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Seventh Meeting of the Intergovernmental
Follow-up and Co-ordination Committee on Economic
Co-operation among Developing Countries (IFCC-VII)

Kuala Lumpur, Malaysia
31 July - 5 August 1989

UNIDO SUPPORT MEASURES TO THE
CARACAS PROGRAMME OF ACTION
1987-1989 AND 1990-1995*

Prepared by
the UNIDO Secretariat

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* This document has not been edited.

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Synopsis

The introduction and overview briefly describe the evolution of the present UNIDO ECDC-TCDC programme and the major sources of funding. A chapter on current activities reports UNIDO's response to specific recommendations of IFCC-VI. Annex 1 lists activities funded under the UNIDO regular budget, including the regular programme for technical co-operation. The final chapter outlines new directions for the programme: by the end of the forthcoming biennium (1990-1991), the programme should fully comply with goals and guidelines set out in the UNIDO Medium-term Plan 1990-1995. The mandates emanating from the Caracas Programme of Action relating to industrialization and technology will remain the background to project design and selection. Planned activities for 1990-1991 are listed under the major mandates of the Caracas Programme of Action in annex 2.

INTRODUCTION AND OVERVIEW

UNIDO was a pioneer United Nations agency in promoting and implementing economic co-operation among developing countries (ECDC). Right from the early 1970s it had recognized economic and technical co-operation as a potentially important means of promoting industrialization of developing countries. By 1977, a special organizational unit responsible for ECDC--the Section for Economic Co-operation among Developing Countries--was in place and a programme developed to promote both ECDC and technical co-operation among developing countries (TCDC).^{*} UNIDO Member States have all along supported this programme and most recently they requested the Director-General to strengthen the programme by further deploying resources to it and giving greater emphasis to co-ordination, and by identifying opportunities and the facilities and capacities that exist in the developing countries for industrial co-operation.1/

The UNIDO ECDC-TCDC programme originally had five mutually-supporting components: organization of Solidarity Ministerial Meetings and Round-table Meetings; promotion of joint programmes for specific industrial sectors; follow up of the System of Consultations; transfer of technology; and promotion of co-operation through study tours, training programmes and seminars. Following the High-level Conference on Economic Co-operation among Developing Countries, held by the Group of 77 in Caracas, Venezuela in May 1981, a sixth component was added: support for activities initiated by the Group of 77, in particular the Caracas Programme of Action.

The Caracas Programme of Action (CPA) singled out industrialization as one of eight sectors for attention. But while special attention has been paid to supporting its implementation in industrial field, other sectors such as energy, raw materials, finance and technical co-operation are also supported. Today, promoting and assisting implementation of economic and technical co-operation among developing countries is an organization-wide activity covering projects and programmes from industrial operations technology to industrial institutions and services, and from investment promotion to South-South consultations, technology promotion and technology development. Over the years, UNIDO actively supported many of the sectoral meetings held under the auspices of the CPA, sending its senior officials to the Inter-governmental Follow-up and Co-ordination Committee meetings.

Programme guidance and funding

Guidance to the UNIDO ECDC-TCDC programme comes from several sources--Member States acting through UNIDO's policy-making organs, Round-table Ministerial Meetings (RTMMs), Consultation Meetings and national and regional country studies. Advice is also received from the Special Advisory Group to the Director-General. RTMMs, for example, identified key areas of co-operation--improvements in identification and use of technologies, know-how and skills, machinery and equipment design, and consulting and construction capabilities; establishment of a technology bank; augmentation of

^{*} At the operational level, economic and technical co-operation with respect to industry are not always clearly distinguished. In this document, ECDC refers to all forms of economic co-operation--from government to institute and agency level. The term technical co-operation among developing countries (TCDC) is reserved for technical assistance projects in which both parties are developing countries and one of them is clearly a donor, usually disposing of national funds earmarked for foreign aid. This excludes, for example, short-term expertise provided by one enterprise to another. Such assistance is considered a normal business activity to develop potential markets for the donor enterprise.

basic skills; establishing and strengthening the institutional framework at national and regional levels; creation of applied R and D programmes in selected sectors; plans to use engineering and consulting capabilities within developing countries; promotion of collective action for negotiating more equitable economic relationships, and policy measures for the developing countries to promote industrial co-operation amongst themselves.

Consultation Meetings, although established primarily as a mechanism for the North-South dialogue to take up industrial issues at sector level, frequently conclude with specific recommendations for strengthening ECDC at regional and interregional levels. In close co-operation with the Group of Latin American and Caribbean Sugar Exporting Countries, UNIDO held the First Interregional Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing in September 1988. A Regional Consultation on the Phosphatic Fertilizers and Pesticides Industry in Africa took place in December 1988. At both there were notable increases in the participation of developing countries, enabling them to engage in bilateral contact on technical co-operation and investment projects. Four further Consultations are planned for 1989, on: the food-processing industry with emphasis on fruit and vegetable processing, on the capital goods industry with emphasis on rural transport equipment, on the electronics industry, and on small and medium-scale enterprises including co-operatives.

