439
<b>TOTAL</b>	<b>2,203,035</b>	<b>6,967,638</b>	<b>179,939</b>	<b>2,606,064</b>	<b>3,315,352</b>	<b>456,546</b>	<b>15,728,574</b>

a/ The table does not include regional, interregional and global projects or individual fellowships and group training programmes in which LDCs have been involved together with other developing countries; such activities are usually financed from non-least developed countries funds.

b/ Includes UNDP special measures.

c/ Excluding 13 per cent overhead costs.

d/ Other sources include the Fund of the United Nations International Drug Control Programme.

## INDUSTRIAL DEVELOPMENT FUND

Table 1

UNIDF/IDF statement of pledges and receipts, as at 31 December 1992

(In US dollars)

Country/organization	Unpaid balances/ advances by donors brought forward from UNIDF 1.1.86	Adjust- ments to prior pledges	IDF firm pledges for				Collections in a/		Exchange adjustments	Unpaid balance	Advances by donors
			1986-1990	1991	1992	1993 and future years	1986-1991	1992			
<u>General-purpose convertible</u>											
Afghanistan	1,500	0	3,000	0	0	0	4,500	0	0	0	0
Algeria	0	0	25,000	0	0	0	25,000	0	0	0	0
Angola	10,000	0	20,000	0	0	0	30,000	0	0	0	0
Argentina	0	150,000	0	0	0	0	149,990	0	10	0	0
Austria	0	0	440,908	168,067	169,492	185,185	649,674	172,414	(35,427)	176,991	0
Bahrain	5,000	0	0	0	0	0	5,000	0	0	0	0
Bangladesh	0	0	12,888	2,420	2,420	2,420	15,248	0	60	4,840	0
Barbados	0	0	20,000	0	0	0	20,000	0	0	0	0
Bhutan	1,320	0	1,450	0	0	0	2,770	0	0	0	0
Bolivia	2,000	0	17,313	0	0	0	14,313	0	0	5,000	0
Brazil	15,000	0	15,000	0	0	0	30,000	0	0	0	0
Burkina Faso	0	0	13,594	0	0	0	13,594	0	0	0	0
Cameroon	0	0	2,985	0	0	0	0	0	(719)	3,704	0
Chile	0	0	30,000	10,000	0	0	30,000	0	0	10,000	0
Colombia	1,425	40	28,709	5,700	5,751	0	35,665	5,751	0	209	0
Congo	11,426	0	0	0	0	0	3,400	0	76	7,950	0
Costa Rica	8,080	0	20,000	0	0	0	26,832	803	0	445	0
Cyprus	0	0	4,187	0	0	0	4,496	0	(309)	0	0
Czechoslovakia	0	0	40,501	0	25,000	0	40,501	25,000	0	0	0
Democratic People's Republic of Korea	0	0	0	0	32,558	33,019	32,558	0	0	33,019	0
Dominica	0	0	3,852	0	0	0	3,840	0	12	0	0
Ecuador	5,440	0	56,235	0	0	0	49,835	0	0	11,840	0
Egypt	0	0	2,000	0	0	0	2,000	0	0	0	0
Ethiopia	0	0	1,111	0	0	0	1,111	0	0	0	0
Fiji	0	0	1,009	0	0	0	0	0	299	710	0
Germany	0	0	18,736	0	0	0	18,736	0	0	0	0
Ghana	0	0	5,000	0	0	0	0	0	0	5,000	0
Greece	36,000	0	0	0	0	0	36,000	0	0	0	0
Grenada	0	0	0	2,500	2,500	0	0	0	0	5,000	0
Guatemala	0	0	32,422	0	0	0	5,000	0	6,517	20,905	0
Guinea	0	(108,600)	0	0	0	0	(108,600)	0	0	0	0
Guyana	723	509	3,416	42	3,750	0	4,000	0	657	3,783	0
Haiti	0	0	5,000	0	0	0	5,000	0	0	0	0
Honduras	0	0	15,000	0	0	0	14,741	(370)	629	0	0
Hungary	0	0	44,334	21,024	24,865	22,863	58,976	22,415	8,832	22,863	0
India	500,000	0	1,250,000	250,000	250,000	250,000	1,750,000	500,000	0	250,000	0
Indonesia	0	0	50,000	0	0	0	50,000	0	0	0	0
Iraq	161,291	0	0	0	0	0	0	0	0	161,291	0
Italy	0	0	200,000	200,000	0	0	400,000	0	0	0	0
Jamaica	4,000	0	8,000	0	0	0	12,000	0	0	0	0
Kenya	10,000	0	29,313	1,409	1,263	1,009	10,348	0	16,090	16,556	0
Kuwait	0	0	150,000	0	0	0	0	0	0	150,000	0

APPENDIX G

Table 1 (continued)

Country/organization	Unpaid balances/ advances by donors brought forward from UNIDF 1.1.86	Adjust- ments to prior pledges	IDF firm pledges for				Collections in a/		Exchange adjustments	Unpaid balance	Advances by donors
			1986-1990	1991	1992	1993 and future years	1986-1991	1992			
<u>General-purpose convertible (continued)</u>											
Lao People's Democratic Republic	1,500	0	1,500	0	0	0	1,500	0	0	1,500	0
Lesotho	0	1,308	6,211	0	0	0	6,311	1,049	159	0	0
Luxembourg	0	0	47,867	12,820	12,121	0	51,433	0	(2,867)	24,242	0
Madagascar	0	0	5,163	715	0	553	4,177	0	1,146	1,108	0
Malawi	0	0	7,166	0	0	0	5,097	0	1,081	988	0
Malaysia	450	0	100,000	20,000	20,000	20,000	120,000	0	0	40,000	0
Mali	2,611	0	0	0	0	0	0	0	(1,093)	3,704	0
Malta	0	0	400	400	0	0	400	0	0	400	0
Mauritius	0	0	4,458	1,000	1,000	0	4,786	1,000	66	606	0
Mexico	0	4,503	15,000	0	0	0	19,503	0	0	0	0
Mongolia	0	0	12,052	1,312	0	0	12,146	0	1,035	183	0
Morocco	5,038	5,010	5,000	0	0	0	13,421	0	1,627	0	0
Mozambique	4,925	0	5,063	0	0	0	5,563	0	4,425	0	0
Myanmar	0	0	5,040	1,000	0	0	4,966	1,032	42	0	0
Nepal	0	0	2,800	700	700	700	3,500	1,400	0	0	0
Netherlands	0	0	657,895	0	0	0	372,079	0	8,038	277,778	0
Nicaragua	0	0	0	0	2,350	0	0	2,350	0	0	0
Nigeria	50,000	0	0	0	0	0	0	0	0	50,000	0
Oman	12,000	0	12,000	0	0	0	12,000	0	0	12,000	0
Pakistan	0	0	48,933	0	0	0	48,933	0	0	0	0
Panama	0	0	6,000	0	0	0	2,000	0	0	4,000	0
Papua New Guinea	0	0	12,871	0	0	0	14,773	0	(1,902)	0	0
Paraguay	30,000	0	0	0	0	0	24,000	0	0	6,000	0
Peru	25,000	0	0	0	0	0	5,000	0	0	20,000	0
Philippines	6,006	0	20,000	0	0	0	18,309	7,123	0	574	0
Portugal	0	0	30,000	0	0	0	30,000	0	0	0	0
Republic of Korea	0	0	156,000	35,000	35,000	0	191,000	35,000	0	0	0
Romania	0	0	0	0	4,040	0	0	4,040	0	0	0
Rwanda	0	0	20,000	0	0	0	20,000	0	0	0	0
Saint Vincent and the Grenadines	0	0	1,500	0	0	0	1,500	0	0	0	0
Saudi Arabia	0	0	3,000,000	0	0	0	3,000,000	0	0	0	0
Senegal	29,113	0	4,000	0	0	0	20,900	0	0	12,213	0
Sierra Leone	94	3,184	5,891	0	0	0	9,167	0	2	0	0
Somalia	2,467	0	0	0	0	0	0	0	67	2,400	0
Sri Lanka	0	0	15,999	3,333	3,333	0	19,296	3,333	36	0	0
Sudan	102,712	0	0	0	0	0	0	35,180	0	67,532	0
Suriname	2,000	0	0	0	0	0	0	0	0	2,000	0
Swaziland	1,532	1,802	8,591	0	0	0	10,931	0	(335)	1,329	0
Syrian Arab Republic	0	5,372	9,910	1,871	788	0	15,282	2,659	0	0	0
Thailand	0	0	102,962	24,206	23,500	0	127,236	23,500	(68)	0	0
Togo	3,916	0	6,514	0	0	0	9,346	0	(768)	1,852	0
Trinidad and Tobago	0	8,175	50,329	0	0	0	60,379	0	(1,675)	0	0
Tunisia	0	0	113,961	0	0	0	111,274	0	2,687	0	0
Uganda	1,000	1,000	9,000	0	0	0	2,000	0	0	9,000	0
United Republic of Tanzania	0	0	3,822	332	283	0	3,238	278	884	37	0

