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Distr. RESTRICTED ODG/R.20 5 July 2001

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

# DEVELOPMENT OF SMI CLUSTERS AND NETWORKS IN NICARAGUA

## US/NIC/97/209

Report of the joint in-depth evaluation mission\*

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Mention of company names and commercial products does not imply the endorsement of UNIDO.

The views and opinions of the team do not necessarily reflect the views of the Government of Austria, of the Government of Nicaragua or of UNIDO.

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# Acknowledgement

The evaluation mission takes this opportunity to thank the staff of the project and all the persons interviewed for the cooperation given during the two weeks of fieldwork. The professionalism, the enthusiasm and the dedication of the staff of the project have helped considerably the evaluation team to prepare this report.

# **Explanatory Notes**

Value of the Nicaraguan CORDOBA during the period of the evaluation, according to the UN operational rate of exchange is:

1 US = 13.4500 CORDOBA

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# **List of Acronyms**

ACODEP - Consultants Association for the Development of the Small, Medium and Micro

Enterprise

ADEL - Local Economic Development Agency

ALASUB - Latin American Association of Subcontracting Exchanges

CADIN - National Chamber of Industry

CANISLAC - Chamber of Nicaragua for the milk sector

CDL - Local Development Committee

CECOOPEMENIC - Association of cooperatives in the metal mechanics sector

CEDENIC - Nicaraguan Centre for the Capacity Building and Entrepreneurs Development -

Centro de Capacitation y Desarrollo Empresarial Nicaraguense (consultant Group)

CINASE - Centro de Investigation y Asesoria Socio-Economica

CONAPI - National Chamber of the Small Industry

COSUDE - Swiss Agency for the Development and the Co-operation

DAE - Entrepreneurial Support Division (within the structure of PAMIC)

GTZ - Deutsche Gesellschaft für Technische Zusammenarbeit

IDB - Interamerican Development Bank.
 IDR - Institute for the Rural Development
 IDSU - Industrial District Support Unit
 IISU - Industrial Integration Support Unit
 INATEC - National Institute of Technology

INPYME - Nicaraguan Institute for Support to Small and Medium Enterprises

IPAC - Pan-American Institute for Capacity Building
 MARENA - Ministry of Environment and Natural Resources
 MIFIC - Ministry of Industry, Development and Trade

NGO - Non-Governmental Organization

PAMIC - National Program of Support to the Micro Enterprise

PRODEGA - Project for cattle development
SME - Small and Medium Enterprise
SMI - Small and Medium Industry

SPX - Subcontracting and Partnership Exchange

UNAN - National University of Nicaragua

UNDP - United Nations Development Programme

UNI - National University of Engineering

UNIPYME - Nicaraguan Union of the Small and Medium Industry

#### EXECUTIVE SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

## Conclusions

# General appreciation of the project

- o The project is addressing very well the needs of the industrial sector in Nicaragua developing a modern concept of promotion of competitiveness through networks and production chains.
- o The project has favoured the engagement of the Government of Nicaragua for the development of small and medium enterprises of the private sector and the design of its strategies.
- o The national counterpart is the Nicaraguan Institute for support to SMEs (INPYME), which is endorsing the philosophy of the project.
- o The National Chamber of Industry (CADIN) is strongly supporting the project and offers accommodation to one of its units.
- O Generally, it can be said that the project has been implemented successfully, covering the productive sectors and the geographical areas foreseen in its project document. The four immediate objectives have been achieved, however, with some shortcomings regarding the third and fourth objectives.
- o The management of the project is efficient, competent and motivated.
- O The project has become a fundamental reference for most institutions in Nicaragua supporting the SMEs.

# Regarding the implementation

- o The project has developed studies, methodology transfer and training manuals.
- o The national professionals recruited are of outstanding quality.
- o The project has benefited from qualified international experts.
- O As UNIDO project, the activities benefit from the positive image of this international organization in the country, politically neutral.
- o The direction and monitoring from UNIDO Headquarters is adequate, in spite of some delays regarding the time of presentation of the reports.
- o The relation with the national counterpart, after some initial difficulties, is now very good.
- There is no overlapping of functions or of structure with the UNIDO project for "Cleaner Production Center".