UNIDO's national and regional industrial studies especially those in the Industrial Development Review series issued by the Industrial Policy and Perspectives Division contain important suggestions for further ECDC activities. The UNIDO annual review, Industry and Development Global Report, featured in 1985 a special section on the opportunities and challenges of South-South co-operation, which will be taken up again in the 1989/1990 and 1990/1991 issues.

By definition, operational ECDC and TCDC activities are funded largely by the countries involved. Increasingly in the case of UNIDO projects, the financial mechanism is that of third-party and self-financing trust funds, especially where the economic co-operation is wholly in the private or quasi-private sector. Such trust-funded assistance, aimed at bringing about economic co-operation at enterprise level, is a recent innovation: the way for it was opened when UNIDO became a specialized agency in 1986 with a mandate to deal directly with the private sector as a means of promoting industrialization.

In some cases, the funding required for ECDC activities is covered by other UNIDO-administered funds--principally the Industrial Development Fund (IDF) and the Special Industrial Services (SIS) Fund. An example is the joint meeting in 1987 organized by the Islamic Chamber of Commerce, Industry and Commodity Exchanges (ICCICE), the Union of Chambers of Commerce, Industry, Maritime Commerce and Commodity Exchanges of Turkey (UCCET) and UNIDO to promote industrial joint ventures among Islamic countries. The funds (\$160,000) to follow up 79 of the working agreements reached were provided in the form of a project development facility under a special contribution of Saudi Arabia to the IDF. China offered part of its special contribution to the IDF to promote enterprise-to-enterprise co-operation with small- and medium scale agro-industry counterparts in Africa, and with machine tools manufacturers from Asia and other regions. A similar funding approach is planned for a Brazil-Africa meeting to promote co-operation in agro-industries. The Republic of Korea made available IPF funding for an ECDC meeting to promote enterprise-to-enterprise co-operation among selected Asian developing countries.

The fact that ECDC is an organization-wide mandate and a large share of UNIDO's ECDC activities take the form of projects in which ECDC is only one of several objectives, presents obvious difficulties in estimating the total

funds made available through UNIDO for ECDC purposes. One recent survey, using a very broad interpretation of ECDC and or TCDC, indicated a total of over \$4 million during the current biennium. In budget proposals for the 1990-1991 biennium, the UNIDO General Conference is expected to approve spending of over \$10 million from the regular budget, a 37 per cent real increase, for the regular programme of technical co-operation. Within this figure, the allocation for co-operation among developing countries will more than double, reaching \$842,000. (Activities funded under the same allocation for the 1988-1989 biennium are listed in annex 1.) In addition, ECDC usually accounts for a major portion of three other regular programme allocations: special needs of the least developed countries (used particularly for Solidarity Meetings), the Industrial Development Decade for Africa (IDDA), and training.

II. FOLLOW-UP TO IFCC-VI

Although active in nearly all the CPA-designated sectors--especially those covering industrialization, technology and TCDC--UNIDO responded specifically to two recommendations of the sixth session of the IFCC. An expert group was organized in Vienna (4-7 April 1989) on Prospects for Industrialization Policies in Developing Countries, taking into Account the Impact of Developments in the Field of New and High Technologies. Another expert group, on raw materials, served as the preparatory meeting for the First Meeting of the Action Committee on Raw Materials of the Group of 77, held on 3-7 April 1989 in Abuja, Nigeria, for which UNIDO also provided substantive support.

Technology

In the area of technology, UNIDO is following with interest the progress of the the Centre of Science and Technology of Non-Aligned and other Developing Countries. The IFCC recommendation that the Centre become a clearing house for information regarding scientific and technical capacities of individual developing countries suggests a number of joint or complementary activities with UNIDO's Industrial and Technological Information Bank (INTIB) and its proposed ECDC component.

IFCC's call at its Havana meeting for enhancement of exchange of information on appropriate, new and high technologies is central to UNIDO's INTIB operations, which are designed (a) to give developing country governments, industrial institutions and enterprises assessed information in response to specific inquiries, and (b) to provide national INTIB focal points with access to UNIDO's and others' data bases. In the area of technology monitoring, UNIDO not only publishes its own periodical monitors in the areas of microelectronics, new materials and biotechnology, it also assists developing countries in setting up appropriate mechanisms to monitor technology developments on their own. A new mechanism in the area of technology monitoring now being developed as a technical intelligence service for policy- and decision makers also has ECDC components.

Policy implications of new technological developments

The aims of the expert group meeting on industrialization policies were to assess patterns of industrialization stemming from new technological developments, to outline industrial strategy options and policy measures, and to strengthen co-operation among developing countries by means of monitoring technological developments and designing joint approaches in industrial policies. Following presentations of technology case studies in fields of

telecommunications, machine tools, clothing, biotechnology, and new and advanced materials the group drew conclusions in six areas: technology information, organization innovation, institutional change, R and D infrastructure, human resources, financial resources, acquisition of technology and entry barriers.

