



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

07547

Distr.
RESTRICTED
UNIDO/IOD.98
8 July 1977
ENGLISH

UNITED NATIONS INDUSTRIAL
DEVELOPMENT ORGANIZATION

MISSION REPORT.

PROJECT REVIEW AND IMPLEMENTATION MISSION TO MEXICO, GUATEMALA AND EL SALVADOR^{1/}
(DP/MEX/73/014, DP/GUA/73/005, DP/ELS/73/005)

from 3 to 18 June 1977 .

by

Sergio Zampetti
Industrial Development Officer
Industrial Planning Section
Industrial Operations Division

1/ This document has been reproduced without formal editing.

id 77-4726

(ii)

List of Persons contacted during the mission in Mexico

NAFINSA

Mr. Luis Almeida, Sub-Director General NAFINSA, Mexico
Mr. Carlos Torres, Assistant of the Sub-Director General, NAFINSA
Mr. Eduardo Colín Trejo, Ind. Programming Director
Mr. Pablo de Cervantes, Sub-Director, Ind. Programming
Dr. Juventino Balderas, Sub-Director, Ind. Programming
Mr. José Antonio Velázquez, Expert in Foundry

INSTITUTO MEXICANO DEL PETRÓLEO

Mr. Fernando Manzanilla S., Sub-Director General,
Instituto Mexicano del Petróleo

Mr. Arturo del Castillo P., Sub-Director for Economic
Studies and Industrial Planning

Mr. José Luis De Las Fuentes, Sub-Director
Project Engineering

Mr. Miguel Martínez Ríos G., Chief
Division of Information

Mr. E. Gurmar, Resident Representative a.i., Mexico
Mr. Francis Lefebvre, Acting SIDPA
Mr. F. Fajnzylber, Project Manager
Messrs.: Ayza, Musa, Solodkowski, Surie and Martindale,
UNIDO experts

Mission to Mexico

The purpose of the mission was to revise the activities of the Capital Goods project Mexico DP/MEX/72/014; acquire personal acquaintance and direct knowledge of the UNIDO team activities and more specifically of the counterpart organization NAFINSA; revise in agreement with the project manager, Mr. Fajnzylber, the local authorities and the SIDFA office the budget proposals for the second half of 1977; discuss at the same time the projected activities for the following phase of the project scheduled for the period 1978-81.

While in Mexico Mr. Davidson SIDFA for Central American countries requested my presence for a short visit in Guatemala and El Salvador for similar purposes to the mission to Mexico.

The Capital Good project implemented jointly by UNIDO and NAFINSA started in November 1971 and continued through 1976 focusing on the identification of specific projects, the technical and economical study of their feasibility and the promotion of investments opportunities both with national and foreign entrepreneurs.

Starting March 1976 the development of the Mexican Capital Goods has been implemented through a global strategy covering all possible aspects of the development requirements. Through a basic document drafted jointly by the UNIDO team and their counterparts in NAFINSA called "MEXICO, a Strategy for the Development of Capital Goods Industry" an instrument of information and policy of primary importance was presented to the Mexican Government who approved the diagnosis and recommendations of the document, granting the development of Capital Good Sector the highest priority.

On the base of the information gathered by the project activities on previous years and of a detailed analysis of present and prospective demand for capital goods up to 1990, coupled with a study of the tendencies of the international market, a number of sectors were identified for priority and concentrated development efforts. For this purpose, under the guidance of the project manager and the economist specialized in the project development and promotion a number of short term UNIDO experts were recruited to cover the supply demand aspects of machine tools manufacturing, of heavy mechanical equipment, of the electrical chemical and petrochemical industry and of the production of electronic equipment.

At the same time the NAFINSA/UNIDO document defined the requirements in terms of economic policy instruments and the institutional mechanism which should back up the development of the sector. There again UNIDO has provided short term expertise to cover such areas as fiscal incentives, mechanisms to direct the purchasing policies of the large national enterprises of Mexico toward local producers of Capital Goods, technology requirements, standardization and quality control for the sector. Finally expertise has been supplied in the field of organization and systematisation of technical information necessary to back up the development of Capital Goods industry.

a) Budget revision for the second half of 1977

At present the project is manned by 10 experts representing 73 m/m which together with two experts under recruitment (4 m/m each), 1 associated expert (12 m/m) under the project TF/76/001 plus another associated expert under recruitment (12 m/m) and the three short term experts recruited or under recruitment under TF/77/001,

