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Working Meeting on Co-operative
Arrangements among Selected
Developing Countries on Production
and Application of Machine Tools

Buenos Aires, Argentina
31 May - 4 June 1988

REPORT*

* This document has not been edited.

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INTRODUCTION

The Working Meeting on Co-operative Arrangements among Selected Developing Countries on Production and Application of Machine Tools was held in Buenos Aires, Argentina, from 31 May to 4 June 1988. The meeting was organized by UNIDO in co-operation with the Argentine Association of Machine Tools, Accessories and Ancillaries (AAFMA) and the Argentine National Institute of Industrial Technology (INTI).

The purpose of the meeting was:

- to exchange information among the participating countries on policy, strategy and problems encountered in the development of machine tool industry;
- to identify co-operation opportunities among the participating countries in this field; and
- to establish working arrangements and develop technical co-operation projects to mutual benefit.

The meeting took place in conjunction with the Argentina International Machine Tool Exhibition 1988 (EMAQ 88) at which exhibitors from Argentina, Brazil, Mexico, Federal Republic of Germany, Italy, Spain displayed their latest products. As part of the meeting programme, participants visited the Exhibition to learn the latest technological advances in this important sector.

I. ORGANIZATION OF THE MEETING

The meeting was attended by 47 participants from 19 countries. The List of Participants is attached as Annex II.

Opening of the Meeting

The meeting was opened on 31 May 1988 by Mr. Israel MAHLER, President of the Association of Industrial Metallurgists of the Republic of Argentina (ADIMRA). He welcomed the delegates to the meeting and invited Mr. Juan H. CIMINARI, Secretary of Industry and Foreign Trade, to open the proceedings.

The Secretary of Industry and Foreign Trade said that the overall objective of the working meeting was to stimulate the exchange of experiences in the fields of machine tools with special emphasis on possibilities of agreements among entrepreneurs comprising the productive association, transfer of technology and eventual joint actions in the field of research and development. The medium-term objectives were South-South economic integration as a tool to diminish the deleterious effect of the external debt. The selection of Argentina as the site for the working meeting had not been accidental; it was recognized as having a mature machine tool sector in so far as the market size and resources permitted. Its accumulated experience would be of great use for developing countries that wished to stimulate utilization of the prime capital goods that constituted the base of all industrialization programmes.

Mr. Ciminari noted that during the sessions, among the technical themes to be discussed, were several illustrating modern technologies of flexible manufacture and automated production at an intermediate level. He explained that incorporation of computation and numerical control had opened a wide field of new productive forms, many of them appropriate for the handling small and medium batch manufacture. These systems, typified by cell manufacture and flexible manufacturing systems, included improved dimensional control and major reductions in machining time. These technologies were relevant in most developing economies - in contrast to older methods of mass manufacture.

He pointed out that the possibilities of the South being included in the international economy depended on its ability to compete and assimilate the scientific-technological advances - not as spectators or simple users of final goods, but as producers of capital goods among which the machine tools were the motivators for the metalworking industry. He referred to the existence of entities such as the National Institute of Industrial Technology (INTI), which was formed by the Industrial Secretariat of External Commerce, with its laboratories, technical units and systems of research centres. The Research Centre for Machine Tools (CIMHEK) was an example of co-operation between state and private industry because INTI was associated in 1973 with the AAPMHA event and the Chamber of Manufacturers of Machine Tools (CAFHIM), carrying on fruitful work in the field of research in collaboration with local specialized producers.

In conclusion, he referred to the role of the Industrial Secretariat of External Commerce whose responsibility included handling of all aspects of the Argentine External Commerce in stimulating the exchange of experience. The Secretariat had created several promotional instruments, among them the FOPEX (Funds for Exportation), which were made available for this event, financing 50 per cent of local costs as a way of showing its approval and underlining the importance of the working meeting. Mr. Cimnary said that the Government of Argentina and the entrepreneurs involved expected results that would strengthen the already cordial relations among the countries present, facilitating, if possible, in the near future, the growth of the economy of each of the countries represented as a way of developing their progress.