Table 1 (continued)

Country/organization	Unpaid balances/ advances by donors brought forward from UNIDF 1.1.86	Adjust- ments to prior pledges	IDF firm pledges for				Collections in a/		Exchange adjustments	Unpaid balance	Advances by donors
			1986-1990	1991	1992	1993 and future years	1986-1991	1992			
<u>General-purpose convertible (continued)</u>											
Venezuela	0	0	11,467	0	0	0	11,467	0	0	0	0
Viet Nam	1,000	0	0	0	0	0	1,000	0	0	0	0
Yemen	0	0	8,400	0	2,000	2,000	4,007	0	(7)	8,400	0
Zaire	3,000	0	113,000	0	0	0	0	0	0	116,000	0
Zambia	517	0	22,749	1,136	850	0	20,738	1,007	3,507	0	0
Zimbabwe	0	8,075	39,447	9,962	5,601	0	54,983	5,436	2,666	0	0
<u>Organizations</u>											
King Abdulaziz City for Science and Technology, Saudi Arabia	0	0	32,760	0	0	0	29,868	0	0	2,892	0
S.G. des Eaux Minerales de Vittef, France	0	0	3,108	0	0	0	3,108	0	0	0	0
Computech Engineering Services Inc., USA	0	0	30,000	0	0	0	30,000	0	0	0	0
Cooperation Council for the Arab States of the Gulf (GCC)	0	0	11,587	0	0	0	0	0	0	11,587	0
Cordecruz, Bolivia	0	0	22,017	0	0	0	22,017	0	0	0	0
<b>Total</b>	<b>1,058,086</b>	<b>80,578</b>	<b>7,379,396</b>	<b>774,949</b>	<b>629,165</b>	<b>517,749</b>	<b>8,005,612</b>	<b>850,400</b>	<b>15,480</b>	<b>1,568,431</b>	<b>0</b>
<u>Special-purpose convertible</u>											
Australia	(68,815)	0	165,209	3,455	0	0	179,470	0	0	0	(79,621)
Austria	(121,788)	0	4,429,865	864,089	1,870,546	2,954,355	5,366,568	2,418,161	0	2,212,338	0
Belgium	(480,520)	0	3,047,255	561,689	1,695,062	437,274	4,332,036	0	0	928,724	0
Brazil	0	0	226,000	99	(99)	0	256,000	0	0	0	(30,000)
Bulgaria	0	0	3,333	0	0	0	3,333	0	0	0	0
China	(289,639)	0	1,180,176	140,842	329,468	14,247	1,980,000	348,571	0	0	(953,477)
Côte d'Ivoire	108,765	0	0	0	0	0	0	0	0	108,765	0
Czechoslovakia	0	0	0	0	0	0	0	29,130	0	0	(29,130)
Democratic People's Republic of Korea	0	0	0	0	0	0	164,785	0	0	0	(164,785)
Denmark	0	0	1,056,926	1,369,815	683,582	774,197	2,497,105	796,320	0	591,095	0
Egypt	(190,893)	0	292,611	0	0	0	0	0	0	101,718	0
Finland	(259,801)	0	377,842	543,361	1,759,545	641,243	3,552,814	0	0	0	(490,624)
France	(817,302)	0	10,775,006	4,058,302	5,044,478	1,249,690	17,159,724	2,527,120	0	623,330	0
Germany	(1,807,841)	0	21,690,025	5,649,978	5,276,964	8,068,880	29,148,153	4,560,863	0	5,168,990	0
Greece	0	0	0	0	132,751	369,624	0	270,000	0	232,375	0
Hungary	5,597	0	(617)	0	0	0	4,980	0	0	0	0
India	79,685	0	378,285	113,883	530,764	87,951	1,550,000	500,000	0	0	(859,432)
Iran, Islamic Republic of	0	0	0	375,160	0	0	373,268	0	0	1,892	0
Italy	(597,640)	0	24,338,456	8,073,511	11,665,043	6,262,123	38,062,355	4,584,506	0	7,094,632	0
Japan	(662,483)	0	7,007,146	2,596,162	3,833,893	1,856,100	10,974,099	3,817,431	0	0	(160,712)
Malta	31,628	0	(31,628)	0	0	0	0	0	0	0	0

Table 1 (continued)

Country/organization	Unpaid balances/ advances by donors brought forward from UNIDF 1.1.86	Adjust- ments to prior pledges	IDF firm pledges for				Collections in a/		Exchange adjustments	Unpaid balance	Advances by donors
			1986-1990	1991	1992	1993 and future years	1986-1991	1992			
<u>Special-purpose convertible (continued)</u>											
Netherlands	(292,528)	0	1,511,060	304,179	608,896	64,529	3,438,816	0	0	0	(1,242,680)
Norway	(282)	0	0	297,368	999,770	1,169,110	1,056,300	1,108,081	0	301,585	0
Poland	0	0	17,211	13,466	45,823	27,500	56,355	27,500	0	20,145	0
Portugal	0	0	0	0	246,455	232,805	0	173,866	0	305,394	0
Republic of Korea	0	0	740,517	216,539	383,940	146,646	1,306,346	200,000	0	0	(18,704)
Saudi Arabia	0	0	10,162	221,350	802,541	26,806	840,230	534,736	0	0	(314,107)
Spain	(38,245)	0	66,446	0	0	0	31,640	0	0	0	(3,439)
Sweden	72,067	0	750,022	375,793	345,132	0	1,218,394	0	0	324,620	0
Switzerland	(1,608,536)	0	6,476,879	1,712,274	3,341,654	2,931,537	7,467,206	3,182,949	0	2,203,653	0
Turkey	0	0	0	0	0	0	25,000	0	0	0	(25,000)
United Kingdom	(150,310)	0	5,042,929	985,015	966,419	0	5,929,373	856,787	0	57,893	0
Venezuela	0	0	0	0	1	0	193,714	0	0	0	(193,713)
Yemen	(2,474)	0	1,249	0	0	0	(1,225)	0	0	0	0
Yugoslavia	(1,041)	0	0	0	0	0	(1,041)	0	0	0	0
Multi-donor projects	0	0	1,644	(1,629)	399,444	4,000,799	0	0	0	4,400,258	0
<u>Organizations</u>											
Arab Industrial Develop- ment and Mining Organization	(19,877)	0	26,997	0	60,000	0	(20,000)	0	0	87,120	0
African Institute for High Technology, Training and Research, Kenya	1,253	0	(5,564)	0	0	0	(4,311)	0	0	0	0
Agence de coopération culturelle et technique (ACCT), Paris	0	0	0	0	42,000	89,250	0	131,250	0	0	0
Banque ouest-africaine de développement (BOAD), Togo	0	0	2,800	0	0	0	2,800	0	0	0	0
Caritas, Austria	0	0	0	0	28,846	0	28,846	0	0	0	0
Chiyoda Corp., Japan	0	0	127,738	(28,140)	0	0	99,598	0	0	0	0
Corporación Andina de Fomento (CAF)	0	0	143,367	249,385	287,879	46,674	570,000	73,038	0	84,267	0
Egyptian Iron and Steel Company	(10,576)	0	5,863	0	0	0	(4,713)	0	0	0	0
Gaz de France, Paris	0	0	0	0	17,967	0	17,967	0	0	0	0
Inverni della Beffa, Italy	0	0	0	0	34,999	0	34,694	0	0	305	0
Kuwait Institute for Higher Technical Training and Research	(48,229)	0	74,665	0	0	0	0	0	0	26,436	0
S.G. des Eaux Minerales de Vittel, France	0	0	21,846	1,505	6,539	0	33,715	0	0	0	(3,825)
Nobel Chematur, Sweden	0	0	9,040	0	0	0	9,040	0	0	0	0
Apple Computer, USA	0	0	27,531	0	0	0	27,531	0	0	0	0
Saudi Consulting House, Saudi Arabia	0	0	11,412	0	0	0	11,412	0	0	0	0
<b>Total</b>	<b>(7,169,825)</b>	<b>0</b>	<b>89,999,704</b>	<b>28,697,451</b>	<b>41,440,302</b>	<b>31,451,340</b>	<b>137,972,377</b>	<b>26,140,309</b>	<b>0</b>	<b>24,875,535</b>	<b>(4,569,249)</b>

