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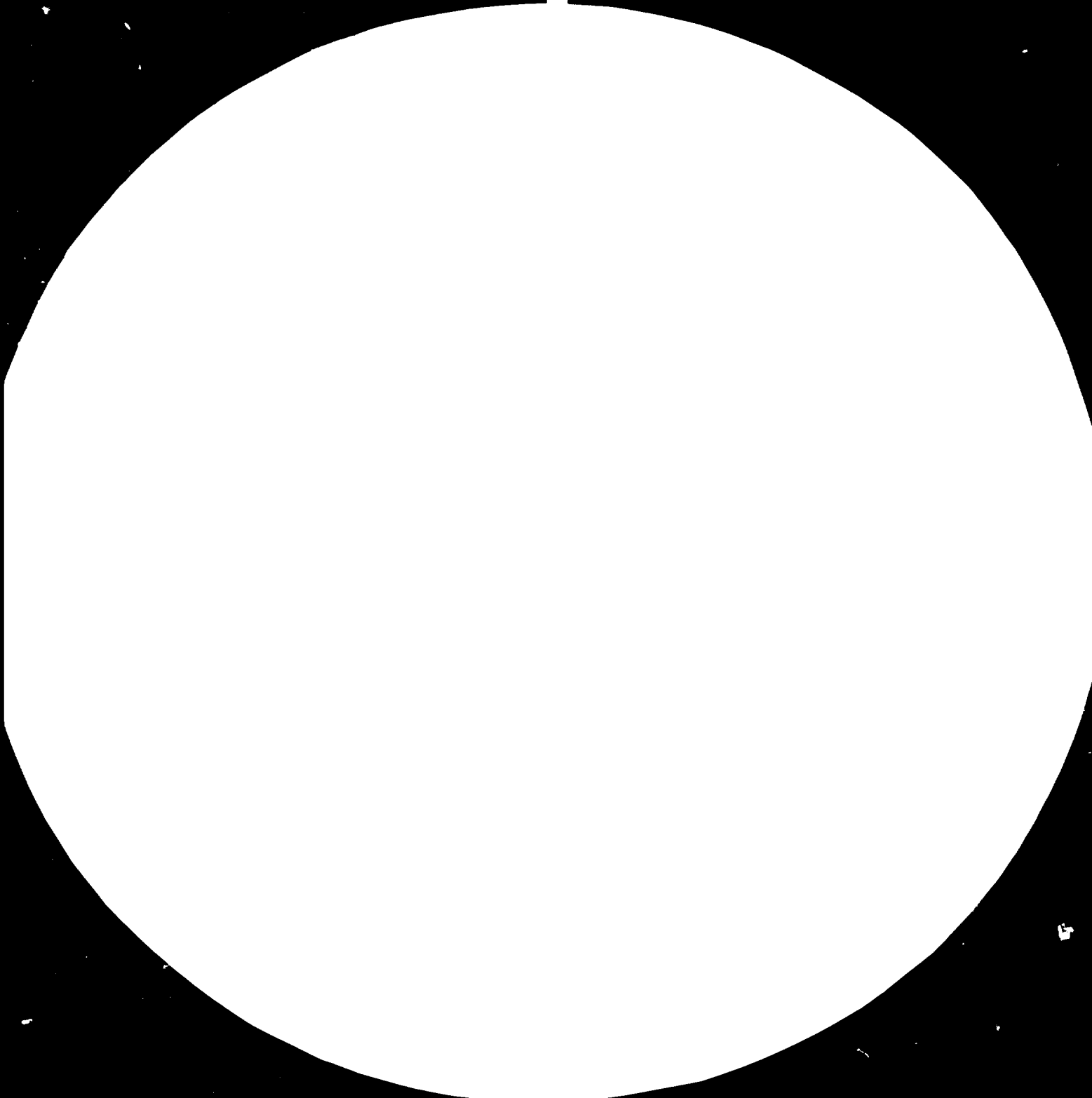
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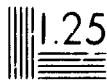
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25 May 1983

Fortalecimiento de la Infraestructura del Desarrollo Tecnológico, de México

Mission to

Mexico,

(Strengthening technological
infrastructure)

of

Frans J. Soede
Senior Industrial Development Officer
Institutional Infrastructure Branch
Division of Industrial Operations

26-30 April 1983

DP/MEX/82/008

This report has not been cleared with the United Nations Industrial
Development Organization (UNIDO) which does not therefore necessarily
share the views presented.