Two current UNIDO projects relate to the resulting recommendations. In the Latin America and Caribbean region, UNIDO is working with (SELA) to increase awareness of decision-makers, establish and further strengthen capabilities to acquire, absorb and disseminate information from international sources on new and high technology and the impact on industrialization prospects. Following a joint meeting with SELA in June 1989, UNIDO will prepare a technical co-operation project to identify common areas of interest for monitoring in Latin America--preparatory to proposals for a full-scale monitoring project. A UNDP-funded project to promote Latin American co-operation in microelectronics (REMLAC) also includes a technology monitoring component.

In line with the recommendation for interregional level action to establish a Centre for Materials Science and Engineering, UNIDO has taken several interrelated steps. As part of a proposed International Centre for Science and Technology, preparatory action is being taken to promote an International Centre for Materials and High Technology in Trieste, Italy to train developing country scientists *inter alia* on selected materials. At the request of the Government of Brazil, preparatory action to set up an International Centre for Materials Assessment and Applications has been initiated. The Centre will look at the assessment and applications of materials in a technoeconomic perspective. Its aim is to help developing country governments and enterprises manage their response to materials developments.

Processing of raw materials

In line with the objective of the Group of 77 Action Committee on Raw Materials to foster co-operation among developing countries in the exploitation, processing and utilization of raw materials in such a manner as to promote self-reliance and enhance expertise, UNIDO convened in August 1988 a group of 15 experts on three material types: agro-based materials for food production, non-metallic minerals and textile fibres. The expert group report (PPD.89) and its 48 recommendations, were circulated together with a synthesis paper on processing of raw materials (PPD.108) to all members of the Group of 77, and served as inputs for the first meeting of the Action Committee itself.

In support of the first meeting of the Action Committee, UNIDO prepared 12 background papers and fielded a team of eight staff and one consultant. The conclusions reached by the Committee covered, *inter alia*, technologies for exploiting, processing and utilization of specific raw materials, research and development, training and expertise, possibilities for co-operation among developing countries, and new opportunities for UNIDO to assist developing countries in their industrialization efforts.

Industrialization

UNIDO strongly welcomes the IFCC recommendation that the Group of 77 in Vienna consider establishing a working group to improve co-ordination among regional groups and take charge of recommendations concerning industrialization.^{2/} UNIDO stands ready to assist the Group of 77 in its deliberations concerning industrialization; to this end, it expects to

maintain regular contacts with the Chairperson of the Group of 77 in Vienna. In UNIDO's policy-making organs, both the regional groups and the Group of 77 take an active interest in UNIDO Secretariat reports on ECDC activities and regularly sponsor decisions and recommendations supporting and directing them to specific issues.

Some of the possibilities for closer involvement of UNIDO in Group of 77 ECDC activities are illustrated by UNIDO's programme in the field of engineering, design and consultancy services. Clearly related to the spheres of activity for the proposed Action Committee on Consultancy, Construction and Engineering, this new programme will, *inter alia* develop links between firms in these industrial support sectors. At the same time, technical assistance aims at not only establishing local consultancy organizations and institutions, and assisting existing ones, but also promoting co-operation and joint ventures among them. Where appropriate, as with the Africa Regional Centre for Design and Manufacturing (ARCEDEM) in Africa, regional engineering design capacity will be promoted as a focal point and a link between national consultancy organizations. At the recent consultative meeting on development of co-operative arrangements in the consultancy and engineering field UNIDO outlined its potential to provide a suitable methodology, information and data bases in support of a centre for promotion of consultancy and engineering design organizations in developing countries.

Developments in TCDC

The IFCC's invitation to the United Nations system to expand its assistance to TCDC projects coincided with a period of severe budget constraints. Despite this, as noted, UNIDO has been able to exceed its originally programmed allocations for ECDC and TCDC from the regular programme of technical co-operation considerably. This resulted in TCDC activities (see annex 1) such as preparations for a solidarity meeting in Guinea later in 1989, group training programmes on management of agro-industrial enterprises and technology in the cement industry and support for a number of bilateral projects.

TCDC continues to be an important tool in the UNIDO training programme with over half the group training offered to technical and managerial personnel in industry and industrial institutions hosted or otherwise involving developing country Governments, companies or organizations. Major programmes were mounted in co-operation with TCDC authorities and training institutes in Bulgaria, China, Côte d'Ivoire, Egypt, Kenya, Morocco, Nigeria, Philippines, Romania, Turkey, Yugoslavia and Zimbabwe. Some 15 to 20 per cent of the UNIDO fellowship programme was hosted in developing countries. In the context of the programme for the Industrial Development Decade for Africa field projects provided management training for women in francophone West Africa, fostered harmonization of HRD programmes in member countries of the Central African Customs and Economic Union, and promoted establishment of training institutions in various industrial sectors at the regional level. A further project is surveying manpower and training needs in the energy sector of the countries of the Preferential Trade Area for Eastern and Southern African States with a view to establishing centres of excellence in the PTA region. UNIDO also began to supply regular information on 150 training opportunities for industry in developing countries to the UNDP INRES-South data base, many of which are offered on TCDC terms. Details are published as a separate section in UNIDO's annual Guide to Training Opportunities for Industrial Development.^{3/} UNIDO shares the IFCC view that human resources development (HRD) is of critical importance to the successful implementation of development programmes and projects. HRD is one of five target areas for attention in the UNIDO Medium-term Plan (see below), which itself will become the guideline for UNIDO's future ECDC-TCDC programme.