Table I (continued)

Country/organization	Unpaid balances/ advances by donors brought forward from UNIDF 1.1.86	Adjust- ments to prior pledges	IDF firm pledges for				Collections in a/		Exchange adjustments	Unpaid balance	Advances by donors
			1986-1990	1991	1992	1993 and future years	1986-1991	1992			
<u>Non-convertible</u>											
Bulgaria	(222,203)	0	387,130	17,051	8,526	0	445,491	0	0	0	(254,987)
China	(54,661)	0	404,335	2,764	53,310	0	539,307	153,153	0	0	(286,712)
Cuba	(219,864)	0	306,545	(25,753)	35,723	0	165,051	28,378	0	0	(96,778)
Czechoslovakia	(78)	0	1,681,213	242,015	294,269	264,758	1,924,156	353,646	0	204,375	0
Egypt	21,793	0	34,894	0	0	0	72,492	0	0	0	(15,805)
Hungary	(1,360)	0	635,638	111,161	180,245	73,593	881,926	205,955	0	0	(88,604)
India	(399,558)	0	325,954	279,420	1,004,813	937,236	2,488,620	1,047,051	0	0	(1,387,806)
Iran, Islamic Republic of	0	0	0	56,667	0	0	66,667	0	0	0	(10,000)
Mongolia	(15,925)	0	0	0	0	0	0	0	0	0	(15,925)
Pakistan	(98,888)	0	81,910	7,939	8,706	0	76,046	0	0	0	(76,379)
Poland	(26,495)	0	787,146	191,744	441,733	392,208	1,199,097	293,743	0	293,496	0
Romania	(2,471)	0	124,141	80,801	0	0	195,895	0	0	6,576	0
Turkey	(2,258)	0	807,275	202,748	366,880	0	1,223,396	298,920	0	0	(147,671)
USSR	(402,605)	0	4,808,841	222,868	(93,940)	0	5,342,774	0	0	0	(807,610)
Yugoslavia	(57,228)	0	272,584	0	1,196	0	703,819	0	0	0	(487,267)
<u>Organizations</u>											
Egyptian Iron and Steel Company	(26,747)	0	(5,195)	0	0	0	0	0	0	0	(31,942)
<b>Total</b>	<b>(1,508,548)</b>	<b>0</b>	<b>10,652,411</b>	<b>1,389,425</b>	<b>2,301,461</b>	<b>1,667,795</b>	<b>15,324,737</b>	<b>2,380,846</b>	<b>0</b>	<b>504,447</b>	<b>(3,707,486)</b>
<b>Grand total</b>	<b>(7,620,287)</b>	<b>80,578</b>	<b>108,031,511</b>	<b>30,861,825</b>	<b>44,370,928</b>	<b>33,636,884</b>	<b>161,302,726</b>	<b>29,371,555</b>	<b>15,480</b>	<b>26,948,413</b>	<b>(8,276,735)</b>

a/ Negative amounts denote repayments to donors.

**Table 2**  
**Status of resources of the Industrial Development Fund as at 31 December 1992**  
(In thousands of US dollars)

	Convertible			Total
	General-purpose	Special-purpose	Non-convertible	
<b>Available for programming</b>				
Balance from UNIDF	4,562	0	0	4,562
Pledges, 1986 to 1992	9,382	179,434	21,401	210,217
Revaluation of pledges	(15)	9,247	(6,342)	2,890
Interest income	4,615	0	0	4,615
Other income	106	0	0	106
<b>Total available</b>	<u>18,650</u>	<u>188,681</u>	<u>15,059</u>	<u>222,390</u>
<b>Approvals</b>				
<b>Projects</b>				
Expenditure, 1986 to 1992	11,431	132,925	13,279	157,635
Commitments, 1993 and future	77	6,271	63	6,411
Not yet implemented	1,812	32,136	2,669	36,617
<b>Subtotal</b>	<u>13,320</u>	<u>171,332</u>	<u>16,011</u>	<u>200,663</u>
<b>Support costs, 1986/1992</b>				
General-purpose convertible	1,486	0	0	1,486
Special-purpose convertible	42	15,484	0	15,526
Non-convertible a/	1,951	111	0	2,062
<b>Subtotal</b>	<u>3,479</u>	<u>15,595</u>	<u>0</u>	<u>19,074</u>
<b>Reserve for support costs, 1993 and future</b>				
General-purpose convertible	246	0	0	246
Special-purpose convertible	0	4,661	0	4,661
Non-convertible a/	352	0	0	352
<b>Subtotal</b>	<u>598</u>	<u>4,661</u>	<u>0</u>	<u>5,259</u>
<b>Total approvals</b>	<u>17,397</u>	<u>191,588</u>	<u>16,011</u>	<u>224,996</u>
<b>Programmable balance</b>	<u>1,253</u>	<u>(2,907)</u>	<u>(952)</u>	<u>(2,606)</u>
<b>Cash position</b>				
Balance from UNIDF	5,229	9,806	3,092	18,127
Contributions received	8,856	164,113	17,706	190,675
Interest and other income	4,722	19,362	(3,092)	20,992
<b>Subtotal</b>	<u>18,807</u>	<u>193,281</u>	<u>17,706</u>	<u>229,794</u>
Disbursements, 1986 to 1992 (including support costs)	15,723	141,363	16,563	173,649
<b>Cash balance</b>	<u>3,084</u>	<u>51,918</u>	<u>1,143</u>	<u>56,145</u>
<b>Unliquidated obligations, 1992 and prior</b>				
Commitments, 1993 and future	361	7,148	1,324	8,833
Reserve for support costs, 1993 and future	77	6,271	63	6,411
Residual value of projects	598	4,661	0	5,259
<b>Total commitments</b>	<u>1,812</u>	<u>32,136</u>	<u>2,669</u>	<u>36,617</u>
<b>Total commitments</b>	<u>2,848</u>	<u>50,216</u>	<u>4,056</u>	<u>57,120</u>
<b>Uncommitted cash balance</b>	<u>236</u> b/	<u>1,702</u>	<u>(2,913)</u>	<u>(975)</u>

a/ Support costs for projects financed from non-convertible currencies are normally charged to the general-purpose convertible segment. However, some donors have agreed that support costs on such projects financed by them should be charged to their convertible contributions.

b/ Against which has been established the operational reserve totalling \$0.550 million.