(14,5 m/m) financed by the Federal Republic of Germany contribution, brings a total of 17 experts which will be assigned to the project during the second half of 1977. Three more experts posts had to be postponed owing to difficulties in recruitment of experts of adequate level. A revision and re-programming of the project activities was therefore necessary within the present ceilings (\$ 468.250 for DP/MEI/72/012; \$ 72.000 for TF/76/001; \$ 52.000 for TF/77/001). The proposed budget revision which is attached for reference has been in principle approved by the counterpart organization and the Resident Representative office and is at present under the scrutiny of the Mexican Foreign Office. The main revisions consist in the following:

- under budget line 11-50 there is provision for 7.3 m/m for short term consultants.
The amount equal to \$ 35.000 will be used to recruit for one month a consultant in heavy mechanical equipment; the Government will supposedly nominate Mr. Patil from India for such assignment. The rest will be available for extensions for those experts whose activities will show that their presence will be required for a longer period than anticipated.
- The budget line 20-00 provides scope for a contract with the "Instituto Mexicano del Petroleo" for a study on the participation of national engineering in the development of Mexican Capital Goods. The Institute is a highly developed organization which has been for the past ten years a key factor and a central element for the development of Mexican activities connected with oil refinement, production of petrochemicals and fertilizers, equipment design, perforation equipment including off-shore platforms, etc. The objective of the study will consist in making a diagnosis of the development of national engineering, both detail and basic engineering, connected with the development of capital goods and

from that establish a set of recommendations aimed at developing national engineering activities, both at the level of elaboration of industrial projects and for the actual design and construction of equipment. The terms of reference of such a contract have been discussed during the mission and after official scrutiny will be sent for action to UNIDO Headquarters. This proposal falls within the activities covered by the New Dimension approach.

- Under Budget line 31-00 scope will be provided for 4 m/m of individual fellowships, which will allow junior NAFINSA technicians and engineers to perform study visits in leading Capital Goods manufacturers in United States and Europe. The specific requirements for such fellowships will be sent to UNIDO soonest.
- Under Budget line 40-00 equipment will be required, namely a photocopying machine Rank Xerox to be either purchased or hired, plus some desk electrical calculating machines and filing and documentation equipment. The specification will be sent to UNIDO Headquarters soonest.
- Under Budget line 50-00 scope is provided for purchasing basic documentation and information material which should form a core of technical information available for NAFINSA technicians for their activities connected with the Capital Goods Sector's development.

Finally, under TF/77/001 the post 11-02 will be revised to allow the recruitment of a Government nominee of Mexican nationality (supposedly under the New Dimension approach) for a period of six months to cover the supply requirements for the petrol industry.

b) Extension of project activities for the period 1978-1981

The Mexican government has granted the development of the Capital Goods Industry a very high priority and the extension of the UNIDO project has been given the highest priority among all UNIDO activities in Mexico. For the next 4 years an amount of 2.6 millions are earmarked for the project. However, this amount might be slightly

reduced to leave space for other minor projects. The extension of the project UNIDO/NAFINSA for the period 1978 - 1981 will be based on the following principal objectives.

1) Sectorial programming and project development

For this activity which will consist in a coherent programming of the various priority sectors based on the supply and demand situation both national and international and on the identification of investment opportunities and requirements and finally specific project formulation the amount of assistance which will be required is about 55% of the total projected expert assistance.

2) Policy Instrument

Under this activity assistance will be granted to define the various economic instruments which will help in the development of the sector such as fiscal incentives, export promotion, technology development, public enterprise purchasing. The amount of assistance required is estimated to 15% of the total.

3) Reinforcement of Technology Infrastructure

The assistance will be required to develop and strengthen national capacity in the field of engineering, Standardization, quality control and other instruments which should help and support the development of the Capital Goods Industries. The amount of assistance requirement will be approximately 15% of the total.

4) Training of Technicians

The activities under this item will cover both the training of individual technicians for all the required levels of specialization, (qualified labour and technicians, engineers, industrial economist specialized in Capital Goods), as well as the organization or strengthening of Mexican training centers and research and technology institutions. Approximately 10% of the assistance will be required for these activities.

5) Technical Information

The organization of a system of technical information covering all the required national and international inputs such as highly technical books and periodicals, will constitute a basic element of the project activities.

Approximately 5% of the total assistance will be required to cover this sector.