Because of its own increasing involvement in promoting enterprise-to-enterprise co-operation, UNIDO has a special interest in the proposed Action Committee on Inter-Enterprise Co-operation. UNIDO has organized a number of sectoral and multisectoral meetings and workshops to promoting such co-operation and to establish mechanisms that will enable developing countries to mount such promotion efforts themselves. UNIDO is also finalizing guidelines on the establishment of multinational production enterprises.

III. UNIDO ECDC-TCDC PROGRAMME

Programme development

In response to UNIDO Member States' request that co-ordination of UNIDO's approach to ECDC and TCDC be strengthened, a policy framework for UNIDO operations is under preparation. The mainspring for the exercise is the UNIDO Medium-term Plan 1990-1995, due for approval by the UNIDO General Conference in November 1989.

ECDC-TCDC in the UNIDO Medium-term Plan 1990 - 1995

The present challenge for economic and technical co-operation among developing countries, pinpointed in UNIDO's draft Medium-term Plan 1990-1995, is to translate general political support into concrete industrial projects at the working level. The aim should be to bring results commensurate with the enthusiasm. Sometimes it is a question of additional financial provisions to implement ECDC/TCDC projects proposed. Sometimes more commitment is needed, especially for major projects involving subregional co-operation.

In UNIDO's view, economic and technical co-operation among developing countries, including industrial co-operation has reached the point where it requires both consolidation and expansion. The main thrust of the action programmes of regional and subregional economic groupings is expected to bear increasingly on industrialization during the 1990s. Nevertheless, industrial co-operation between developing countries will have to achieve a breakthrough in order to exploit effectively the advantages to be derived from economies of scale and specialization of production. Greater commitment would be required for increasing trade among developing countries in industrial raw materials, intermediate and final products. The first prerequisite would be to achieve tangible progress at regional and subregional levels in concrete industrial complementation schemes, and to the establishment of technical, legal and institutional infrastructures for development of technological, managerial and entrepreneurial services.

In this context, economic co-operation among developing countries and subregional industrial co-operation were identified as a thematic programme ingredients to be given priority attention in the development of five target problem areas: human resource development, development and transfer of technology, industrial rehabilitation, small- and medium-scale industry, environment and energy. In pursuing all five thematic programme objectives, UNIDO will pay greater attention to the scope for joint action among appropriate groupings of developing countries. For this UNIDO would need to expand its resource base for project development and promotion, particularly to assist regional and subregional institutions. Activity packages would be developed to strengthen their functions and to mobilize extra resources to support their projects. UNIDO could thus play a catalytic role in overcoming difficulties encountered in creating new programmes at an inter-governmental level, while building on existing institutional bases for regional and subregional co-operation in a variety of specialized fields.

Priority would be given to:

- o Inter-country co-operation in human resource development and transfer of technology, in particular activities strengthening and interlinking national centres of excellence in specialized technological fields, and exploiting possibilities for complementation at subregional or regional level;
- o Development of joint teams of indigenous expertise to take on various technical tasks that occur repeatedly in the context of industrial rehabilitation and restructuring in developing countries;
- o Exchange of experience among national extension service institutions and industrial associations, particularly those concerned with modernization of small enterprises and incubation of techno-industrial ventures and related policy issues; and
- o Consultation and negotiations on enterprise-to-enterprise co-operation so as to derive full benefit from opportunities for specialization and complementation of production and trade in manufactured goods.

The System of Consultations, especially in its preparatory processes at the regional level, will accord high priority to identifying concrete potential co-operative programmes along the above and other promising lines of co-operation among the developing countries concerned, as well as the problems to be tackled in implementing or upgrading such programmes so as to generate a greater multiplier effect.

The Medium-term Plan emphasises greater support for the co-operation efforts undertaken by the developing countries at subregional, regional and inter-regional level. The technical and political capabilities of the numerous institutional infrastructures existing at subregional level will have to be strengthened. Active assistance will be rendered to examining concrete possibilities for exploiting more fully the advantages of joint undertakings by pooling human, natural and financial resources, as well as from re-consolidating and upgrading existing technical infrastructure with a focus on agreed priority fields. Specialization of production through increased enterprise-to-enterprise co-operation and increased trade will receive special attention. Special attention will also be given to strengthening the existing and establishing new institutional infrastructure at national level with the aim of facilitating industrial co-operation. Information exchange will be expanded to the same end. To achieve these aims, UNIDO will have to involve industrial enterprises, professional associations and non-governmental organizations in the programme.

In addition to traditional resources such as UNDP and IDF for such activities, increasing attention will go to mobilizing financial resources from other sources in the form of trust funds. Technical co-operation in support of enterprise-to-enterprise co-operation, for example, may be supplied on the basis of self-financing trust funds paid for by one or both potential partners. Industrial co-operation promotion offices now under consideration in several developing countries, may be supported by third-party trust funds.