Table 3

Projects approved/revised under UNIDF/IDF, 1978-1992  
according to priority area, as at 31 December 1992

UNIDF/IDF priority area	Number of projects	Special-purpose convertible	General-purpose convertible	Special-purpose non-convertible	General-purpose non-convertible	Total (US dollars)	Percentage
		(In US dollars, excluding overheads)					
Special measures for the least developed, land-locked and island developing countries	184	10,057,968	3,133,033	353,640	1,602,209	15,146,850	5.3
Development and transfer of industrial technology and industrial information	709	57,746,697	8,145,182	1,812,799	1,275,535	68,980,213	24.2
Economic cooperation among developing countries	184	2,451,412	3,883,750	1,073,435	1,345,222	8,753,819	3.1
Training programmes and strengthening industrial training institutions in developing countries	1,040	32,521,379	5,508,764	6,871,852	16,413,780	61,315,775	21.5
Industrial institutional infrastructure	180	8,075,818	3,167,428	252,212	442,293	11,937,751	4.2
Industries processing local natural resources, including export-oriented industries	224	21,345,385	2,420,945	360,983	518,365	24,645,678	8.6
Industries satisfying basic needs and support to rural industries	116	8,192,107	1,838,001	279,822	95,559	10,405,489	3.6
Promotional activities	520	69,807,664	5,609,024	1,770,253	879,177	78,066,118	27.3
Other activities	118	3,160,804	2,779,227	271,902	39,879	6,251,812	2.2
<b>TOTAL</b>	<b>3,275</b>	<b>213,359,234</b>	<b>36,485,354</b>	<b>13,046,898</b>	<b>22,612,019</b>	<b>285,503,505</b>	<b>100.0</b>



**Table 4**  
**Net approvals/revisions in 1992 of projects financed under IDF**

(By region and programme component)

Region	US dollars	Percentage
Africa (excluding Arab States)	11,011,231	34.3
Arab States	588,314	1.8
Africa	53,284	0.2
West Asia	6,699	0.0
Regional	528,331	1.6
Asia and the Pacific	4,505,892	14.0
Europe	718,916	2.2
Latin America and the Caribbean	3,682,029	11.5
Global and interregional	11,585,486	36.1
TOTAL	32,091,868	100.0
<u>Programme component/priority area</u>		
Special measures for the least developed, land-locked and island developing countries	747,106	2.3
Development and transfer of industrial technology and industrial information	5,293,119	16.5
Economic cooperation among developing countries	1,931,840	6.0
Training programmes and strengthening industrial training institutions in developing countries	2,829,966	8.8
Industrial institutional infrastructure	1,277,042	4.0
Industries processing local natural resources, including export-oriented industries	6,304,758	19.6
Industries satisfying basic needs and support to rural industries	860,235	2.7
Promotional activities	11,353,805	35.4
Others	1,493,997	4.7
TOTAL	32,091,868	100.0

Note: Negative figures reflect downward revisions of existing projects during the year.

Table 4 (a)

General-purpose convertible projects  
(By region and programme component)

Region	US dollars	Percentage
Africa (excluding Arab States)	364,492	26.9
Arab States	57,368	4.2
Africa	43,936	3.2
West Asia	7,552	0.6
Regional	5,880	0.4
Asia and the Pacific	225,173	16.6
Europe	46,287	3.4
Latin America and the Caribbean	333,699	24.7
Global and interregional	326,239	24.1
TOTAL	1,353,258	100.0
<u>Programme component/priority area</u>		
Special measures for the least developed, land-locked and island developing countries	7,781	0.6
Development and transfer of industrial technology and industrial information	134,776	10.0
Economic cooperation among developing countries	101,285	7.5
Training programmes and strengthening industrial training institutions in developing countries	126,185	9.3
Industrial institutional infrastructure	255,135	18.9
Industries processing local natural resources, including export-oriented industries	125,959	9.3
Industries satisfying basic needs and support to rural industries	17,052	1.3
Promotional activities	170,138	12.6
Others	414,947	30.7
TOTAL	1,353,258	100.0

Note: Negative figures reflect downward revisions of existing projects during the year.

**Table 4 (b)**  
**Special-purpose convertible projects**  
 (By region and programme component)

Region	US dollars	Percentage
Africa (excluding Arab States)	9,832,739	35.0
Arab States	534,328	1.9
Africa	11,877	0.0
West Asia	0	0.0
Regional	522,451	1.9
Asia and the Pacific	4,264,688	15.2
Europe	662,965	2.4
Latin America and the Caribbean	3,349,620	11.9
Global and interregional	9,447,763	33.6
TOTAL	28,092,103	100.0
 <u>Programme component/priority area</u>		
Special measures for the least developed, land-locked and island developing countries	749,056	2.7
Development and transfer of industrial technology and industrial information	4,532,659	16.1
Economic cooperation among developing countries	869,308	3.1
Training programmes and strengthening industrial training institutions in developing countries	2,184,982	7.8
Industrial institutional infrastructure	1,022,907	3.6
Industries processing local natural resources, including export-oriented industries	6,178,799	22.0
Industries satisfying basic needs and support to rural industries	843,183	3.0
Promotional activities	10,660,444	37.9
Others	1,050,765	3.7
TOTAL	28,092,103	100.0

Table 4 (c)

Special-purpose and general-purpose non-convertible projects

(By region and programme component)

Region	US dollars	Percentage
Africa (excluding Arab States)	814,000	30.8
Arab States	(3,382)	(0.1)
Africa	(2,529)	(0.1)
West Asia	(853)	(0.0)
Regional	0	0.0
Asia and the Pacific	16,031	0.6
Europe	9,664	0.4
Latin America and the Caribbean	(1,290)	(0.0)
Global and interregional	1,811,484	68.4
<b>TOTAL</b>	<b>2,646,507</b>	<b>100.0</b>
<u>Programme component/priority area</u>		
Special measures for the least developed, land-locked and island developing countries	(9,731)	(0.4)
Development and transfer of industrial technology and industrial information	625,684	23.6
Economic cooperation among developing countries	961,247	36.3
Training programmes and strengthening industrial training institutions in developing countries	518,799	19.6
Industrial institutional infrastructure	(1,000)	(0.0)
Industries processing local natural resources, including export-oriented industries	0	0.0
Industries satisfying basic needs and support to rural industries	0	0.0
Promotional activities	28,285	1.1
Others	523,223	19.8
<b>TOTAL</b>	<b>2,646,507</b>	<b>100.0</b>

Note: Negative figures reflect downward revisions of existing projects during the year.