# Regarding the achievement of the objectives

- o The main role of the project has been to transmit a vision of competitive development based on association and diffusion of the logic of clusters and networks, as well as the instruments to facilitate it.
- o The project has significantly contributed to establish and improve the relations among enterprises of different scales or sectors and also between enterprises and institutions dealing with the promotion of the SMEs.
- O Among many other things, it has favoured the improvement of the management of the enterprises and the training of the managerial personnel.
- The support of the project has represented for numerous entrepreneurs concrete improvements in productivity and profitability.
- The methodology of the project has been successfully transferred to other national institutions and to a UNIDO project in Guatemala, and inspires other projects in Africa.

# a. Objective 1: promotion of horizontal networks

- The project has promoted systems of cooperation among enterprises, which have now better business prospects thanks to the improvement of their management and technology and broader access to information and markets.
- The project has directly established 26 networks and 22 indirectly, through transfer of its methodology to other institutions.
- The project has established a training system for consultants/brokers of eight other institutions for transfer of the methodology.

# b. Objective 2: promotion of vertical networks

- The project has facilitated the establishment of various kinds of relations among large enterprises and suppliers, introducing a practical model and methodological package for improving the competitiveness through the cooperation.
- The establishment of proper business relations among large enterprises and suppliers has been facilitated by the support of the project in preparing plans of improvements.
- The market measure of its effectiveness is the contribution of each enterprise in cash and time.

# c. Objective 3: establishment of industrial districts

- This objective has been too ambitious and exceeds the possibilities of the project. It has been adequately reinterpreted.
- The project has progressed in horizontal and vertical networking of enterprises and institutions in two of the three districts foreseen in the project document, with the milk production and industry as core branch.
- Thanks to the project the Chamber of Nicaragua for the milk sector (CANISLAC) is grouping for the first time all the actors of the sector.

# d. Objective 4: coordination and dissemination

- The project keeps good contacts and cooperation with national and international institutions and projects operating in Nicaragua.
- The project has successfully organized the progressive transfer of the methodology to INPYME and other institutions.
- The project is publicizing its activities contributing to a periodical bulletin prepared by a NGO, supported by the Austrian cooperation.

# Regarding the influence in the policies and institutions of Nicaragua

o The project has a strong influence on the design of national policies and promotion systems; it offers practical support to the institutions backing up the SMEs.

# Regarding future perspectives

- o The high impact gained at the level of enterprises and institutions suggests the extension of the project for another term to strengthen the results.
- The positive results will most probably be maintained independently from the results of the next national elections.
- o The national counterpart should be prepared to take over the methodology and the philosophy of the project.

o The Chamber of Industry has expressed its interest and willingness to continue the activities of the project, offering its premises.

## Recommendations

# 1. To the project authorities

# a. Regarding the general orientation

- o To further develop the concept of promoting industrial development through the cooperation of enterprises and concentrate the efforts on horizontal and vertical integration in the perspective of cluster creation.
- o To consider the impact of the activities on the national consultants market, enhancing the qualification of consultants and persuading the enterprises of the convenience to pay for these services.
- o More interaction between horizontal and vertical networks, prioritizing well-determined geographical areas.

# b. Regarding the management

- o To better define the responsibilities of the institutional counterpart.
- o To increase interaction among the teams.
- o To better diffuse the results of the project.
- o To elaborate quarterly reports in English and Spanish for all the parties concerned.
- o To procure better equipment regarding PCs and phone connections. Provisions for renting cars from UNDP should be foreseen in the budget.