During the opening session, the Chief of the Section for Economic Co-operation among Developing Countries of UNIDO thanked the Government of Argentina and in particular the Argentine Association of Manufacturers of Machine Tools, Accessories and Ancillaries and the National Institute of Industrial Technology of Argentina for their generous contribution to the meeting.

He noted with great appreciation the contribution made by the Government of Argentina in promoting and strengthening the economic and technical co-operation among developing countries. Co-operation between Argentina and UNIDO in the promotion of industrial development of third world countries had a long-standing history. The generous support and active participation of the Argentine Institutions in UNIDO activities was a clear manifestation of Argentina's Government policy in this field.

He explained that UNIDO had, for over the past ten years, developed and implemented ECDC/TCDC programme which was composed of several mutually supporting components. It encompassed the organization of solidarity ministerial meetings in least developed countries, the organization of round-table ministerial meetings in specific sectors, the promotion and development of pilot programmes for specific industrial sectors, the follow-up to the conclusions and recommendations of UNIDO consultation meetings. The programme also devised support measures for the implementation of the Caracas Programme of Action and launched initiatives for the promotion of enterprise-to-enterprise co-operation. He further explained the purpose of the meeting and looked forward to fruitful discussions among the participating countries.

Election of Officers

Israel Mahler, President of the Association of Industrial Metallurgists of the Republic of Argentina was elected Chairman. R.W. Basu, Deputy Director-General, Directorate of General Technical Development, Ministry of Industry of India; Victor de la Fuentes, President of Section No 103, Machine Tool Manufacturing, National Chamber of Processing Industry of Mexico; and Zahir Lamrani, Director-General, Arab Machine Tool Company of Morocco were elected Vice-Chairmen. José Martín Llinas Matamoros, Superintendent First Delegate, Department of Industry and Commerce of Colombia, was elected Rapporteur.

Adoption of the Agenda

The meeting adopted the following agenda:

Opening of the meeting
Election of the Chairman, Vice-Chairmen and Rapporteur
Adoption of the agenda
Statements by heads of delegation
Presentation of papers on machine tools industry
Bilateral discussions on co-operation projects
Group discussions on establishment of information system
Adoption of the conclusions and recommendations of the meeting
Closure of the meeting

The Work Programme is attached as Annex III.

Adoption of Conclusions and Recommendations

The meeting adopted the draft conclusions and recommendations at its last session on 4 June 1988.

Closure of the Meeting

During the closing session of the meeting, the President of National Institute of Industrial Technology of Argentina (INTI) elaborated some experiential approaches on developmental models that will enable developing countries to reach certain accepted levels of development. The ways to reach the desired standard should be through the force of imagination, motivation and the collaboration of those that are in the same circumstance.

Finally, he added that INTI, as main partner in the organization of the Meeting, shared a great responsibility in providing continuous support to this type of initiative of international co-operation.

The President of the Argentine Association of Machine Tools, Accessories and Ancillaries (AAFMA) said, on behalf of all Argentine manufacturers of machine tools, that it was a great satisfaction to convene this Meeting in Buenos Aires, and he was convinced that the objectives would be achieved, as the participants were able to hear each other and were able to elaborate concrete action agreements.

Finally, he stated that those who had common problems, they would always be able to find a helpful hand in Argentina to try to solve them.

The delegate from China, on behalf of all participants, thanked the institutions which had arranged this successful Meeting. He added that the participants were comforted with a very heavy Agenda in the framework of a wonderful country and a very pretty city. They were leaving the country with the sense of satisfaction and high responsibility for the work to be further developed.