TRAINING ACTIVITIES IN 1992

Table 1 a/

In-plant group training programmes in 1992

Field of study	Type of programme			Host country	Number of participants			
	National	Regional	Inter-regional		of which			
					All developing countries	LDCs	Female	African participants b/
Rolling stock maintenance	-	x	-	Belgium/Cameroon	12	6	-	12
Rolling stock management	-	x	-	Belgium/Cameroon	11	7	1	11
Railway spare parts management	-	x	-	Belgium/Indonesia	12	2	-	-
Rolling stock maintenance	-	x	-	Belgium/Indonesia	11	4	-	-
Port equipment maintenance	-	x	-	France	20	9	1	20
Production of medicaments	-	x	-	France	20	4	4	-
Biomedical and laboratory electronic equipment maintenance	-	-	x	Hungary	13	1	2	4
Gas and oil transportation network maintenance	-	-	x	Hungary	10	1	-	5
Petrochemicals, petroleum refinery and fertilizer plant maintenance	-	-	x	India	9	-	-	1
Production management	-	-	x	Japan	9	1	1	1
Spare parts design and manufacture	-	-	x	Poland	9	3	1	1
Cement industry	-	-	x	Turkey	10	3	-	3
Sugar industry	-	-	x	Turkey	10	1	2	4
Fruit and vegetable processing	-	-	x	Turkey	10	4	4	6
Iron and steel industry	-	-	x	Turkey	9	2	-	2
Utilization of medicinal and aromatic plants in pharmaceutical industry	-	-	x	Turkey	9	4	6	4

APPENDIX H

Appendix H

Table 1 (continued)

Field of study	Type of programme			Host country	Number of participants			
	National	Regional	Inter- regional		of which			
					All developing countries	LDCs	Female	African participants b/
Small-scale foundry industry	-	-	x	Turkey	10	10	-	8
Textile industry	-	-	x	Turkey	10	4	4	6
Electric welding	-	-	x	Ukraine	7	1	-	-
Rolling stock maintenance	-	x	-	United Kingdom/ Malawi	15	9	-	15
Leather goods technology	-	x	-	United Republic of Tanzania	14	-	3	14
Training of trainers - agro-industry maintenance systems in PTA countries	-	x	-	Zimbabwe	15	9	-	15
TOTAL					255	85	29	132

a/ These figures do not include participants in training activities organized within the framework of UNIDO-executed field projects.

b/ Including participants from African Arab States.

TRAINING ACTIVITIES IN 1992

Table 2 a/

Other group training programmes in 1992

Field of study	Type of programme				Number of participants			
	National	Regional	Inter-regional	Host country	of which			African participants b/
					All developing countries	LDCs	Female	
Industrial investment projects and COMFAR for Nigerian bankers c/	x	-	-	Austria	13	-	-	13
COMFAR c/	-	-	x	Austria	10	-	2	3
Industrial investment project preparation and evaluation with COMFAR	x	-	-	Botswana	14	14	2	14
Computer-aided tools and spare parts production	-	x	-	Burkina Faso/Costa Rica/Kenya/Uruguay	96	20	2	40
Fly-ash utilization	-	-	x	China	15	1	1	-
Industrial investment project preparation and evaluation with COMFAR	-	x	-	Colombia	100	-	-	-
Project design and evaluation	x	-	-	Czechoslovakia	50	-	21	-
Technology transfer and contracting	x	-	-	Czechoslovakia	50	-	10	-
High quality steel production	-	-	x	Czechoslovakia	14	-	-	14
Cement - top management	-	-	x	Egypt	12	-	-	3
Computing services and software in industry	-	x	-	France	20	-	1	-
Training of trainers for African development banks	-	x	-	France	15	10	3	15
Small- and medium-scale enterprise financing	-	x	-	France	16	10	3	16
Production of medicines	-	x	-	France	18	4	2	-
Industrial project promotion and financing	-	x	-	Gabon	27	3	8	27

Table 2 (continued)

Field of study	Type of programme			Host country	Number of participants			
	National	Regional	Inter-regional		of which			
					All developing countries	LDCs	Female	African participants b/
Role of savings and credit for development and women's entrepreneurship in UDEAC countries	-	x	-	Gabon	30	10	30	30
Financial analysis and COMFAR	-	x	-	Guatemala	14	-	4	-
Utilization of ISO 9000 standards	x	-	-	Hungary	70	-	8	-
Advances in cement manufacture	-	-	x	India	7	-	-	4
Advanced practices in cement industry	-	-	x	India	3	-	-	-
Computerized control in kiln operations - cement	-	-	x	India	9	-	-	-
Computerized control in mill operations - cement	-	-	x	India	3	-	-	-
Industrial project preparation and appraisal d/	-	-	x	India	50	6	15	13
Training of future COMFAR trainers	x	-	-	India	24	-	-	-
Technology acquisition	-	-	x	India	200	-	50	-
Industrial project preparation, evaluation, financing and execution	-	x	-	Italy	16	-	2	16
Investment feasibility study analysis and evaluation	-	-	x	Italy	12	-	2	8
Industrial planning	-	x	-	Japan	2	-	4	-
Joint venture negotiation	x	-	-	Nepal	50	50	3	-
Business analysis and industrial restructuring	x	-	-	Poland	82	-	20	-
Industrial project preparation, appraisal and financing	-	-	x	Poland	22	4	3	6



Table 2 (continued)

Field of study	Type of programme			Host country	Number of participants			
	National	Regional	Inter-regional		of which			
					All developing countries	LDCs	Female	African participants b/
Industrial investment project appraisal and evaluation of public enterprises	x	-	-	Romania	30	-	10	-
COMFAR	x	-	-	Sudan	18	18	5	18
Industrial project preparation and management for LDCs	-	x	-	Thailand	19	15	-	-
Cement industry	-	-	x	Turkey	9	3	-	3
Cement industry technology, maintenance and energy management	-	-	x	Turkey	13	-	-	8
Information technology	-	-	x	Ukraine	11	2	-	-
Policies and strategies for human resource development	-	-	x	United Kingdom	11	3	1	1
Technology transfer negotiation and contracting	x	-	-	United Republic of Tanzania	36	36	10	36
<b>TOTAL</b>					<b>1,218</b>	<b>209</b>	<b>222</b>	<b>288</b>

a/ These figures do not include participants in training activities organized within the framework of UNIDO-executed field projects.

b/ Including African Arab States.

c/ Self-financed.

d/ Two programmes carried out in 1992.

Table 3

Number of fellowships and study tours started in 1992,  
by nationality/home area, country or territory

Nationality/home area, country or territory	Number of individuals placed									Total
	UNDP			Regular Programme			Other programmes			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
<b>AFRICA a/</b>										
Angola	25	5	30	0	0	0	2	1	3	33
Burundi	0	0	0	3	1	4	0	0	0	4
Cameroon	1	0	1	0	0	0	0	0	0	1
Cape Verde	8	1	9	1	0	1	0	0	0	10
Chad	3	0	3	0	0	0	0	0	0	3
Ethiopia	20	0	20	2	0	2	10	1	11	33
Gabon	0	0	0	0	0	0	2	0	2	2
Ghana	2	0	2	0	0	0	0	0	0	2
Guinea-Bissau	2	1	3	0	0	0	0	0	0	3
Guinea	0	0	0	3	0	3	0	0	0	3
Kenya	22	18	40	0	0	0	6	1	7	47
Lesotho	0	1	1	0	0	0	0	0	0	1
Madagascar	8	0	8	0	0	0	0	0	0	8
Malawi	2	4	6	0	0	0	1	0	1	7
Mauritius	0	0	0	1	0	1	0	0	0	1
Mozambique	6	1	7	0	0	0	0	0	0	7
Niger	3	0	3	0	0	0	0	0	0	3
Nigeria	37	1	38	0	0	0	7	0	7	45
Sao Tome and Principe	3	0	3	0	0	0	0	0	0	3
Senegal	4	2	6	4	0	4	0	0	0	10
Togo	6	2	8	0	0	0	0	0	0	8
Uganda	8	4	12	0	0	0	1	0	1	13
United Republic of Tanzania	17	2	19	0	0	0	8	0	8	27
Zaire	1	0	1	0	0	0	0	0	0	1
Zambia	6	2	8	0	0	0	2	1	3	11
Zimbabwe	0	0	0	0	0	0	12	1	13	13
<b>Total Africa</b>	<b>184</b>	<b>44</b>	<b>228</b>	<b>14</b>	<b>1</b>	<b>15</b>	<b>51</b>	<b>5</b>	<b>56</b>	<b>299</b>
<b>ARAB STATES</b>										
Algeria	38	9	47	0	0	0	4	0	4	51
Egypt	14	1	15	0	0	0	9	0	9	24
Jordan	8	0	8	0	0	0	0	0	0	8
Libyan Arab Jamahiriya	0	0	0	0	0	0	7	0	7	7
Morocco	17	3	20	0	0	0	6	2	8	28
Oman	0	0	0	4	0	4	0	0	0	4
Saudi Arabia	1	0	1	0	0	0	0	0	0	1
Sudan	0	0	0	0	0	0	3	0	3	3
Tunisia	8	0	8	0	0	0	5	0	5	13
<b>Total Arab States</b>	<b>86</b>	<b>13</b>	<b>99</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>34</b>	<b>2</b>	<b>36</b>	<b>139</b>