## c. Regarding the implementation

- o To continue the assistance to the enterprises, progressively taken over by with consultants paid directly by them.
- o To give priority in the selection of clients to the more dynamic small enterprises.
- o Promotion of networks should prevail over the elaboration of plans for management improvement or enterprise assessments.
- o To intensify interaction with the Center for Cleaner Production.

# 2. To the institutional counterparts

- o To establish within the INPYME a permanent structure for the interaction with the project.
- o To grant the project or its successor, a function of permanent consultancy.

## 3. To UNIDO

- o To stimulate the potential synergy between the projects implemented by UNIDO.
- o To establish contacts with the UNIDO Program of subcontracting.
- o To stimulate joint actions with the networks of Investment and Technology Promotion Offices of UNIDO.
- o In case of a third phase, with a joint in-depth evaluation foreseen, this should take place at the mid-term, to allow adjustments of the activities.
- o To undertake a local audit of the account established by the project for the income generated by the retributed services given by the project.

# 4. To the Donor

o To authorize a re-programming of the project until end-December 2001 using the remnant of the funds already assigned and not spent.

# **General recommendation**

To approve a continuation of the project to capitalize the good results obtained considering that the modernization of the economy is a thrust for economic development and poverty alleviation

#### I. INTRODUCTION

# 1. Background of the project

The project US/NIC/97/209 "Development of SMI Clusters and Networks in Nicaragua" was signed by all the parties concerned in December 1997, started its implementation in January 1998 and the activities in April 1998.

The project was designed to consolidate, diffuse and diversify the experiences and results gained through the implementation of the previous project US/NIC/94/012, also financed by the Government of Austria.

Especially this new project had for objectives:

- To consolidate the SME networks created during the previous project and to create new networks.
- To diffuse the network creation methodology through the training of a group of clusters brokers.
- To diversify the networking model in order to include the promotion of cooperation linkages between networks of SMEs and large industries, promoting the integration of production chains and focusing the efforts on the qualitative development, technical and managerial, of the suppliers.
- To promote and diffuse the concept of cluster and cooperativism at the level of the local communities, supporting and reinforcing the establishment of local industrial conglomerations and districts.
- To apply the networking approach at the institutional level and to promote the diffusion and exchange of knowledge on clusters and networks within institutions and projects.

The estimated starting date of the project was foreseen for the 1<sup>st</sup>. January 1998 and the planned duration was three years.

The basic idea of the project is that the most important factor for enterprise competitiveness is the system of relationships and cooperation. The enterprises can improve their performance if they develop an efficient system of cooperation among them: buyers, customers, suppliers, service providers, which allows the enhancing of a process of complementation and specialization. This conglomeration of services permits to reduce the costs of the production and to improve the quality.

To address this problematic the present project US/NIC/97/207 is developing a strategy to promote the networking approach, aiming at establishing relationships among enterprises and between enterprises and supporting institutions.

The development objective of the project is to raise the contribution of SMEs to the national industrial output by increasing their competitiveness and by improving the effectiveness of the national institutional support system to the SMEs.

The immediate objectives are four:

- To promote the SMEs networking and to create institutional capabilities to sustain the networking creation and diffusion process in the medium-long term.
- The integration of production chains through fostering cooperation linkages between SMEs , or clusters of SMEs, and larger industries, with focus on the development of the suppliers.
- To foster the organization and development of industrial districts and of local capacities, within each district, to analyze their competitive position and to generate coordinated actions for a sustainable development.

- To stimulate coordination and synergy between the various institutions, programs and projects dealing with SME clusters and networks in Nicaragua and to promote a joint development process with similar actors in other developing and industrialized countries.

The total budget of the project is US\$ 1,366,600 (excluding the support costs) for a period of three years and the Donor is the Government of Austria.

The designated national counterpart of the project is INPYME (Nicaraguan Institute of Support to Small and Medium Enterprises).

# 2. Purpose of the evaluation

The tasks of the joint evaluation mission are described in the Terms of Reference of the mission (Annex 1 refers).