The activities of the project for 1978 will be financed by a budget tentatively amounting to 536.000 dollars. A preliminary agreement was reached with the Mexican authorities and in particular with NAFINSA on the form and extent of UNIDO assistance. Subject to possible further re-consideration the UNIDO contribution to the project is expected to be based on a group of five long term experts covering the following main activities :

- The Project Manager responsible for the overall supervision of the project and involved also on activities of industrial programming and promotion.
- One expert in industrial sectorial programming and project development.
- Three experts which will have the full responsibility for the development of three major product groups. These product groups according to the present priorities and focusing, could be machine tools and equipment, professional electronic, heavy mechanical equipment. However, this selection should be considered only very preliminar NAFINSA having expressed the concern of receiving the Government approval on these priorities. Further assistance could be granted on the following fields :
- Some 20 m/m will be available for highly specialized consultants for very specific technical tasks.
- An amount of approximately 90.000 dollars will be earmarked for subcontracting connected with the supply and demand of heavy mechanical equipment either in the electrical sector or in the petrochemical sector or both.
- Provision for seven months for individual fellowships, for Group training, for Equipment and for Documentation up to a total of approximately 35.000 dollars is also provided.

The proposed budget for 1978 is attached for reference.

The recruitment criteria for next year activities for the project, should obviously be based on the highest possible level of competence with the specific requirement of good working knowledge of the Spanish language, which will secure the necessary team work with the NAFINSA counterparts. This language requirement will not be applied for highly specialized technicians who will participate in the project activities for short term assignments.

c) Other projects

Information was given by the Resident Representative's office that the project DP/ITEX/75/006 Development of Basic Industries should be considered cancelled.

The project for technological services for Capital Goods Industries which was proposed for the assistance to CONACYT (Consejo Nacional de Ciencia y Tecnología) will be receiving a low priority for lack of funds and since some of his projected activities are covered by the Capital Goods project with NAFINCA.

Proposed Budget Revision Capital Goods Project

<u>Project No.</u>	<u>Post</u>	<u>Expert</u>	<u>E/m</u>	<u>Total</u>
TF/EX/76/001	11-01	Exp. Ind. Planning	6 m/m	31,000
TF/EX/76/001	11-02	Exp. Project Evaluation	5 m/m	31,000
				<u>62,000</u>
DP/EX/72/014	11-01	Project Manager	12 m/m	50,400
	11-26	Exp. Machine Tools	4 m/m	20,000
	11-32	Exp. Ind. Promotion	12 m/m	48,000
	11-33	Exp. Food Processing	3 m/m	15,000
	11-36	Public Enterprise Purchasing	6 m/m	30,000
	11-41	Metallurgical Public Enterprise	4 m/m	20,000
	11-42	Agricultural Machinery	4 m/m	20,000
	11-43	Exp. Transport Equipment	7 m/m	28,000
	11-44	Exp. Earth Moving Equipment	4 m/m	20,000
	11-46	Exp. Professional Electronics	4 m/m	20,000
	11-47	Exp. Ind. Information	8 m/m	36,000
	11-48	Elect. Engineer	4 m/m	22,500
	11-50 A	Consultant	1 m/m	5,000
	11-50 B	Consultant	6.3 m/m	30,200
	15-01	Travel		10,000
	16-00	Mission Costs		5,000
	20-00	Subcontracting		72,000
	31-00	Fellowships	4 m/m	4,800
	32-00	Group Training		10,000
	40-00	Equipment		8,000
	50-00	Miscellaneous		2,050
				<u>466,250</u>
TF/EX/77/001	11-01	Exp. Heavy Mechar. Equipment	4.5 m/m	18,000
	11-02	Petroleum Engineer	6 m/m	18,000
	11-03	Exp. Mechanical Process	4 m/m	16,000
				<u>52,000</u>
		GRAND TOTAL		<u>18,000</u>
				<u>18,000</u>
				<u>16,000</u>
		TOTAL		<u>52,000</u>

Proposed Budget for 1978

IP/EX/72/014

Post	Title	m/m	Costs
11-01	Project Manager	12	55,200
11-26	Machine Tools and Equipment	12	52,800
11-32	Ind. Programming and Promotion	12	52,800
11-46	Exp. Electronics	12	52,800
11-47	Heavy Mechanical Equipment	12	52,800
11-50	Consultants	20	120,000
15-01	Travel		15,000
16-00	Mission Costs		5,000
20-00	Subcontracting		20,000
31-00	Fellowships	7	5,100
32-00	Group Training		15,000
40-00	Equipment		5,000
50-00	Miscellaneous		10,500
			<u>536,000</u>

List of Persons contacted during the mission in
Guatemala and El Salvador.