Biennium 1990-1991

The ECDC-TCDC programme of activities foreseen in the UNIDO programme and budget for 1990-1991 will be influenced by three main external sources--the IFCC, the High-level Committee on the Review of TCDC, and regional or subregional organizations.

Regional groupings of UNIDO Member States may play a substantial role both in framing new UNIDO programmes for each region and the ECDC content of

those programmes. The recent session of the Industrial Development Board paved the way for such involvement with a decision to establish a regional co-operation programme for the industrial recovery of Latin America and the Caribbean.^{4/} Existing programmes are to be strengthened and additional priority programmes developed in, *inter alia*, biotechnology, capital goods, electronics, new materials, data processing, human resources and agro-industry. The Director-General was urged to set up a mechanism for this, develop a regional programme and facilitate active participation of the countries of the Latin America and Caribbean region.

Emphasis on promoting ECDC at enterprise level, especially plant-level co-operation in the private sector, will continue, with emphasis on projects funded by self-financed and third-party trust funds. New mechanisms include development of an ECDC data base as the focal point of a programme to match requirements and offers of technology for transfer and other forms of industrial co-operation among developing countries. For TCDC, UNIDO will promote a more systematic approach using UNIDO field resources to identify least developed countries' TCDC needs and the resources of the more advanced developing countries to fulfill them. UNIDO will also focus on industrial chambers of commerce and industry and manufacturer's associations both as a source of TCDC inputs and to act as the prime contact for ECDC promotion.

The proposed ECDC activities in relation to CPA mandates are listed in annex 2.

Notes

1. Resolution GC.2/Res.1, IDB.4/Dec.15 and IDB.5/Dec.5
2. G.77/IFCC-VI/87/RPT.
3. IDB.5/36 and IDB.5/37
4. See IDB.5/Dec.25; ECDC elements are implicit in similar programmes for Asia and the Pacific (IDB.5/Dec.23) and for the Arab countries (IDB.5/Dec.26). ECDC was a major mechanism in the Programme of Action for the Industrial Development Decade for Africa (IDDA) and again features strongly in proposals for a second decade (see DP/ID/SER.B/645).

Annex 1

UNIDO ECDC activities funded from the Regular Budget
1988 - 1989

Regular programme of technical assistance

<u>Project</u>	<u>Total allotment in \$US</u>
Workshop for developing a programme of diversification of the cane sugar industry in the Caribbean region, Havana, 22/9-4/10/88	9,050
Etude de pré-faisabilité pour l'exploitation forestière et établissement des scieries (financement du voyage international de 3 experts chinois)	11,300
Solidarity Ministerial Meeting in the industrial development of Guinea, Conakry, Guinea, 11-15/12/1989	133,980
Ninth session of the UNIDO leather and leather products industry panel, Pecs, Hungary, 25-17/10/1988	34,560
Study tour on the production of bagasse newsprint paper	4,600
Expert group meeting on exchange of information among developing countries on available technologies in the field of small and medium industries, Ljubljana, 12-14/4/88	17,600
Co-operation arrangements among selected developing countries on the production and application of machine tools (meeting: Buenos Aires, 31/5-4/6/88)	72,768
First international consultation on the food processing industry with emphasis on sugar cane processing, Havana, Cuba, 26-30/9/88	28,018
IPGTP in organization and management of agro-industrial enterprises, Novi Sad, Yugoslavia, 6/9-19/10/88	13,898
Seminar on interferon and related biologicals, Havana, 17-22/4/89	53,100
14th GTP in the field of cement industry, Ankara, Turkey, 25/9-25/10/89	5,070
Second international rubber conference "Teheran '89", Teheran, Iran, 23-29/9/89	41,500
Working group on co-operation on production and application of machine tools among selected developing countries, Shanghai, China, 8-12 May 1989	27,900

Workshop on CAD/CAM systems for the small and medium-scale engineering in selected ESCAP developing countries, Singapore, 9-20/5/88	67 870
Identification of specific projects for the production of semi-finished and finished non-ferrous metals in Latin America	16 000
Mango processing development (TCDC co-operation with Brazil)	10 440
TCDC Turkey/Republic of Korea - Utilization of high-sulphur lignite without accompanying excessive pollution	11 000
Assistance to Istanbul Chamber of Commerce for organization of their industrial estates	24 000
TOTAL	582 654 =====

Regular budget allocation for the
Section for Economic Co-operation among Developing Countries

	Total allocation \$US
Country survey to identify ECDC-TCDC opportunities	9 000
Preparations for Round-table Ministerial Meeting	9 000
Preparations and servicing of two interregional on co-operation with Africa	150 000
Report on entrepreneurs' co-operation and mechanisms used to identify further co-operation opportunities	20 200
Updating investment profiles and donors' conference following Afro-Asian co-operation meeting	80 000
Identification of project for programme on multinational enterprises	39 600
Inventories of industrial capabilities in two countries	22 000
Expert group meetings to formulate a programme of action to identify, promote and exploit opportunities for joint ventures	53 400
TOTAL	383 200 =====

Projects financed from the Industrial Development Fund
1988-1989

	Total allocation \$US
Assistance preparatoire en vue de la creation d'une association des producteurs Africains de fer et d'acier	36 900
Workshop for development of a programme of diversification of the cane sugar industry in the caribbean region, Havana, Cuba, 22/9-4/10/1988	20 300
Model programme for integrated regional production of biologicals in Latin America	100 000
Expert group meeting on the processing of raw materials, Vienna, 22-26/8/1988	56 700
Arab country studies for the 7th industrial development conference of the Arab States	96 500
TOTAL:	310 400 =====

Annex II.