The Chief of the Section for Economic Co-operation among Developing Countries of UNIDO thanked the Argentine authorities and institutions for the excellent arrangements on all levels and the generous hospitality extended to all participants. He referred to the outcome of the meeting and emphasized the responsibility for follow-up action remaining with the

participants themselves. He encouraged the participants to take necessary action to materialize the co-operation opportunities discussed during the meeting. However, he continued, UNIDO - within its limited resources - was ready to assist whenever possible with the effective follow-up action to be taken after the meeting by the countries concerned.

He thanked the delegates from Brazil, China, India and Morocco for having invited UNIDO to organize similar meetings in their respective countries. However, the holding of such meetings would require substantial input from both host Governments and UNIDO. This would require discussions between UNIDO and the respective Governments for eventual implementation of the invitation. In this respect, he promised to contact the respective delegates after the meeting.

Chairman of the Meeting stated that this Meeting was the result of the willingness to get closer among participating countries, the commitment to develop further their industries with the final result of improving the quality of life. This effort skillfully guided by UNIDO had the intention to put together the industrial capacities of developing countries for an emerging process, leading to a substantial progress in social development.

He thanked the participants for their efforts in reaching established objectives and the staff who supported the proceedings of the Meeting.

II. SUMMARY OF STATEMENTS DELIVERED AT THE PLENARY SESSION

The Chief of UNIDO Human Resources Planning Unit serving as the Coordinator of the meeting explained UNIDO ECDC/TCDC programme and the main purpose of the meeting, namely to establish specific working agreements and develop technical co-operation projects among participating countries in order to stimulate the establishment of production plants, exchange of expertise, upgrade managerial and technical personnel, develop new markets and promote entrepreneurial integration in the machine tools industry. He further explained the follow-up action to be undertaken by UNIDO after the meeting.

The representative of UNIDO Engineering Industries Branch said that assistance relevant to machine tool design development and manufacture, including its application and tooling, fell within the responsibility of the Branch. He gave some examples of technical assistance projects being implemented in India, Indonesia, Nigeria, Trinidad and Tobago and the Democratic People's Republic of Korea. He further explained the availability of various funds for such technical co-operation projects.

All participants were honoured to present a short summary of the situation of machine tools industry in their countries. The presentations, in most cases, highlighted the present status of the development of this sector, the problems encountered, the Government policy and strategy and the desire for co-operation with other countries. The presentations, in some cases, also referred to the technical assistance required from UNIDO in this field. In the latter case, discussions were subsequently held between the participants concerned and the staff member of UNIDO Engineering Industries Branch for further perusal. ^{1/}

^{1/} Country summaries could unfortunately not be included in the Report due to the limited budget available for printing and translation.

III. PRESENTATION OF PAPERS

During the meeting, four papers were presented by UNIDO consultant and Argentine specialists. After each presentation discussions were held.

The papers presented during the meeting were the following:

- Future Technology and Market Trends in the Machine Tools Industry, presented by Eric Wightman, UNIDO consultant.
- Machine Tools Industry, its Current Situation and Perspectives, presented by Daniel Chudnowsky, Argentine specialist
- Experiences and Results of the Use of Numerical Controlled Machines, presented by Saturnino Castano, Argentine specialist.
- Establishment of Information System in the fields of Machine Tools Industry, Capital Goods and Engineering, presented by Argentine panel specialists.

IV. SUMMARY OF DISCUSSIONS ON MACHINE TOOLS MANUFACTURING

A. Overview

A number of issues were identified arising from discussions held during the working sessions.

It was recognised that there were probably four categories of machine tool user/builders and the circumstances specific to each of these are reviewed:

- Little or no manufacturing capability.
- Capability for manufacture of machine tools but not yet committed.
- Limited capability for the manufacture of basic machine tools wishing to diversify into advanced CNC machine tool manufacture.
- Established suppliers of all types of machine tools including CNC.