GUATEMALA

Mr. Raul Villaterro, Chief of Section Industries and Mines Development,
Secretaría General del Consejo Nacional de Planificación Económica

Mr. Mario Garcia Salas, Chief of Project Promotion, Direction CORFINA

Mr. O. Olcese, Resident Representative, UNDP

Mr. K. Davison, SIDFA

Ms. Michele Snocck, Assistant SIDFA

Mr. Cristian Gillen, Chief of Project

Mr. J. Jofre, UNIDO Expert

EL SALVADOR

Mr. Gilberto Lara, Chief of Planning and Technical Assessment
in the Ministry of Economy

Mr. Edgardo Chicas Alfaro, Chief, Department of Industrial Studies,
INSAPI

Mr. T. Painter, Resident Representative, UNDP

Mr. Gustavo Luna, Project Manager, Project DP/ELS/73/005

Mission to Guatemala

a) Review of Current activities

The purpose of the mission was to discuss and define implementation requirements of the project DP/GUA/73/005 for the second half of the year. The project of Industrial Development and Promotion has been conceived to supply technical assistance in an articulated and comprehensive way, both at the level of macro-planning as well as at the level of identification of specific projects.

The first priorities of the project activities have been the formulation of the medium term industrial development plan 1976-1979 for Guatemala and of the operational plan for the industrial sector for the year 1977. These activities were implemented in tight co-operation with the counterpart organization, Secretaria General del Consejo Nacional de Planificación Económica.

With the second counterpart organization Corporación Financiera Nacional (CORFINA) the project supplied assistance for the establishment of the operational plan for the CORFINA and for the formulation of its pre-investment and investment programme. Another contribution was to establish the methodology requirements and priorities which will serve as guidance and criteria for the development, selection and evaluation of industrial projects for the public sector of Guatemala. In practical terms, some 50 industrial projects have been established, which are now at different level of development (Seven of them are at present in the phase of construction, twelve others will be implemented before the end of the year, the rest being under scrutiny and evaluation).

CORFINA was given also the responsibility to assist in the development of industrial projects, which will be managed by co-operatives of land producers, now for the first time entering in the production activities. The Government considers this initiative of a very essential sociological importance aimed at developing a local managerial class. In this field UNIDO assistance will be highly praised and urgently needed.

The project received at the beginning of the year a ceiling amounting to 116,000 dollars. However, confirmation will be given to UNIDO by the Resident Representative office in the very near future that the ceiling for the project has been increased to 1,255,330.

This will provide scope for extended consultancy services aimed at assisting to the creation and functioning of the seven industrial projects under construction and supervision by COMINA, several of them being managed in the form of industrial co-operatives. These projects which cover the field of agro-based industries will require UNIDO short term expertise for the delicate initial period of starting production. In particular this refers to the factory for Chili and Redpeper processing, apple processing, tropical fruit canning, and wood treatment. The first three plants would require three months consultants each and two months for the last one.

Another urgent requirement which should be fulfilled before the end of the year consist in the realization of techno-economic pre-feasibility studies for the creation of a citric plant, of a protein food plant and a steel plant based on the process of direct reduction. Consultancy services have been requested to UNIDO for the purpose.

Finally, assistance will be required for the elaboration of the operational plan for industrial sector for 1978 in the field of a) industrial statistics and b) to elaborate an econometric model of short term industrial development.

b) Technical co-operation programme for industrial sector of Guatemala for the period of 1978/1979

The project manager of Guatemala 73/005 Mr. Cristian Gillen prepared recently a comprehensive programme of technical co-operation in the field of the industrial sector for 1978/79 which will be the basic document for the programming mission from UNIDO Headquarters scheduled for next September. In order not to prejudice the findings and recommendations of the planned mission, my comments on the document were made purely on the personal base also to get acquainted with the background of such programme.

My understanding is that the proposed programme has been drafted in full agreement with the Secretaría General del Consejo Nacional de Planificación Económica de Guatemala and with COMINA. It follows in the great lines the theoretical and methodological approach presently applied within the project Guatemala 73/005 of which it represents the logical continuation and extension. The main aspects which have been considered for the programme are the following :

-Assist in strengthening and consolidating the system of industrial planning through the elaboration of medium term industrial plan for 1972-1983, the establishment of an industrialization econometric model and the creation of a decentralization plan for the industrial sector, from Guatemala City to other industrial centers in the country.