1. Contacts with the UNIDO team

Briefing by the CTA, Mr. Arturo Castaños and the two other experts, Ernesto Benado and Fernando Machado provided the following information about CONACYT and the project:

a) After the usual six year presidential election in Mexico, CONACYT was reorganized and the following officials are now related to our project.

Hector Mayagoytia	Director-General
Franklin Rendon	Director Desarrollo Tecnológico
Jaime Parada	Sub-Director, Promocion y Enlace
Juan Capallera	Sub-Director, Proyectos Tecnológicos
Agustin Sanchez	Sub-Director, Instrumentes de Política Tecnológica

The Director Desarrollo Tecnológico decided that the project should be attached to his office. This decision created some frustration for Sr. Jaime Parada who was our former counterpart but who was not affected by the political change and is still in the same position as before. There are, however, indications that he may leave CONACYT if the right opportunity presents itself.

As is the practice in Mexico, the new Director (Technology Development), brought nine new staff members into his department. Some have been attached to the sub-divisions, other are still floating around. This, of course, created uncertainty amongst the old-timers and was one of the reasons for a decrease of his staff from 130 to 100. Unfortunately among those who left there were some highly knowledgeable and efficient people. On the 26 April the new Director briefed all staff of his Division on his future plans for policy and reorganization.

b) All UNDP operational projects are at present under re-evaluation by the Ministry of Foreign Affairs and Planning. It is expected that a final decision will be taken by the second half of May. The original project budget (1983/86) was 1,728 million dollars. It is expected that it will be reduced to the usual 55% but it may finally be at a higher level due to its priority and the strong influence of CONACYT in the decision process.

The political change did not affect the relationship with the eleven industrial research institutes with which CONACYT was related. The implementation of the 50 million dollars loan from the IADB which was intended to finance institutional infrastructure development for science and technology is at present suspended and it may very well be that these funds, of which only about 2 million dollars have been used by CONACYT, will be allocated for other purposes.

c) The mission passed through a difficult period due to the political change in the country but has now established good relations with the new Director of Desarrollo de Tecnología, Franklin Rendon. Sr. Rendon is a civil engineer by training and has his own small firm in geophysical work. He does not have any experience with the administration of a large and complicated organization like CONACYT. However, he seems to be a hard worker and has very broad interests.

2. Discussion at the Cancellaría (Ministry of Foreign Affairs)

A discussion was held with Srta. Graziela Vázquez-Díaz Jimenez, the Deputy Director of International Technical Co-operation, in the presence of the CTA which was very interesting because this person had worked with CONACYT in the past and has therefore an intimate knowledge of this organization, its objectives and methods of working. She was very curious to know in detail about the project's objectives and the impact it could make in relation to the objectives of the government, who are by the way, still going through the process of confirmation by holding consultations on a national level with the participation of all parties concerned (government, labour unions, academia, agriculture, industry etc.).

3. Meeting at the UNDP Office

The Resident Representative, the SIDFA and the UNIDO/JPO were not available and ideas were exchanged with Srta. Elena Martinez, the Deputy Resident Representative. This person is very well acquainted with the project and supports it. However, she is of the opinion that UNDP's success in the LA region in the future, will be determined not so much by "routine technical assistance", but more by high level missions of short duration which could provide "spectacular" advice or give solutions to basic problems in specialized fields requiring input from consultants with worldwide experience.

4. Meeting with Sr. Franklin Rendon (Director Technology Development)

A working breakfast took place on 27 April at the executive room of CONACYT with Sr. Franklin Rendon and his senior staff in the presence of our CTA and expert Ernesto Benado.

Sr. Rendon has a general overview of the situation in Mexico and the role expected of CONACYT in the development process, particularly in the field of technology development. He mentioned that although the process of re-organization within his department has not yet been finalized he likes an organization which is flexible and can adopt itself quickly to assist in solving new problems. Sr. Rendon was given a thorough briefing on the utilization of the project budget, other resources available from UNIDO itself and also the possibility of requesting assistance from the UNFSSD and bilateral resources eventually under a multi-bilateral umbrella.

As was done on former occasions we expressed our dissatisfaction to Sr. Rendon about the situation of counterpart staff inside CONACYT. Although efforts have been made to improve this situation most CONACYT professional staff is of the generalist type. Therefore it was promised by CONACYT to hire some specialists such as a mechanical engineer and an information specialist who could be assigned as CONACYT counterparts to our experts and consultants.