B. Requirements for Upgrading

In order to progress to a more advanced stage, the following actions were recognised:

1. Little or no manufacturing capability:
 - Evaluation of resources
 - Creation of manufacturing base
 - Maintenance and service functions

2. Capability of manufacture:

- Regional co-operation
- Technology transfer
- Marketing

3. Diversification to advanced CNC machine tools:

- Product evaluation
- Plans for modernization
- Technology transfer, license deals, etc.

4. Established suppliers:

- Markets for sales promotion
- Licensors for product range
- Training facilities for items mentioned under 1.,2.,3.

C. Constraints

Constraints relevant to each of the above categories were identified, considered to be impediments to future growth:

- High cost of CNC control systems which were required to be imported.
- Service support for central systems.
- Lack of knowledge of potential users.
- High cost and technical know-how required for continued development which prohibited small developing countries from competing in the manufacture of CNC machine tools.
- Lack of funds to make the initial investment in training facilities, pilot plants and or prototype systems.

V. SUMMARY OF GROUP DISCUSSIONS ON INFORMATION SYSTEM

The group considered that there was a need to build an information system in the field of machine tools industry, capital goods and engineering industry.

The main objective was to integrate the system within those already existing.

The proposed system should not be the duplication of UNIDO existing system, UNIDO would be one of the users of the projected network.

The system should include the following items:

- a) Name of company
- b) Capital (in US\$)
- c) Address
- d) Contact/sponsors
- e) Source of information
- g) Product
- h) Technology
- f) Expertise

VI. RESULTS OF BILATERAL DISCUSSIONS ON CO-OPERATION PROJECTS

The bilateral discussions, aimed at identifying co-operation opportunities among participating countries and UNIDO, were held on 2 and 3 June 1988, with a total of approx. 60 bilateral rounds. As a result, 43 co-operation projects were registered. They included actions for the exchange of information, technical assistance, training, feasible joint ventures and supply of parts to be incorporated to local production for the domestic and third country markets. In most of the cases, participants agreed on schedules of future steps to be taken.

UNIDO, together with AAFMHA, would undertake the follow-up action for the best achievement of the foreseen targets. In order to assure that co-operation agreements were made effective, consultants were foreseen to visit the participating countries to review the status of the projects and help "pushing them up" in situ.

Results of Bilateral Discussions on Co-operation Projects are attached as Annex I.

VII. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

1. It was unanimously agreed that this meeting had achieved its objectives, namely to provide a forum for the participants from Asian, African and Latin American regions to establish contacts, discuss matters of common interest, identify co-operation opportunities and eventually enter into co-operation agreements in the machine tools industry.

2. The operational mechanism of the meeting was considered to be extremely effective since it allowed the participants to be exposed to the latest technological development in this field, to get acquainted with host country capacities in very concrete terms, to become aware of facilities and technological development in the course of these presentations and furthermore start constructive steps for achieving the benefits from joint co-operation projects.

3. It was also recognised that there was much room for the developing countries to co-operate with each other in transfer of technology, exchange of information, development of human resources, joint co-operation programmes, joint ventures, etc., in the machine tools industry.

B. Recommendations

1. The participants, particularly those who established contacts and identified areas for co-operation, should continue negotiations in order to establish co-operation agreements. UNIDO consultants should visit selected countries to help develop such co-operation agreements.
2. UNIDO should, at the request of the Government, continue to provide technical assistance to developing countries in the machine tools industry.
3. UNIDO should continue its efforts to promote regional co-operation among developing countries in this industry.
4. China and India would host international machine tools shows in the first half of 1989 and had invited UNIDO to organize similar meetings for selected developing countries during those occasions. Brazil indicated its readiness to host a meeting or serve as a base for a project fostering co-operation among developing countries in the engineering industry sector. Furthermore, Morocco showed interest in organizing a meeting for Arab states machine tools industry. UNIDO should, within the availability of funds, respond to these invitations as a follow-up of the present meeting held in Buenos Aires.
5. A data bank in the field of machine tools industry should be established to enable rapid access of information for those countries wishing to enter into technology transfer agreements. This data bank should include consultancy, training and manufacturing.