-assist in implementing and consolidating industrial national institutions which are responsible for industrial planning, pre-investment and investment activities and transfer and development of technology. Assistance is also foreseen to the elaboration of industrial policies and the related legislative bills covering its application;

-assist the public sector in general and ICA in particular in their programme of pre-investment and investment by detecting and selecting investment opportunities, supervising feasibility studies, selecting projects of national interest and supervise their erection and, later on, functioning.

-Finally the programme should assist the country in the development of transfer of technology, the development or export of manufacture goods and, through a programme of training and productivity, assist the competent national organization, INECELAP, in streamlining and increase industrial productivity through individual or group training.

At this stage the programme proposed should be considered a frame for reflection and consideration since it covers extensively all possible fields of UNDP intervention in the Guatemala industrial development. Its financial requirements for two years amount to 2.190.000 dollars of UNDP contribution and 4.241.000 dollars as contribution from the Guatemala Government. Since for the forthcoming two years, 700.000 dollars have been tentatively earmarked as UNDP contribution for such a programme it will be the task of the programming mission in agreement with the local authorities to select from the present programme priority areas to be implemented or suggest alternative source of financing to cover all or most of the objectives of the preliminary programme.

Mission to El Salvador

The project of Industrial Programming and Policies IP/ILS/73/005 has provided assistance to the El Salvador Government and in particular to the Ministry of Economy and to the Instituto Salvadoreño de Fomento Industrial (INSAFI), in the field of short term planning and programming with in particular the elaboration of the operational plan for 1976, selection and promotion of industrial projects, industrial information, administration of development, training.

The project has been one of those heavily affected by the CERP crisis and its ceiling level at the 100,000 dollars. Recently an IS project (SI/ILS/75/807) has contributed to the project activity providing assistance for improvement of industrial statistics and will provide in the near future short term consultancy in glass and textile technology as well as in investment promotion of specific industrial projects. The Principal Adviser of the project ILS/73/005, Mr. G. Luna, who is co-ordinating the two project activities, has identified areas where further short term consultant services will be required by UNIDO.

These are the following :

- a consultant in the field of **polyester** technology to be attached to INSAFI for two months;

- a consultant in quality control to be attached to the Ministry of Economy for two months;

- again for the Ministry of Economy, UNIDO should contribute to the expenditure of two experts of CEPAL/UNIDO Mr. G. Guha for 0.25 m/m and Mr. K. Dewall for 0.75 m/m.

Resources are available in the project budget in form of mission costs, which have been earmarked to obtain 5 m/m of Headquarters personnel to cover such topics as metal-mechanic, agro-industry, synthetic fibres, fertilizers, industrial zones and transfer of technology. Short term mission of three to four weeks each are proposed under these scheme and the request has been already addressed to Mr. Veliky. Should these scheme in part or in total encounter difficulties of implementation, the funds available for mission costs together with the left overs of the consultants funds could be earmarked for a two months Special Service agreement in industrial productivity to assist the Unidad de Consultoria Industrial and the Centro Nacional de Productividad. Further three

m/m of consultants could be required to assist INSAFI in project evaluation activities.

As a follow up of the recommendation of the programming mission which visited El Salvador in March 1977 to draft a programme of technical co-operation for the industrial sector for the period 1978-82, preliminary discussions were held with the Principal Adviser of the on-going project, Mr. Luna, and with the Resident Representative of El Salvador, Mr. Painter. The preliminary draft of Country Programming for 1978/82 has earmarked 1,485,600 dollars for the integrated project of industrial development proposed by the programming mission. Since several areas of this new project constitute a logical prolongation of the activities of the present on-going project, a tentative out-line of priority areas to be considered for implementation in 1978 was made.

The ceiling proposed by the Government for 1978 for the industrial development project has been tentatively set at 171,200 dollars. According to the Resident Representative however, UNDP Headquarters are likely to reprogramme the distribution of expenditure among the various projects and allocate to the industrial development project a slightly higher amount than the one suggested by the Government of El Salvador, a figure between 200,000 and 250,000 was suggested. Within these limitations it is obvious that a selection has to be made among the priorities included in the programme of co-operation suggested by the programming mission. Together with Mr. Luna a tentative implementation plan for 1978 with due consideration of requirements and priorities of national institutions was drafted as follows :

- Project co-ordinator, also responsible for micro- and macro industrial planning, 12 m/m.