Sr. Rendon expressed his great admiration for the work of the UNIDO team and expressed the hope that the magnitude of the assistance can be extended notwithstanding the paucity of funds. Mr. Rendon will come to UNIDO's headquarters Vienna for briefing during June.

5. Visit to the situation room of CONACYT

A visit was made to the situation room of CONACYT where all kind of statistical data can be shown through the use of audio-visual equipment combined with computers. A demonstration was given of the programme of RIESGO COMPARTIDO of which our expert Fernando Machado has just finalized an evaluation.

6. Meeting with Sr. Mario Waissbluth (28 April)

Sr. Waissbluth who was the Director of the Science Department of CONACYT before the presidential change, has now been appointed as Director General de Desarrollo Tecnológico, Universidad Nacional Autónoma de México (UNAM). He reports to the Director of Research who is directly subordinate to the rector. UNAM has 380,000 students of whom 200,000 are of the undergraduate and graduate level and 180,000 students of the senior high school level. UNAM employs 30,000 professors and 3,000 full-time researchers. UNAM is the largest University in Latin America and probably the largest University in the world.

Sr. Waissbluth has been appointed with the objective of developing programmes which can bring the University closer to the realities of industrial life. His tentative programme of work covers at present the following activities and he hopes to receive assistance from high-level experts from UNIDO:

- (a) industrial legislation and intellectual property
- (b) selling of technology, preparation of manufacturing packages from research results
- (c) consultancy for industry
- (d) strategy of licensing and patents
- (e) manufacturing inside University (probably micro-computers etc.) for sales to university population
- (f) extra-curriculum teaching and post-graduate work
- (g) research in the economy, management and anthropology of technology. Science and technology policies on materials technology.

During the mission a Seminar was under way at UNAM in which two of our experts participated as resource persons. (Annex B)

7. Meeting with Sr. Jaime Parada

Mr. Parada has requirements for a number of short-term specialized missions which could be accommodated in the project. It also may be necessary to organize short-term missions for UNIDO interregional advisers in metallurgy and CAD/CAM.

The participation of Mexico in the Regional NDT project for Latin America was discussed. Sr. Parada intended to come to the Montevideo meeting but this was not realized due to internal difficulties in getting full co-operation from PETROMEX and the Atomic Energy Commission which are of course important partners in the field of NDT. A national committee on NDT has held five meetings and it looks as if Mexico will participate in the 3rd Co-ordinators meeting. Mr. Parada will arrange for an official letter from the Director General of CONACYT to the UNIDO Resident Representative to confirm Mexico's participation.

8. General observations.

(a) The UNIDO team seems to have the confidence of the new management of CONACYT and is also maintaining excellent internal working relations. The work performed by the team is impressive both qualitatively as well as quantitatively.

(b) The ratio between long-term experts m/m and m/m available for short or medium-term missions is rather high and should be kept under surveillance. If more funds are obtained for the project these should be used only for short-term or medium-term expertise.

REUNION TRIPARTITA

DP/MEX/82/008 "Fortalecimiento a la Infraestructura Tecnológica".

Marzo 28, 1983

Asistentes a la Reunión:

Secretaría de Relaciones Exteriores

Lic. Graciela Vázquez Díaz
Lic. Jorge Bosques

PNUD

Emb. Gustavo Silva Aranda
Ing. Fernando Fajnzylber
Srita. Elena Martínez
Dr. Arturo Castaños
Sr. Han Steen

CONACyT

Dr. Asdrubal Flores
Ing. Magdalena Hernández
Dr. Franklin Rendón
Ing. Jaime Parada
Ing. Juan Capallera

INFORME DE LA REUNION

Introducción.

El 28 de marzo se llevó a cabo la reunión tripartita en la cual participaron representantes del Gobierno de México (a través de la Sría. de Relaciones Exteriores), representantes del organismo nacional ejecutor (CONACyT), representantes del Programa de las Naciones Unidas para el Desarrollo que provee los fondos para la realización del proyecto y representantes de la agencia internacional ejecutora (ONUDI).

Durante la primera parte de la reunión se describieron las experiencias y resultados del año 1982 y se analizaron los años posteriores. Durante la segunda parte se discutieron principalmente las recientes limitaciones financieras del PNUD y sus consecuencias para el programa de México y el proyecto en particular.

Los funcionarios de CONACyT hicieron una relación de los objetivos del proyecto, los resultados concretos obtenidos durante el primer año de ejecución y las dificultades que se encontraron en esta etapa. Proporcionaron a los participantes de la reunión un resumen del proyecto y los logros obtenidos en 1982.