The evaluation mission also reviewed whether the approach utilized in the project has led to optimum results, or whether another one would have improved the results.

# 3. Composition of the evaluation mission

The persons nominated to conduct the evaluation have not been involved in the design, appraisal or implementation of the project. Their observations and findings are the result of this in-depth evaluation carried out in their own capacity. The views and opinions of the team do not necessarily reflect the views of the Government of Austria, of the Government of Nicaragua or of UNIDO.

The mission was composed of the following members:

- Mr. Alfredo Stecher, independent consultant, director of Recursos S.A.C. consultoria empresarial, Lima, Peru. Team leader and representative of the Donor. Nominated by the Austrian Ministry of Foreign Affairs.
- Mr. Sergio Santamaria, executive director of CINASE (Centro de Investigación y Asesoria Socio-Economica). Nominated by the Government of Nicaragua.
- Mr. Mario Marchich, Senior Evaluation officer, Office for Internal Oversight and Evaluation. Representative of UNIDO.

The mission assembled in Managua on Sunday 25 March 2001, to start its work. Ten working days were allowed for visiting the project, interviewing the entrepreneurs in different parts of the country, discussing with the counterparts and the institutions and for visiting the Ministries. An overview of the mission program is contained in the Annex 2.

The preliminary findings have been presented by the evaluation team in Managua on 5 April 2001 to the national counterpart INPYME, the local office of the Austrian Regional Technical Cooperation, the consultants and staff associated to the project, UNDP and other national and international institutions related to the project.

The same findings have been further presented on 26 April 2001 by the evaluation team to the responsible staff at the Austrian Ministry of Foreign Affairs in Vienna and on the 27 of April to the staff of UNIDO. All these presentations have been followed by interesting and fruitful discussions with the participants.

# 4. Evaluation methodology and approach

The report is based on:

- o the documents of the project, the project progress report and all other documentation provided by the project authority in Vienna and in Managua
- o in depth discussions with the Project's coordinator and staff as well as consultants of cooperating institutions
- o meetings with the state counterpart and high ranking officials of the Ministry of Industry and Trade as well as with the Chamber of Industry hosting one of the units
- o numerous state and private entities
- o and mainly the field visits in the capital and 5 departments (Boaco, Chontales, Masaya, Granada and Leon), with visits to enterprises and interviews with 95 entrepreneurs/clients/end-users (of which 6 representing medium and big enterprises).

The list of the persons met and interviewed is contained in Annex 3.

To establish the report the evaluation team has followed the UNIDO's instructions for preparing the independent in-depth evaluation reports. The team has attempted to give a comprehensive image of the project and to discuss issues in a way which may be helpful for the leaders and the staff of the project to improve their present and future performance.

At the beginning of the evaluation mission a questionnaire on client appreciation of the services has been sent to around 300 entrepreneurs assisted by the project. A total number of 77 entrepreneurs responded, which, considering the difficulties of communications in the country and the often modest level of the persons assisted, is considered a sufficient sample size to be representative for the opinions of the project's clients, thus being an additional input for the conclusions drawn by the evaluation team.

The data derived from the Management Information System of the project, the questionnaires results, the interviews and the evaluators' own observations, enabled the evaluation team to get sufficient insight in the achievements of the project and to accomplish its task. The conceptual framework for the evaluation is described in Annex 4.

#### II. PROJECT CONTEXT AND DESIGN

#### 1. Socio-economic context

An adverse international environment affected the Nicaraguan economy during the year 2000, remarkably, among other factors, a fall in the international prices of the export products like coffee and sugar cane.

The previous fall of the international prices was compensated by an increase in the external demand. This had an impact on the growth of the GDP in the measure of 4.3% and at the same time on the fall of the total expenditure. See annex 5.

Moreover, the prices of the oil and of its by-products affected the production of the refineries and had a significant impact on the profitability of the production of commodities and services, in which oil plays a fundamental role as input.