Planned UNIDO ECDC activities
1990-1991

Information

Reports: analytical report on ECDC to assist policy formulation.

Two policy-oriented surveys and studies as basis for development of regional and subregional programmes and joint policies for investment and trade promotion that would facilitate ECDC in selected regional and subregional groupings; two reports on industrial restructuring and rehabilitation in African subregions and the African region as a whole; advisory services and analytical reports through subregional groupings on selected issues, e.g. small-scale industries, HRD, technological innovation policies.

Report on constraints on regional and subregional co-operation in capital goods, including proposals to overcome them; report on methodology for collecting and disseminating information on technologies for SME; background paper on co-operation in Latin America in capital goods production, procurement and marketing; background paper assessing experience in establishing multinational production enterprises and identifying new opportunities for such enterprises in different regions

Follow-up of the first Consultation on the non-ferrous metals industry with regional studies to identify production complementarities among selected Asian countries to promote more integrated regional development; interregional study to promote co-operation in non-ferrous metals between Asia, Africa and Latin America; follow-up of the first consultation meeting on electronics industries with regional studies to identify areas of co-operation in Asia and Africa and an interregional study to identify areas of co-operation between Latin America, Africa and Asia; reports on integrated development of the petrochemical industry at regional level; market analysis and technological profiles of five petrochemical products that could be established in the Arab region taking co-operation with other regions of Africa, Latin America and Asia into account; policy paper on modalities of co-operation in the petrochemical sector, particularly regional and interregional co-operation; report to the IDB on international co-operation

measures and technical assistance arising from Consultations in selected areas. Recommendations of Consultative Group on Informatics Technology (COGIT) on programmes of international co-operation;

Directories: expanded version of industrial map of Africa.

Inventory of national industrial co-operation capabilities at the level of small-scale industries in selected sectors in two countries; regional directories of ECDC and TCDC capabilities.

Investors' guides for specific African, Asia and Pacific, and Latin American and Caribbean countries.

Technological petrochemical capabilities; revised and enlarged directory of sources of supply for the pharmaceutical industry.

Directories of information brokers, industrial and technological research institutions, information services and systems, equipment manufacturers; INTIB focal points; technology atlas (technology options, requirements and offers) for one region; institutions, organizations and professional associations active in special technologies; research subjects in special technologies

Newsletters, brochures: periodic ICDC newsletter, information brochure on UNIDO ICDC programme; Offers and Requests of Technology (new series); annual empirical analysis of TIES data base (see below); TIES Newsletter and quarterly update on technology acquisition and negotiation issues; annual publication of UNIDO Guide to Training Opportunities for Industrial Development and UNIDO Industrial Training Offer Programme

Data bases: establishment and maintenance of ECDC/TCDC/ICDC data bases in co-operation with in-house and outside systems to match industrial and technological capacities and needs; technology supply data bases (INTIB and sectoral data bases in co-operation with manufacturers' associations); Industrial Energy Conservation Abstract (INECA); modernization of TIES data base (see below); expansion of industrial feasibility studies data bank to disseminate project related technical, economic and financial information; updating of UNIDO roster of experts including addition of experts specifically available for TCDC projects.

Projects: IDDA inter-country industrial

Training

operations projects for:

- o Promotion of industrial information among selected African countries.

Training staff of INTIB focal points and other network participants; guidelines and monographs for negotiators; compendium of sample model contracts; expert system to facilitate decision-making in transfer of technology; training courses for African negotiators

Inter-country industrial operations projects in development of:

- o Industrial training infrastructure (five ongoing)
- o Individual fellowships and study tours
- o Group training programmes hosted by developing countries, including self-financed and third-party trust fund financed training;

Expansion of centres of excellence programme (including joint research and training schemes); promotion of co-operation in training at all levels; greater use of developing country experts in UNIDO technical co-operation training programmes; assistance in establishing training institutions at regional or subregional level; international institutional linkage programmes among neighbouring countries; joint development of training standards, skill certification and professional qualification systems; introduction of exchange programmes and financial facilities within regional and subregional groupings; training policy fora to promote international industrial co-operation to enhance the role of small- and medium-scale producers; new co-operation programmes for upgrading local skills and public extension services in cost management, maintenance engineering, marketing and credit services. Training in investment promotion.