RESULTS OF BILATERAL DISCUSSIONS ON CO-OPERATION PROJECTS

ANNEX I

- II -

Report for	ALGERIA	ARGENTINA	BOLIVIA	BRAZIL	COLOMBIA	COSTA RICA	CHINA	ECUADOR	INDIA	EGYPT	MOROCCO	MEXICO	PERU	ROMANIA	TRINIDAD	TUNISIA	URUGUAY	VENEZUELA	UNIDO-INTI	JAMAICA
ALGERIA	////			X			X			X	X			X		X				
ARGENTINA	////	////	X		X	X	X	X				X	X				X	X		
BOLIVIA	////	////	////						X										X	
BRAZIL	////	////	////	////													X			
COLOMBIA	////	////	////	////	////															
COSTA RICA	////	////	////	////	////	////														
CHINA	////	////	////	////	////	////	////													
ECUADOR	////	////	////	////	////	////	////	////												
INDIA	////	////	////	////	////	////	////	////	////	X		X			X					
EGYPT	////	////	////	////	////	////	////	////	////	////										
MOROCCO	////	////	////	////	////	////	////	////	////	////	////									
MEXICO	////	////	////	////	////	////	////	////	////	////	////	////								
PERU	////	////	////	////	////	////	////	////	////	////	////	////	////							
ROMANIA	////	////	////	////	////	////	////	////	////	////	////	////	////	////						
TRINIDAD	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////					
TUNISIA	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////				
URUGUAY	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////			
VENEZUELA	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////		
UNIDO-INTI	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	
JAMAICA	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////	////

* Note: The report for each bilateral meeting is recorded on the form for the country, which goes in alphabetical order, as indicated in the table.

Firm or official	Counterpart		Type of co-operation	Follow-up
	Country	Firm or official		
<u>ALGERIA</u>				
Mohamed KEb IR Salim NOUI	Egypt	AMIN	Purchase of special steels by Algeria Delivery for Algeria of bench and column drills greater than 13 mm	
Idem.	Morocco	LAMRANI	Exchange of products: lathes, drills, cutters, grinders Exchange of experience. Sub-contracting	
Idem.	China	Liang Xun Xuan	Execution of projects Exchange of completed products, raw materials, and mechanical and electrical parts and components	
Idem.	Romania	TRUFASU	Algeria: exchange - export of products in general Romania: occupational training - Technical assistance with production - Delivery of cast and rolled Parts and machine parts - Participation in the manufacture of devices and tools	Supervision by UNIDO requested
Idem.	Tunisia	CRAOUCH	Development of products within joint companies (SOMATOLE and SOMIPLAST) based in Algeria	
Mohamed KEb IR Salim NOUI	Brazil	PANS IERA CAUDURO	Performance of projects by Brazil Commercial exchange Possible nomination of representatives	

Firm or official	Counterpart		Type of co-operation	Follow-up
	Country	Firm or official		
<u>ARGENTINA</u>				
C.T. Electro-mecánica	Bolivia	CELIS	Training of technicians from Bolivia's private sector Design of training programme	
CASTAÑO	Colombia	LLINAS	Consultancy for Colombian industry on numerical-control machine tools Aid for a group of enterprises: first stage, selection of equipment; second stage, implementation	
DAISA Co. Ltd.	Costa Rica	MASIS	Analysis of joint investment for manufacture in Costa Rica intended for export to the United States (minimum integration 35 per cent)	
DARGE BURANI KEORGE FRANCO	Costa Rica	MASIS	Exchange of marketing information	
C.T. Electro-mecánica	China	LIANG	Examination of joint designs and production	
CASTAÑO	China	LIANG	Representation in Argentina for CNC machine tool components	