In spite of its importance in the generation of commodities and services, from the point of view of taxation, oil is subject to the highest tax rate in the measure of 110% of the CIF value, thus contributing to the financing of the Nicaraguan current public expenditure, which represents 19.3% of the taxation, but with a negative influence on the production costs of the companies.

From the point of view of the available income, we saw a growth of only 2.1% compared to the previous year (6.7% in 1999). This decrease in the available income caused the dropping in the private expenditure by 3%, but did not influence the public expenditure that grew by 2%, due to expenditures related to the new structures of the Government, consequence of the constitutional reforms, the financing of the municipal elections and the salary adjustments in the public sector. In added values the national consumption fell by 2.1%. See annexes 5 and 6.

In spite of such behaviour of the consumption we can observe an excess of expenditure over the production, which was financed with external savings (36.3% of the GDP). The national savings showed a lower difference (-1.2% of the GDP). Such macro - economic behaviour reflects the vulnerability of the Nicaraguan economy, which is strongly related to the flow of external aids and of external family remittances which play a role more and more important in the economic situation of the country.

We can conclude that the external crisis which involved the country during the year 2000 caused in a certain measure the fall of the available income, which combined with a lower rate of investment, made possible to decrease the deficit in the current account of the balance of payments, but not to avoid the decrease of the international reserves of the country.

## a) Employment

The employment in Nicaragua is quite irregular both at geographical level and as a type. The development of the employment is fundamental for a positive behaviour of the economy.

According to the level of economic activity, which has experienced a considerable growth from the year 1994, the rate of unemployment decreased from 10.7% in 1999 to 9.8% in the 2000, however the unutilized capacity of the market had the tendency to increase. This can be explained by the fact that the new jobs generated constituted underemployment.

In the productive sectors, the jobs were mainly generated in the agricultural, building, trade and the social services sectors, (98% of the total), the agricultural sector representing alone 47.8% of the total. It is necessary to highlight that the problem of unemployment is more current in the countryside where the rate of unemployment is estimated approximately at 14%.

Regarding the formal sector of the economy, the employment level represents 45.3% of the urban economic active population, that even if it has improved by 1.7% in comparison to the previous year, it

has suffered a decrease in the total of the urban economic active population (1%) if compared to the year 1999.

On the other hand the number of workers affiliated to the Nicaraguan Institute of Social Security (INSS) grew by 9.3% over the total number of people employed at national level (6%). This shows a larger expansion of the formal sector of the economy in relation to the informal sector.

It is important to highlight that the growth in the enrolment to social security, had more emphasis in the activities with a low relative growth in added values, such as the manufacturing industry (18.9%), electricity and water (19.8%), while the primary activities, whose growth in added values was 8.4%, had a growth of the contributing persons to the INSS only by 1.8%.

Considering the existing strong relationship between the persons contributing to the Social Security and the companies which pay 2% to the National Institute of Technology (INATEC), we can conclude that this institution covers in geographical terms the urban areas and in economic terms the trade, services and manufacturing activities by 22.61%, 32.80% and 12.98% respectively.

This coverage level is a limitation for the mechanism that optimize the resources of professional training in those sectors that have an higher contribution to the Gross Domestic Product, as it is the case of the primary activities which contribute by 29.5%, but in terms of enrolled companies it represents only a 9.0% of all the companies registered with INATEC.

Regarding the level of contribution to the Social Security it should be added that the sector of primary activities generated in the year 2000 60% of the employment and 55.8% of the export.

The growth in the number of people employed in the agricultural sector (8.7%) is higher than the general growth of employed persons in other sectors at national level (6%). This should be attributed to the intensive use of the manpower in the seeding and harvesting of wheat and coffee.

The increment in the productivity<sup>1</sup> of the mentioned economic sectors was fostered by the training courses offered by the various training centres at national level (846 courses in the year 2000), with particular impact in the trade and service activities which offered a total of 615 courses in the year 2000. The productivity of these sectors improved by 5.6% if compared to the previous year.