IDDA inter-country industrial operations projects for:

- o Renforcement des capacités de formation du CAMPC dans le domaine des PME/PMI
- o Programme de formation des formateurs aux techniques et méthodes de formation dans les institutions de financement dans les pays membres de l'UDEAC
- o Création au sein de CIGE d'une unité pilote d'intervention et de formation des femmes entrepreneurs
- o Development of the pharmaceutical industry in lusophone Africa
- o Renforcement des capacités de formation de CESAG dans le domaine du management industriel

Industrial co-
operation

- o Strengthening the capacity and capability of CMD and CIRD (Nigeria)
- o Regional workshop on energy conservation
- o Survey of manpower and training needs in the energy sector
- o PTA training seminar in financial analysis
- o Joint UNIDO/ARCEDEM workshop on core metallurgical industries for African developing countries

Global, interregional and inter-country: two meetings of regional and subregional research institutes to assess economic and industrial prospects for developing countries.

Interregional industrial operations projects in development of:

- o Textile and garment manufacturing industries (two)
- o Products, applications and process technologies in the petroleum and petrochemical industries
- o Non-metallic minerals, glass ceramics and building materials industries (three)
- o Iron and steel industries
- o Application of computer and other advanced techniques in engineering industries (four)
- o Design, development, manufacture, maintenance and repair of land-based and water-borne transport equipment (two)
- o Packaging and printing industries (two)
- o Small- and medium-scale industries (five)
- o Project preparation, evaluation, financing and COMFAR application (six)

IDDA inter-country industrial operations projects for:

- o Production of vaccines for Africa
- o Production of oral rehydration salts and intravenous fluids
- o Metallurgical technology centre for PTA countries
- o Assistance à la section des études de la banque ouest africaine de développement

Other inter-country industrial operations projects in development of:

- o Leather footwear and leather and rubber products industries
- o Cement, lime and related industries
- o Products, applications and process technologies in the petroleum and petrochemical industries
- o Formulation packaging, quality control,

- chemical technology of medicinal plants/essential oils, industrial application, biologicals, vaccines, synthetic pharmaceuticals and fermentation (three)
- o Development, local formulation and production of active ingredients for control and safety in pesticides manufacturing (two)
- o Non-metallic minerals, glass ceramics and building materials industries (three)
- o Non-ferrous metals industry
- o Iron and steel industries
- o Introduction of rationalization and computerized systems in production processes. maintenance and related fields in metallurgical industries (two)
- o Formulation of strategies and policies for industrialization including regional co-operation and integration
- o Integrated sectoral planning (two)
- o Industrial research and development institutions and industrial information services
- o Institutions for standardization, methodology and quality control (two)
- o Small- and medium-scale industries (four)
- o Institutions for promoting industrial development
- o Rural industrial development (two)
- o Industrial management (two)
- o Industrial rehabilitation (three)
- o Industrial consultancy (two)
- o Wood-processing and wood-products industries (two)
- o Preparation and evaluation of feasibility studies for industrial development (three)
- o Upgrading of national capabilities to conduct pre-investment studies (two)
- o Project preparation, evaluation, financing and COMFAR application (four)
- o Multidisciplinary projects (two)
- o Environment (five)
- o Energy (two)
- o Computerized systems (three)

Africa: four subregional meetings in Africa (Tunis, Zambia, Abidjan and Libreville) on promotion of subregional co-operation in industries supporting agricultural development (IDDA); follow up with priority subregional projects emphasizing regional or subregional industrial and engineering consultancy and maintenance services; programme for second IDDA; Conference of African Ministers of Industry;

Intergovernment Committee of Experts of the Whole on Industrialization of Africa; development of 80 new regional and subregional projects; four subregional investment fora oriented towards specific subsectors of industry supporting agricultural development in Africa.

Latin America and Caribbean: promotion of self-financing trust funds for co-operation between Mexico and Venezuela and the Central America and Caribbean countries; promotion of industrial projects under technical co-operation agreements reached with selected countries, e.g. Brazil and Argentina; meeting on policy measures for industrial restructuring and enhancement of efficiency and competitiveness in Latin America; meeting on co-operative arrangements in selected engineering industries in Latin America;

Least developed countries: three regional workshops on project identification and design (one Asia, one anglophone Africa, one francophone Africa).

Enterprise-to-enterprise co-operation: interregional meeting on one selected industrial sector; two regional or subregional meetings to promote industrial joint ventures (one in Asia, one for Islamic countries); regional meeting to promote co-operation in a selected engineering sector in Latin America; six technical workshops to identify preliminary projects; guidelines on establishment of multinational production enterprises; industrial co-operation programmes in conjunction with regional and subregional groupings; promotion of regional and subregional co-operation in selected industrial sectors, including iron and steel in Africa, and petrochemical R and D between North African and Gulf countries. Assistance (study tours, technical workshops and seminars) to enterprises (especially from least developed countries) to co-operate with partners from other developing countries.

Direct support of industrial co-operation between manufacturing plants through self-financed or third-party trust funds; service to development finance institutions (identification, negotiation and monitoring of industrial co-operation projects executed by UNIDO and financed by DFIs under third-party trust fund schemes taking advantage of UNIDO' experience, inter alia, in ECDC and TCDC.