- Expert in industrial administration, whose prime responsibility would be a) to re-organize INSAFI to allow it to execute, select and finance industrial projects as well as b) help in re-organizing the too numerous institutions which exist at present to assist small scale industry development, 6 m/m

- Expert in planning and erection of industrial zones, 6 m/m

- Expert in programming of metalmechonic sector, with particular emphasis to forging activities, 6 m/m

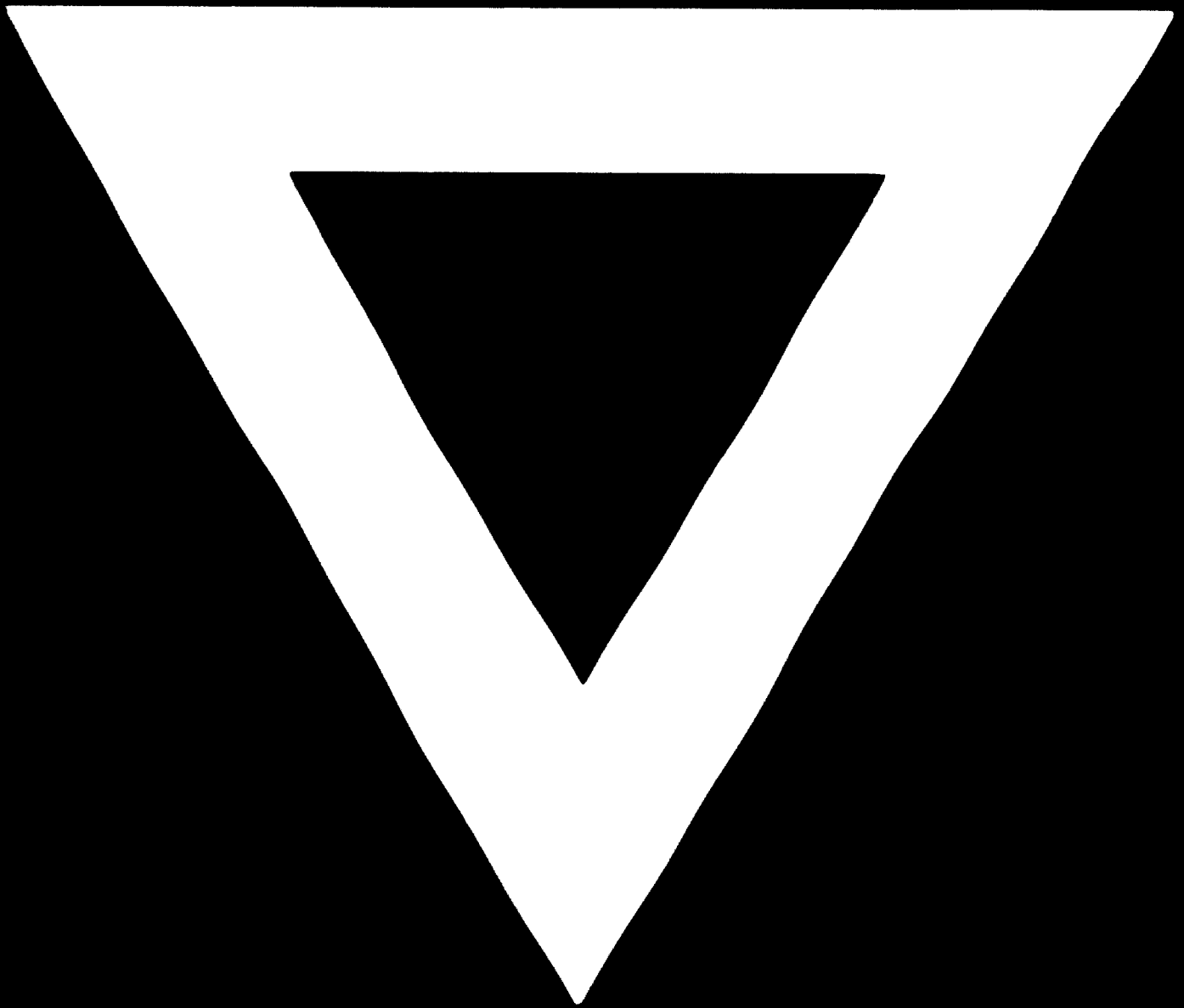
- Expert in project identification and selection, 6 m/m

About 10,000 dollars could be earmarked for equipment, mission costs, travel and administrative costs.

This very preliminary suggestion will be subject to revision once the negotiation between the Government and UNDP Headquarters will finalize a ceiling level. This will probably occur toward the end of September next.



C-723



79.01.17