Regarding the activities of the primary sector, which benefited from 85 courses, the indicator has also been positive by 6.6%, reflecting in that way the positivity of the principle of prioritizing the training courses.

#### b) Evolution by sectors

## b.1. Primary activities

From the point of view of the sectors, the added value of the agricultural sector grew by 7.9% in the year 2000, thanks to the agro-exportable products, but the domestic consumption decreased by 1.2%. It has, however, to be noted that the cattle production registered an increase of 9.9%, increasing its participation to the GDP (8,2%) by 0.4% in comparison to the previous year. See annex 7.

The increase of the cattle sector was supported by an increment in the forage availability and by an increase in the export price of bovine meat and of livestock.

In relation to the milk sector, the production increased by 3.6%, higher than the previous year (2.7%). This level of growth was possible thanks to the reduction of the number of female cattle slaughtered during the last six years, which had an impact on the number of births, and thanks to the increase by 14% of the price paid to the milk producers in comparison to the year 1999.

<sup>&</sup>lt;sup>1</sup> The productivity is calculated as relation between the sectoral added value and the employees of the sector.

It is important to underline that out of the 3.6% increase in the milk production, only 1.6% represents an increase in the volume of the milk stock of the industrial plants, whereas the remaining 2% went to the cheese production (for both national and export markets). These data demonstrate the strategic role that the milk sector has for the national economy of Nicaragua.

The Fishing sector grew by 7.3% in its added value and its export is at the second place of the total of the traditional exported products. It has to be highlighted that in the last six years the investment in the fishing sector has increased the exports of this sector by an average of 20.4%.

# b.2. Secondary activities

The manufacturing industry has been the economic activity with less growth during the last years (1,8% in the decade of the ninety). This situation was particularly evident in the year 2000. According to the evolution of the added value of this activity, it grew only by 2% in relation to the year 1999. More positive was the impact in the food branch (4.2%), non-metallic minerals (2.2%) and leather and footwear (2% and 3.5% respectively). These results allowed to compensate the fall in the production of beverages (-1.2%) and textiles (-9%). Annex 8.

It has to be highlighted that in the case of the of beverages sector, the negative trend was caused by the increase in the tax imposition on rums and beers, which provoked a decrease of the demand.

Moreover, it is also necessary to point out that 75% of the gross value of the industrial production of Nicaragua was generated by the big enterprises, 17% by the micro-enterprises and only 8% by the medium enterprises. This shows the small contribution of the micro-enterprises to the industrial production, which is the result of the process of commercial and tariff deregulation to which the sector underwent during the last ten years.

The survival of the micro enterprise in Nicaragua will be possible only starting the process of modernization of the equipment and the training of the work force. This will allow an increment in the productivity of the sector, as it has been observed in other sectors of the economy.

Concerning the building sector, we observe a decrease comparing the 47.3% growth in 1999 and the 10.4% in 2000. This contraction is due to the decrease in the private investments by 20% in comparison to the previous year. This decrease is partly due to the electoral process, with the municipal elections in the year 2000 and partly also to the ending of the reconstruction works due to the hurricane Mitch.

# *b.3. Tertiary activities*

This important sector of the Nicaraguan economy grew in 2000 by 2.7%, lower than the rate observed in the year 1999 (4%). This is fundamentally due to the contraction of the global offer in the country, and to the bankruptcy of two important private banks. This situation caused a reduction of the perceptual participation of the tertiary activities to the formation of the GDP, decreasing from 43.3% in the year 1999 to 42.6% in the year 2000.

# 2. Macro-economic perspectives for the year 2001

Some political factors have to be added to the previous macro-economic context, regarding the development of the economy of Nicaragua. Municipal and national elections in Nicaragua in the year 2000/2001 have introduced elements of recession in the national economy.

The persistence of risk elements, both exogenous and endogenous, could slow down the growth of the economy in the near future. Exogenous factors that have to be mentioned are those which refer to the external crisis and the international low prices of the agricultural products, like coffee and sugar.