Meeting on enterprise-to-enterprise co-operation in specific subsectors of African industry supporting agricultural development.

Identification of 50 opportunities in advanced developing countries for transfer of special technologies plus major equipment to other developing countries; six international/regional enterprise-level co-operation fora on special technologies; co-operation among consulting, design and engineering organizations

Consultations: leather and leather products industry panel; second consultation on the wood and wood products industry with a focus on international co-operation to develop new mechanisms for increasing trade in wood products, technologies for raising productivity and establishing new capacities; consultation on the capital goods industry with a report on identification of common areas for regional co-operation in Latin America, Asia and Africa; consultation on the building materials industry with identification of forms of co-operation for the expansion of production capacity of low-cost building materials; interregional expert group meeting for promotion of co-operation in electronics between different regions; follow-up activities to regional consultation on phosphatic fertilizers and pesticides industries in Africa including an interregional expert group meeting to advise on further development of these industries in Africa; regional and interregional meetings on the pharmaceutical industry; regional working group meeting in Africa on plans of action for human resources development in industrial maintenance; regional experts group meeting on industrial rehabilitation and restructuring; preparations for two regional Consultations on specific subsectors of industry supporting agricultural development in Africa

Industrial networking: African regional sub-network for industrial information; regional workshops for INTIB national focal points; international information exchange network between small and medium enterprises; information network on environmental/clean technologies (in co-operation with UNEP and others); establishment of INTIB on-line linkages and an exchange mechanism for films, tapes or computer films on diskette on technologies for small- and medium-scale

industries.

Technological Information Exchange System (TIES) meeting; co-operation between TIES and subregional information networks, e.g. Sistema Andino de Información Tecnológica (SAIT) and ASEAN Technological Exchange of Information (ASTIS); establishment of African TIES.

Support of Regional Network on Small Hydropower in the Asia/Pacific region. International service to facilitate supply of bioreagents for researchers in developing countries; networking of biotechnology research through computer conferencing; co-operation with CALAI on Latin American Microelectronic Network (REMLAC) projects (legal aspects of software, software development, training in integrated circuit design and extension of applications to small- and medium-sized enterprises; promotion of a Consultative Group on Solar Energy Research and Applications (COSERA) to serve as a high-level forum for donor and recipient organizations; Expansion of COMFAR User's Club.

Technology transfer

Technology mart to promote direct contact of technology seekers and suppliers.

Four technological co-operation agreements in plant-to-plant; co-operation for transfer of technology to small-scale industries; establishment of three technological centres to promote basic technology, two in Central America, one in Africa; two regional expert group meetings to promote standardization, quality control and metrology.

Assistance in intercountry technological co-operation in the telecommunications industry (follow-up to donors'/investors' conference on telecommunications industry in Africa; donors'/investors' conference on telecommunications industry in the Asia region; EGM on developing countries' experience and prospects for linkages between biotechnology research institutions and industry, and industrial application of research results; assistance for interim programme of the ICGEB

Food and agriculture

Regional follow-up to earlier consultations on food processing, with emphasis on sugar-cane, fruit and vegetable processing; regional meetings for Asia (for the sugar-cane industry) and Latin America (fruit and vegetable processing); regional consultation on fisheries for Asia and Pacific countries

with emphasis on international co-operation to promote measures for exchange of information on technologies, fish resources and investment resources, with a view to establishing joint ventures; follow-up of consultations on agricultural machinery with interregional expert group meeting to promote flexible small and medium-scale plants;

Interregional industrial operations projects in development of:

- o Agriculture-based food industries
- o Agro-based raw materials, by-products and waste utilization technologies
- o Prototype mobile seed dressing applicators suitable for African countries
- o Small-scale gari-processing technology

Energy

Extension of INECA (see above) to Asia/Pacific and Africa region; demonstration biogas plants in selected African countries; application of windmill technology in Africa; development of integrated approach to energy diversification in the Asia region; transfer of Latin American small hydropower technology to other regions; development of gasifier technology for agricultural wastes IDDA inter-country industrial operations projects for:

- o Transfer of appropriate technology for small-scale fuel alcohol distillery (TCDC)
- o Use of indigeous biomass resources (biogasifier)

Raw materials

Report on co-operation in compiling and exchanging information on developing countries' capacities and capabilities for processing raw materials; possible regional seminar on setting up a network of national R and D centres; other measures proposed by Group of 77 Action Committee

TCDC

Solidarity meetings for industrial development in two least developed countries; technical co-operation projects following up preliminary agreements reached at UNIDO and other UN TCDC meetings; joint UNIDO-institution programmes to promote co-operation between institutions and industrial organization in Latin America with African counterparts; agreements with

Governments and/or chambers of industry and commerce and manufacturers' associations to make available blocks of expert time for TCDC projects; systematic incorporation of a TCDC dimension in UNIDO technical co-operation projects; mobilization of TCDC resources of both UNIDO and more advanced developing countries for the benefit of LDCs; mobilization of special-purpose contributions to UNIDO-administered funds for project development facilities to follow up TCDC promotion meetings.