Se remarcó la importancia del proyecto dentro de los actuales lineamientos políticos del mismo instituto, así como la necesidad de colaborar en este momento en la planificación tecnológica en donde cooperan CONACyT y SPP, y, posteriormente, en su implementación.

Se destacó la necesidad de minimizar el impacto de las reducciones presupuestarias y, de ser posible, ampliar el presupuesto por medio de diversos mecanismos

Ante una solicitud concreta de Relaciones Exteriores se definieron los requerimientos mínimos para un funcionamiento aceptable del proyecto durante el año en curso, a saber:

- Asesor técnico principal, extensión por 12 meses
- Experto en gestión y comercialización de tecnología, extensión por 12 meses
- Experto en apoyo a centros de pequeña y mediana industria, extensión por 12 meses
- Consultor en tecnología de plásticos, por 3 meses
- Consultor en información tecnológica, por 3 meses

Este último depende del inicio de las actividades del programa que contempla el sistema de información tecnológica para la industria.

- Consultor de alto nivel a corto plazo, por 2 meses
- Contratación de alto nivel a corto plazo, por 2 meses
- Contratación de expertos nacionales, por 10 meses

La contratación de expertos a largo plazo en ciertos campos, está basada en el hecho de que dichos expertos ya conocen la problemática del país y por lo tanto su aporte es relativamente mucho mayor que el de los expertos de corto plazo en los mismos campos que no conocen el país y por lo tanto, pierden tiempo buscando información.

La contratación de expertos a corto plazo sirve en casos específicos previamente preparados por los expertos a largo plazo y la contraparte nacional.

Los aspectos estrictamente sectoriales del proyecto no tendrán el tratamiento previsto en el documento, pero serán reemplazados por una visión más global de la problemática tecnológica, lo que significa que no se tratarán temas específicos como financiamiento, comercialización de tecnología, etc.

Lo descrito anteriormente coincide con los planteamientos del PNUD.

Por parte de la agencia ejecutora, ONUDI, se destacaron tres ejemplos concretos con los cuales se demostraba la utilidad del proyecto en la resolución de problemas en el campo tecnológico que afronta el país. Los tres ejemplos se refirieron a vinculaciones concretas entre el sector productivo y el de investigación y a la problemática de la gestión tecnológica.

Al finalizar la reunión se hizo hincapié por parte de CONACyT en que la temática se encuentra dentro de las 18 prioridades ya definidas para el país y en que el proyecto tiene un importante efecto multiplicador sobre numerosas instituciones y centros que coordina CONACyT.

Se indicó asimismo que los expertos en agroindustria, eléctrica y electrónica, energéticos, organización y métodos pueden por el momento ser suspendidos.

PRIMER CURSO DE DESARROLLO Y COMERCIALIZACIÓN DE TECNOLOGÍA



**DIRECCIÓN GENERAL DE DESARROLLO
TECNOLÓGICO, UNAM**

**ORGANIZACIÓN DE LAS NACIONES UNIDAS
PARA EL DESARROLLO INDUSTRIAL (ONUDI)**



**DEL 25 AL 29 DE ABRIL DE 1983
DE LAS 16:30 A LAS 21:00 HORAS**

PROGRAMA					
hora	25	26	27	28	29
16:30 a 17:50	El paquete tecnológico	Transferencia de tecnología: contratos	Análisis de contratos Negociación de contratos: ejercicio	Negociación de contratos: ejercicio	Negociación de contratos: lineamientos
18:05 a 19:25	Estrategias de investigación	El Registro Nacional de Transferencia de Tecnología	Negociación de contratos: ejercicio	Negociación de contratos: ejercicio	Negociación de contratos: lineamientos
19:35 a 20:55	Propiedad Industrial y patentes	Análisis de contratos	Negociación de contratos: ejercicio	Negociación de contratos: ejercicio	Agencias gubernamenta- les de estímulo, apoyo y regulación

EXPOSITORES

Jaime Alvarez Soberanis
Francisco Barnés
Arturo Castaños

Fernando Machado

Mario Weissbluth

Secretaría de Comercio y Fomento Industrial
Secretaría de Energía, Minas e Industria Paraestatal
Organización de las Naciones Unidas para el
Desarrollo Industrial
Organización de las Naciones Unidas para el
Desarrollo Industrial
Universidad Nacional Autónoma de México

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Coordinación de la Investigación Científica,
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548-4368

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