As for the endogenous factors, it is important to point out those referred to the foreign debt, to the internal debt and to the socio-political factors linked to the country risk assessment.

If considered quantitatively the economy's growth rate is expected to have an increase of maximum 2.5%, with impact on the reduction of the investments (so much public as private) and a lower growth of the agricultural production. The latter is a consequence of the fall of the international prices of the main exportable products of the country.

On the other hand, from the point of view of the manufacturing industry, it is foreseeable the same low growth (2%) as in the year 2000. However, it is important to note that in this growth, the cattle production will have a major role, particularly regarding the milk production and its by-products.

The milk production will be influenced by important investments in the milk storage, made by the main pasteurization company of the country (PARMALAT) and by the establishment of production agreements with the cheese producers in the departments of Boaco and Chontales. These actions are, therefore, improving the commercialization of the products both at national and international level.

As for the tertiary sector, a growth of around 3% is foreseeable through the activities of trade and of the bank system.

As for the activities of the government, according to the national budget, approved by the National Assembly, a 10% increase was decided in respect to the year 2000. Recent negotiations with the International Monetary Fund (I.M.F.) recommend a substantial reduction of this rate to 15%, foreseeing a 3% decrease of its added value when compared to the previous year.

## 3. Reasons for the assistance of UNIDO

The assistance of UNIDO for the execution of this project was determined by the necessity of continuing in a coherent way the support program to the industrial sector and particularly to the SMEs, based on the concept of development of networks. UNIDO has developed specific experiences and a well-established methodology in this field through implementation of similar projects, as well as through the management of objectives oriented planning. Projects based on the strategy of SMEs' network development are currently implemented by UNIDO in Central America, Latin America and Asia.

This project in Nicaragua is benefiting from the expertise developed by UNIDO in other countries, through acquired know-how, institutional contacts and participation in joint-learning activities.

It has to be added that the project has also benefited from other UNIDO's expertise, like:

- Specific sub-sectorial experience related particularly to the development of industrial districts.
   It is of particular interest the involvement of experts in these sub-sectors, which facilitates the provision of specialized information.
- o Identification and integration of national and international experts with experience in various fields and periodical monitoring of their work.
- o Organization of study tours, entrepreneurs' commercial missions and supporting missions of UNIDO's staff.
- Experience in the field of environment protection. Co-operation with the activities of a national cleaner production centre in Nicaragua, which is implemented by UNIDO and also financed by Austria.

# 4. Institutional context of the project

Presently there are several programs of support to SMEs in Nicaragua. The Ministry of Industry, Development and Trade (MIFIC) and the Nicaraguan Institute of Support to the Small and Medium Enterprises (INPYME) are the co-ordinators for the government assistance to the SMEs. The mandate of these above-mentioned institutions is to provide the SMEs: technical and financial assistance, improving

the access to the foreign markets through the co-ordination of the available resources offered by the Donors.

INPYME is an autonomous institution created in 1991, under the name of PAMIC, thanks to the support of several bilateral donors as well as of UNIDO and IDB (Interamerican Development Bank). INPYME provides financial and technical assistance to micro-enterprises, to NGOs, and to other organizations involved with the SME sector in individual programs of support. A network of 16 NGOs, which provide financial support to micro-enterprises, is linked to this organization. More recently INPYME has given more emphasis to the services offered directly to the micro- enterprises, especially in the manufacturing sector.

The on-going programs of assistance depend largely on the support of the bilateral and multilateral cooperation. Important Donors are: Austria, Belgium, Denmark, Germany, Holland, Norway and Switzerland, among others.

Beside the above-mentioned support institutions linked to INPYME, there are also 18 NGOs, which provide financial support to SME sector. Their priorities are based on geographical areas and specific economic sectors.