Firm or official	Counterpart		Type of co-operation	Follow-up
	Country	Firm or official		
<u>ARGENTINA</u>				
TURRI Co. Ltd.	China	LIANG	Chinese investment in equipment and know-how at TURRI Co. Ltd. geared to the Latin American market	
INTI	Ecuador	AYALA CEbCA	Capital goods support centre for small and medium-size enterprises for detail design and engineering	INTI/CEbCA agreement - assistance requested from UNIDO for installing laboratory equipment
DARGE FRANCO BURANI KEORGE	Ecuador	AYALA CEbCA	Exchange of information/rectifiers, boring machines, milling machines, drilling machines, eccentric presses and saws Additions and transfer of technology	
TURRI Co. Ltd.	Mexico	DE LAS FUENTES	Argentine offer to transfer technology for CNC lathes	
CASTAÑO	Mexico	DE LAS FUENTES	Argentine offer to transfer technology for CNC lathes	
DARGE FRANCO BURANI KEORGE	Mexico	DE LAS FUENTES	Exchange of information/rectifiers, drilling machines, milling machines, boring machines, eccentric presses and saws Additions and transfer of technology	

Firm or official	Counterpart		Type of co-operation	Follow-up
	Country	Firm or official		
<u>ARGENTINA</u>				
ROSSI	Mexico	DE LAS FUENTES	Extension of the line of products made in Mexico under the DAISA licence for rollers and guillotines with greater capacity than at present Representation for sales in Mexico of rollers and guillotines of high capacity	
DARGE BURANI KEORGE FRANCO	Peru	PEIRANO MORAN	Exchange of information on rectifiers, drilling machines, milling machines, boring machines, eccentric presses and saws Additions and transfer of technology	
INTI	Peru	PEIRANO MORAN	Advice on implementation of policies on metal shaving machinery in Peru	Request to UNIDO for an assistance project
GASTAÑO	Uruguay	ESTOL	Technical assistance for the adoption of numerical control techniques	Need for legal support and credits
C.T. Electro- mecánica	Venezuela	Fernando MARTINEZ	Study of: - Personnel training - Technology transfer - Sale of machines in the field of CNC equipment and electro-erosion	

Firm or official	Counterpart		Type of co-operation	Follow-up
	Country	Firm or official		
<u>BOLIVIA</u>				
DE CELIS Deputy Minister of Industry	India	BASU	Training in improved productivity and reconditioning of machine tools Maintenance techniques Training of bolivian technicians at Indian technological centres	bolivian CIOCA will request support from UNIDO
Idem.	UNIDO	L. SOTO KREBS	Trilateral project with the Santa Fé Province (Argentina) to organize a centre similar to the Technical Assistance Department (DAT) of that province	Visit by a Ministry of Industry and Commerce official to the DAT headquarters, Rosario, Santa Fé, Argentina
Idem.	UNIDO	Hans FRITZ	Co-operation for recruitment of two experts in forging and die casting Purchase of metal mechanical laboratory equipment	Allocation of resources
<u>BRAZIL</u>				
Aldo Egidio PANSIERA	Colombia	José Martín LLINAS	Technological and commercial co-operation programme: technology transfer, training and technical assistance	Colombia will officially invite brazil in order to draw up the relevant agreement.
Aldo Egidio PANSIERA	Uruguay	P. ESTOL	Joint venture viability study for complementary action and manufacture of machine-tool parts for the area	