Table 3 (continued)

Nationality/home area, country or territory	Number of individuals placed									Total
	UNDP			Regular Programme			Other programmes			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
<b>ASIA AND THE PACIFIC</b>										
Bangladesh	9	0	9	0	0	0	0	0	0	9
Bhutan	10	1	11	0	0	0	0	0	0	11
China	80	21	101	0	0	0	53	11	64	165
Democratic People's Republic of Korea	24	0	24	0	0	0	8	2	10	34
India	85	1	86	1	0	1	17	1	18	105
Indonesia	6	7	13	0	0	0	0	0	0	13
Iran (Islamic Republic of)	6	1	7	0	0	0	0	0	0	7
Malaysia	0	0	0	0	0	0	1	0	1	1
Mongolia	4	4	8	0	0	0	0	0	0	8
Myanmar	2	4	6	0	0	0	0	0	0	6
Nepal	29	2	31	1	0	1	1	0	1	33
Pakistan	53	1	54	0	0	0	0	0	0	54
Philippines	6	17	23	0	0	0	3	1	4	27
Republic of Korea	8	0	8	0	0	0	0	0	0	8
Singapore	1	1	2	0	0	0	0	0	0	2
Solomon Islands	4	0	4	0	0	0	0	0	0	4
Sri Lanka	13	6	19	0	0	0	0	0	0	19
Thailand	10	5	15	0	0	0	2	3	5	20
Viet Nam	94	18	112	0	0	0	13	0	13	125
<b>Total Asia and the Pacific</b>	<b>444</b>	<b>89</b>	<b>533</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>98</b>	<b>18</b>	<b>116</b>	<b>651</b>
<b>EUROPE</b>										
Albania	3	0	3	0	0	0	0	0	0	3
Bulgaria	25	4	29	0	0	0	1	3	4	33
Cyprus	5	0	5	0	0	0	0	0	0	5
Czechoslovakia	23	7	30	0	0	0	0	0	0	30
Greece	0	0	0	0	0	0	0	1	1	1
Hungary	0	0	0	0	0	0	18	3	21	21
Kazakhstan	0	0	0	0	0	0	6	0	6	6
Poland	17	2	19	0	0	0	25	3	28	47
Portugal	30	0	30	0	0	0	0	0	0	30
Romania	6	4	10	0	0	0	0	0	0	10
Russian Federation	0	0	0	0	0	0	4	0	4	4
Turkey	16	3	19	4	0	4	3	0	3	26
Uzbekistan	0	0	0	0	0	0	1	0	1	1
Yugoslavia	5	2	7	1	0	1	3	1	4	12
<b>Total Europe</b>	<b>130</b>	<b>22</b>	<b>152</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>61</b>	<b>11</b>	<b>72</b>	<b>229</b>

Table 3 (continued)

Nationality/home area, country or territory	Number of individuals placed									
	UNDP			Regular Programme			Other programmes			Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
<b>LATIN AMERICA AND THE CARIBBEAN</b>										
Antigua and Barbuda	1	0	1	0	0	0	0	0	0	1
Argentina	1	0	1	1	0	1	11	1	12	14
Bolivia	4	0	4	0	0	0	6	0	6	10
Brazil	1	0	1	0	0	0	20	5	25	26
Chile	0	0	0	0	0	0	9	3	12	12
Colombia	0	0	0	0	0	0	12	0	12	12
Costa Rica	2	0	2	0	0	0	0	0	0	2
Cuba	6	2	8	1	1	2	8	4	12	22
Ecuador	3	0	3	0	0	0	10	0	10	13
Guatemala	0	0	0	0	0	0	1	3	4	4
Guyana	0	1	1	0	0	0	0	0	0	1
Haiti	1	1	2	0	0	0	0	0	0	2
Jamaica	1	5	6	0	1	1	0	0	0	7
Mexico	0	0	0	0	0	0	8	3	11	11
Nicaragua	6	0	6	0	0	0	0	0	0	6
Paraguay	0	1	1	0	0	0	3	0	3	4
Peru	3	0	3	0	1	1	8	0	8	12
Trinidad and Tobago	4	0	4	0	0	0	1	0	1	5
Uruguay	0	0	0	0	0	0	4	0	4	4
Venezuela	0	0	0	0	0	0	13	3	16	16
Total Latin America and the Caribbean	33	10	43	2	3	5	114	22	136	184
<b>GRAND TOTAL</b>	<b>877</b>	<b>178</b>	<b>1,055</b>	<b>27</b>	<b>4</b>	<b>31</b>	<b>358</b>	<b>58</b>	<b>416</b>	<b>1,502</b>

a/ African Arab States (Algeria, Egypt, Libyan Arab Jamahiriya, Morocco, Sudan and Tunisia) included under "Arab States".

b/ Including 240 females, 218 individuals from least developed countries, 425 individuals from African countries (including African Arab States).

**Table 4**  
**Fellowship and study tours started in 1992 by country,**  
**geographical area or territory of study a/ b/**

Country/ geographical area/ territory of study	Number of individuals placed			Total
	UNDP	Regular programme	Other programmes	
Argentina	2	0	0	2
Australia	32	1	4	37
Austria	48	0	10	58
Austria (UNIDO Headquarters)	56	7	13	76
Bangladesh	11	0	0	11
Belarus	1	0	0	1
Belgium	13	0	3	16
Benin	2	0	0	2
Bolivia	0	0	1	1
Botswana	6	0	0	6
Brazil	3	2	0	5
Bulgaria	3	0	0	3
Canada	24	0	0	24
Chile	1	0	28	29
China	59	1	8	68
Colombia	9	1	10	20
Costa Rica	6	0	0	6
Côte d'Ivoire	2	0	0	2
Cuba	6	0	6	12
Czechoslovakia	24	0	3	27
Cyprus	2	0	0	2
Denmark	10	0	4	14
Dominican Republic	0	1	0	1
Ecuador	1	0	0	1
Egypt	2	0	1	3
El Salvador	6	0	0	6
Finland	11	0	12	23
France	95	0	59	154
Germany	106	3	34	143
Ghana	1	0	0	1
Greece	4	0	1	5
Honduras	6	0	0	6
Hong Kong	20	0	13	33
Hungary	30	1	1	32
India	63	0	2	65
Indonesia	11	0	0	11
Iran	2	0	0	2
Ireland	7	1	1	9
Israel	1	0	0	1
Italy	43	2	85	130
Japan	35	0	19	54
Jordan	20	0	0	20
Kenya	7	2	9	18
Malaysia	29	0	0	29
Mali	1	0	0	1
Mauritius	6	0	0	6