Firm or official	Counterpart		Type of co-operation	Follow-up
	Country	Firm or official		
<u>CHINA</u>				
LIANG Xun Xuan	UNIDO	Hans FRITZ	Assistance in modernizing plant No. 2 at Beijing China would like to receive technical assistance for modernizing the plant. UNIDO and the Chinese Government will consider the inclusion of this project within the SIS financing arrangement	UNIDO will provide an expert for three months.
LIANG Xun Xuan	Uruguay	Peter ESTOL	Uruguay requests assistance in managerial training and technology transfer for the construction of finishing equipment (painting, heat treatment)	
<u>COLOMBIA</u>				
José Martín LLINAS	Romania	Theodor TRUFASU	Assembly of and training in Romanian machine tools in Colombia Study of a technical assistance agreement for technology transfer and personnel training	The supervision and support of UNIDO is requested.
<u>COSTA RICA</u>				
Rodrigo MASIS	Romania	Theodor TRUFASU	Training of personnel in Romania Romania will prepare a proposal for an agreement on making machine tools to Costa Rica's specifications	Support requested from UNIDO
R. MARTIN	UNIDO	H.J. Fritz	Assistance to Metalworking Industry	UNIDO technical assistance possibilities are being explored.

Firm or official	Counterpart		Type of co-operation	Follow-up
	Country	Firm or official		
<u>EGYPT</u>				
Mohamed Amin BADAWY	Tunisia	CHAOUCH (CETRIME)	Tunisia is interested in Egyptian experience in numerical control and purchase of special steels for pressing and moulding in the plastics sector	
Idem.	India	DESHPANDE	Co-operating in the field of machine tools - rectifier project	
<u>INDIA</u>				
DESHPANDE	Mexico	Victor DE LAS FUENTES	Exchange of information on co-operation in the area of lathes	
Idem.	Trinidad and Tobago	Dave BHAJAN	Training of technical personnel in the design and maintenance of machine tools	UNIDO fellowships for training in machine tools in India
R.N. BASU	UNIDO	H.J. Fritz	Local design and development of 3-axis CNC Contro Unit	Mr. Basu will investigate eventual involvement of UNIDO.
V.M. DESPHANDE	UNIDO	H.J. Fritz	Training of UNIDO assisted technical assistance projects in Trinidad and Tobago and in Ethiopia.	UNIDO will use India/H.M.T. as source of training in machine tool related areas.

Firm or official	Counterpart		Type of co-operation	Follow-up
	Country	Firm or official		
<u>JAMAICA</u>				
E. THOMAS	UNIDO	H.J. Fritz	Strengthening of the Tool Maker's Institute through UNIDO technical assistance	UNIDO future technical assistance under exploration.
<u>MOROCCO</u>				
Z. LAMRANI	Tunisia	N. CHAOUCH	Specialized production MOROCCO - Manufacture of lathes and milling machines for Tunisia; TUNISIA - Manufacture of machines for wood intended for Morocco	
<u>ROMANIA</u>				
T. TRUFASU	Venezuela	Fernando MARTINEZ	Manufacture of Romanian machines in Venezuela: - Economic feasibility study - Legal and financial requirements - Study of the integration of Venezuelan parts	
<u>TRINIDAD AND TOBAGO</u>				
Dave BHANAN	Uruguay	Peter ESTOL	Joint-venture study to establish bases for co-operation in the manufacture of simple agricultural and industrial machinery	Mutual visits

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ANNEX III

WORK PROGRAMME

Tuesday, 31 May 1988

- Opening ceremony.
- Election of authorities.
Presentation and discussion on UNIDO programme for promoting ECDC, UNIDO's technical assistance programme in machine tools.
- Presentation and discussion on "Experiences and Results of Using Numeric Control Machine Tools" conducted by Argentine specialist.

Wednesday, 1 June 1988

- Presentation of country papers for co-operative arrangements by heads of delegation.
- Group work for establishing a data base for co-operation among enterprises/organizations/institutions in the field of machine tools, conducted by Argentine panel specialists.
- Organized visit to the International Exhibition of Machine Tools in small groups of common interest.

Thursday, 2 June 1988

- Bilateral negotiations guided by UNIDO staff, project facilitators, international and local consultants.
- Presentation and discussions on "Machine Tools Industry, its Current Situation and Perspectives" conducted by Argentine specialists.

Friday, 3 June 1988

- Continuation of bilateral negotiations.

Saturday, 4 June 1988

- Meeting conclusions and closing ceremony.