Table 4 (continued)

Country/ geographical area/ territory of study	Number of individuals placed			Total
	UNDP	Regular programme	Other programmes	
Mexico	1	0	47	48
Morocco	4	4	0	8
Myanmar	3	0	0	3
Netherlands	25	5	5	35
New Caledonia	1	0	0	1
New Zealand	1	0	0	1
Norway	3	0	0	3
Pakistan	8	0	0	8
Philippines	15	0	0	15
Poland	13	0	0	13
Portugal	51	0	0	51
Republic of Korea	15	0	10	25
Russian Federation	6	0	4	10
Senegal	6	0	0	6
Singapore	47	0	6	53
Slovenia	4	0	0	4
South Africa	2	0	0	2
Spain	17	1	3	21
Sweden	15	0	3	18
Switzerland	16	0	11	27
Thailand	56	1	4	61
Togo	1	0	0	1
Tonga	4	0	0	4
Tunisia	20	0	0	20
Turkey	18	0	3	21
Uganda	13	2	0	15
Ukraine	2	0	0	2
United Kingdom	140	6	51	197
United Republic of Tanzania	3	2	11	16
United States of America	132	0	37	169
Venezuela	3	0	0	3
Viet Nam	2	0	0	2
Yugoslavia	4	0	0	4
Zaire	2	0	1	3
Zambia	0	2	0	2
Zimbabwe	5	2	4	11
<b>TOTAL</b>	<b>1,485</b>	<b>47</b>	<b>527</b>	<b>2,059</b>

a/ Where a fellowship/study tour included more than one country/geographical area/territory, it is listed against each one concerned. Thus the totals in table 4 do not correspond to those in table 3.

b/ Of these placements 758 or 37 per cent are arranged in developing countries thus contributing to technical cooperation among developing countries.

## APPENDIX I

## AGREEMENTS CONCLUDED BY UNIDO IN 1992

Agreements with StatesCameroon

Agreement between the United Nations Industrial Development Organization and the Government of the Republic of Cameroon regarding the arrangements for the fifth regular session of the General Conference of UNIDO, signed on 2 November

France

Exchange of letters between the Permanent Representative of France and the Director-General of UNIDO concerning a further extension for an indefinite period of the UNIDO Industrial Promotion Service in Paris, signed on 25 February and 3 March

Greece

Agreement between the United Nations Industrial Development Organization and the Government of Greece with regard to a special-purpose contribution to the Industrial Development Fund and to the establishment of the UNIDO service in Greece for the promotion of industrial investment and the strengthening of cooperation with developing countries, signed on 14 February and 4 March

India

Exchange of letters between the Permanent Representative of India and the Director-General of UNIDO regarding the extension until 31 March 1993 of the basic terms and conditions governing UNIDO projects envisaged in the interim programme for the International Centre for Genetic Engineering and Biotechnology (ICGEB), its related exchange of letters and trust fund agreement, and of the revised related project, signed on 6 and 26 March

Italy

Exchange of letters between the Permanent Representative of Italy and the Director-General of UNIDO concerning the extension until 30 June 1992 of the agreement on basic terms and conditions governing the UNIDO project concerning the preparatory phase for the establishment of an International Centre for Science and High Technology and of the related revised project, signed on 20 December 1991 and 18 February 1992

Exchange of letters between the Permanent Representative of Italy and the Officer-in-Charge of UNIDO regarding the applicability until 31 December 1996 of the agreement on basic terms and conditions governing UNIDO projects envisaged in the five-year work programme for the

International Centre for Genetic Engineering and Biotechnology to the related revised project, signed on 10 June and 16 September

Exchange of letters between the Permanent Representative of Italy and the Director-General of UNIDO regarding the extension from 1 July until 31 December 1992 of the agreement on basic terms and conditions governing the UNIDO project concerning the preparatory phase for the establishment of an International Centre for Science and High Technology and of the related revised project, signed on 1 July and 16 September

Japan

Exchange of notes between the Permanent Representative of Japan and the Officer-in-Charge of UNIDO regarding the extension from 29 September 1992 until 31 August 1995 of the interregional project for the establishment in Japan of the UNIDO service for the promotion of industrial investment in developing countries, signed on 29 September

Memorandum concerning the interregional project of the UNIDO service in Japan for the promotion of industrial investment in developing countries, signed on 29 September

Nigeria

Basic cooperation agreement between the United Nations Industrial Development Organization and the Government of the Federal Republic of Nigeria, signed on 5 November

Republic of Korea

Exchange of letters between the Permanent Representative of the Republic of Korea and the Director-General of UNIDO regarding the extension from 16 July until 15 October 1992 of the UNIDO service for promotion of industrial investment in developing countries, signed on 15 and 16 July

Exchange of letters between the Permanent Representative of the Republic of Korea and the Director-General of UNIDO regarding the extension from 16 October 1992 until 15 April 1993 of the UNIDO service for promotion of industrial investment in developing countries, signed on 14 October

Exchange of letters between the Permanent Representative of the Republic of Korea and the Director-General of UNIDO regarding the extension until 6 July 1993 of the trust fund agreement and related project entitled "promotion of industrial cooperation between enterprises in the People's Republic of China and the Republic of Korea", signed on 31 July and 4 August

Russian Federation

Memorandum of understanding for cooperation between the United Nations Industrial Development Organization and the Ministry of Industry of the Russian Federation, signed on 3 and 4 April

Agreement between the Government of the Russian Federation and UNIDO on the activities of the UNIDO Centre for International Industrial Cooperation in the Russian Federation, signed on 18 December

Exchange of letters of 18 December between the Deputy Minister of Science, Higher Education and Technical Policy of the Russian Federation and the Director-General of UNIDO regarding the agreement between the Government of the Russian Federation and UNIDO on the activities of the UNIDO Centre for International Industrial Cooperation in the Russian Federation, signed on 18 December

Tunisia

Agreement between the United Nations Industrial Development Organization and the Government of the Republic of Tunisia regarding the arrangements for the first Consultation on the construction industry, Tunis, Tunisia, 3-7 May 1993, signed on 10 December

United States of America

Memorandum of understanding between the United Nations Industrial Development Organization and the Environmental Protection Agency of the United States of America for technical cooperation on environmental protection and industrial development, signed on 3 June

Exchange of letters between the Government of the Commonwealth of Puerto Rico and the Director-General of UNIDO concerning the conclusion of a working arrangement, signed on 9 June

Agreements with the United Nations

Agreement between the United Nations Industrial Development Organization and the United Nations on arrangements for the sale of UNIDO publications, signed on 4 and 7 May

Economic Commission for Latin America and the Caribbean (ECLAC)

Memorandum of understanding between the United Nations Industrial Development

Organization and the United Nations Economic Commission for Latin America and the Caribbean, signed on 7 October 1991 and 21 December 1992

Agreements with intergovernmental organizations

Asian-African Legal Consultative Committee (AALCC)

Relationship agreement between the United Nations Industrial Development Organization and the Asian-African Legal Consultative Committee, signed on 6 November

Latin American Economic System (SELA)

Third programme of cooperation between the Secretariat of UNIDO and the permanent secretariat of SELA (1992-1993), signed on 30 October

Agreements with other institutions

Biotechnology Center of Excellence Corporation (BCEC)

Memorandum of understanding and cooperation concluded ad referendum on 27 December 1991 between the United Nations Industrial Development Organization and the Biotechnology Center of Excellence Corporation, Boston, USA, and protocol confirming that memorandum of understanding and cooperation, signed on 7 May

Financing Agency for Studies and Projects (FINEP)

Working arrangement between the United Nations Industrial Development Organization and the Financing Agency for Studies and Projects of Brazil, signed on 5 June

Research Area of Trieste

Exchange of letters between the Director-General of UNIDO and the President of the Research Area of Trieste regarding the extension until 31 December 1992 of the 1989 agreement and related rental agreement between the Research Area of Trieste and UNIDO with respect to the related project on pilot activities, signed on 1 July and 23 September



OUTPUTS IMPLEMENTED AGAINST OUTPUTS PROGRAMMED, 1992, WITH INDICATION OF TOTAL OUTPUTS FOR 1992-1993

Major programme 300: Programme and Project Development

Code	Output classification	Programmed 92-93 (1)	Implemented 1992 (2)	Commenced 1992 for completion 1993 (3)	Postponed (4)	Terminated (5)	Additional outputs (6)	Scheduled for implemen- tation 1993 (7)
1011	Expert group meetings	8	1			3		4
1012	Regional/global preparatory meetings	1	1				1	1
1015	Fairs/exhibitions	1						1
1016	Other meetings	12	6					6
1021	Workshops/seminars	32	15		2			15
1022	Internal training	52	22	1				29
1031	Data banks	6	1	3				2
1032	New reports and manuals	19	10	2	2			5
1033	Updated reports and manuals	1						1
1034	New internal guidelines	4	1	2				1
1036	Abstracts, periodicals and loose-leaf publications	11	4		1	6	1	1
1041	Country studies	29	9					20
1042	Subsectoral studies/analyses	3		1				2
1043	Other studies	28	24	4			8	8
1061	Projects identified	3,320	1,122					2,198
1062	Projects developed and formulated	1,390	485					905
1063	Projects approved	100	54					46
1064	Projects implemented	17	2	8				7
1068	Project appraisal memoranda/advice	1,000	372					628
1069	Projects reviewed for UNIDO funding	1,750	919					831
1071	Computer systems developed	1		1				
1501	Advisory services	7	7	3			3	
1504	Integrated development programmes	30	10	4				16
1505	Country programme reviews	300	150					150
1506	Country/special regional industrial plans/programmes	17	9	4			2	6
3001	Direction and management	4		4				
9001	Other	1						1

APPENDIX J

Appendix J

## Major programme 400: Industrial Promotion, Consultations and Technology

Code	Output classification	Programmed 92-93 (1)	Implemented 1992 (2)	Commenced 1992 for completion 1993 (3)	Postponed (4)	Terminated (5)	Additional outputs (6)	Scheduled for implemen- tion 1993 (7)
1011	Expert group meetings	21	4					17
1012	Regional/global preparatory meetings	8	4					4
1013	Consultations	5	2				1	4
1014	Investment forums	13	6					7
1015	Fairs/exhibitions	5	3				2	4
1021	Workshops/seminars	58	31					27
1023	Group training programmes (no. of participants)	560	176	150		52		182
1024	Fellowshs, study tours or delegates programmes	135	48	11				76
1025	Country presentation tours	60	116				157	101
1031	Data banks	11	2	7				2
1032	New reports and manuals	33	5	14				14
1036	Abstracts, periodicals and loose-leaf publications	112	51					61
1041	Country studies	64	21	10				33
1042	Subsectoral studies/analyses	178	54	21				103
1043	Other studies	8		2				6
1064	Projects implemented	43	10	23				10
1065	Projects completed	230	70	54			12	118
1066	Investment projects identified/screened/appraised	1,430	960	146			426	750
1067	Investment projects concluded	240	194				100	146
1501	Advisory services	6		5				1
1502	Technical cooperation in a particular subsector	3		2				1
1503	Technical cooperation in policy formulation	2	2					
3001	Direction and management	3	1					2
9001	Other		1				1	

Major programme 500: Industrial Operations

Code	Output classification	Programmed 92-93 (1)	Implemented 1992 (2)	Commenced 1992 for completion 1993 (3)	Postponed (4)	Terminated (5)	Additional outputs (6)	Scheduled for implemen- tion 1993 (7)
1011	Expert group meetings	9	2				1	8
1021	Workshops/seminars		4				4	
1023	Group training programmes	100	28					72
1024	Fellowships, study tours or delegates programmes	4,000	2,059					1,941
1032	New reports and manuals	6	3	2			2	3
1033	Updated reports and manuals	3	1					2
1034	New internal guidelines	1		1				
1042	Subsectoral studies/analyses		2				2	
1063	Projects approved	580	304				51	327
1065	Projects completed	538	341				50	247
1071	Computer systems developed		1				1	
1501	Advisory services	4	1	4			1	
1502	Technical cooperation in a particular subsector	20		21			1	
1503	Technical cooperation in policy formulation	8		8				
2001	Support services	2		2				
300i	Direction and management	6		6				

Note:

Column (2) Implemented if output was completed during the year in conformity with the description.

Column (4) Postponed if output (whether commenced or not) was rescheduled for the following biennium.

Column (6) Additional outputs are shown in those instances where they were required by virtue of a legislative decision or were added at the initiative of the Secretariat.

Column (1)+(6) = (2)+(3)+(4)+(5)+(7).

Explanatory note

As promised by the Secretariat in the supplement to the Annual Report presented to the fourth session of the General Conference (GC.4/35, para. 6), appendix J has been refined in order to provide a more comprehensive monitoring of outputs and activities in the substantive Departments. Presentation is thus at the Departmental level and due account has been taken of the diversity and different weights of the outputs and activities identified in major programmes 300, 400 and 500 of the programme and budgets for 1992-1993 (GC.4/42). Consideration has also been given to the fact that certain outputs are more difficult to identify precisely in the programme and budgets and are therefore less measurable. The figures cited are based on the description of the Departments' activities given in the respective chapters of the Annual Report and on the significant performance indicators presented in that Report.

The outputs have been grouped according to the following categories which reflect the broad range of activities undertaken by the Organization.

<u>Code</u>	<u>Output classification</u>
1011	Expert group meetings
1012	Regional/global preparatory meetings
1013	Consultations
1014	Investment forums
1015	Fairs/exhibitions
1016	Other meetings
1021	Workshops/seminars
1022	Internal training
1023	Group training programmes
1024	Fellowships, study tours or delegates programmes (number of participants)
1025	Country presentation tours
1031	Data banks
1032	New reports and manuals
1033	Updated reports and manuals
1034	New internal guidelines
1035	Updated internal guidelines
1036	Abstracts, periodicals and loose-leaf publications
1041	Country studies
1042	Subsectoral studies/analyses
1043	Other studies
1061	Projects identified
1062	Projects developed and formulated
1063	Projects approved
1064	Projects implemented
1065	Projects completed
1066	Investment projects identified/screened/appraised
1067	Investment projects concluded
1068	Project appraisal memoranda/advice
1069	Projects reviewed for UNIDO funding
1071	Computer systems developed
1501	Advisory services
1502	Technical cooperation in a particular subsector
1503	Technical cooperation in policy formulation
1504	Integrated development programmes
1505	Country programme review
1506	Country/special regional industrial plans/programmes
2001	Support services
3001	Direction and management
9001	Other

Outputs carried over from previous biennium(s) have been reported under the column "additional outputs". Outputs that were cited in the programme and budget documents without any quantification have been indicated as follows: (a) if no output was implemented in 1992, the column "Programmed 92-93" shows at least one output; (b) if an output or outputs was/were implemented during 1992, the same number or an estimated total for the biennium is indicated under "Programmed 92-93".

As can be seen from the foregoing, the summary table provides a statistical report of the Organization's output and activities in the first year of the biennial budget period 1992-1993. An analysis of the figures would be more appropriate at the end of that period when a fuller picture of the Organization's efforts is available.