Most of these NGOs offer loans based on market interest rates. However, the requirements for collateral securities are lower than those required by commercial banks. The loan usually includes a package of training, which is specifically designed to improve the administrative capacity of the borrower.

Nevertheless, it is necessary to underline that, in spite of the importance of these micro-lenders, the small industrial enterprises still have difficulties in obtaining adequate financing. This can be explained by the long periods of amortization of the investments made and by the long cycle of production, which increases the working capital requirements.

On the other hand, due to the disappearance of an extremely important bank of the State, the Nicaraguan Investment Fund (FNI) remains the only institution that offers soft loans to the small enterprises. However, the Fund still requires a solid feasibility study to justify the viability of the considered investment. Most of the SMEs lack the technical knowledge to design and execute these projects.

As for the training, a variety of institutions organize training courses for the SMEs. The most important are: the National Institute of Technology (INATEC), which is the central public institution for professional training that offers courses on technical and administrative subjects and covers the capital and the most important urban agglomerations; INPYME; the National Chamber of the Small Industry (CONAPI); COPEMENIC, an association for the co-operatives of the metal-mechanic sector. These institutions make strong efforts for the training of the SMEs.

Only few SMEs benefit from these training programs due to the lack of knowledge about their existence and because the courses are not focused on real necessities, but are only based on the capacities and objectives of the training institutions.

The methodology applied by UNIDO in previous projects tried to overcome these problems. The idea was to increase the internal capacity of the enterprises to better define their own training needs and to establish a correlation between their needs and those of the institutions providing the training.

The technical assistance in Nicaragua is offered by institutions linked to specific sectors. Among others stand INPYME, CONAPI, the National University of Engineering (UNI) and the FNI. Some international NGOs provide technical assistance through international volunteers and experts.

## 5. Project document objectives and expected results

The purpose of the project is to consolidate, diffuse and diversify the experience and the results obtained with the implementation of the previous project US/NIC/94/012, particularly with reference to:

- o Consolidation of the SMEs networks created during the first phase of the project. New networks will be formed (30) and the methodology for the constitution of networks will be diffused through the training of a group of networks brokers.
- o Diversification of the concept of enterprises' co-operation to include the promotion of linkages between the SMEs or networks of SMEs with the large industries. Favouring in this way the integration of productive chains with focus on the suppliers development.
- o Promotion of the cluster concept at the level of local communities, fostering the creation of local industrial districts.
- Use of the networking concept at the institutional level to promote the diffusion and exchange of the know-how, on clusters and networks, between institutions and projects that operate in different countries.

The expected outputs at the end of the project are the following:

- o 30 networks of SMEs will have been established and will have generated new business opportunities for the participating SMEs.
- o 30 network consultants trained and operating within local institutions of support to promote the creation of SME networks applying the UNIDO networking methodology.
- o INPYME, especially its Entrepreneurial Support Division, will have the capacity to direct and promote the activities of the networks in Nicaragua.
- o A training package will be available on the principles and techniques to promote productive chains integration in Nicaragua.
- o At least 10 successful cases of linkages between small and large enterprises will serve as model cases for the promotion of the industrial integration in Nicaragua.
- o Institutional capacities will have been established for the support and development of industrial districts in different areas of Nicaragua.
- o Industrial district projects will have been developed in at least three localities of the country.
- o INPYME and other institutions of support to SME will be linked to the UNIDO electronic platform of clusters and networks, through which will exchange information and experiences.
- O Joint learning seminars will have produced opportunities for professionals, operating in the area of networks and clusters, to exchange experiences, information and expertise with professionals from other countries.

#### III. PROJECT IMPLEMENTATION

#### 1. Generalities

Approved at the end of 1997 and with the estimated starting date January 1998, the project started its activities in April of the same year, having the National Program of Support to the Micro Enterprise (PAMIC) as the Government Counterpart Agency. Then, the Government of Nicaragua changed PAMIC into INPYME, the Nicaraguan Institute of Support to Small and Medium Enterprises, a decentralized institution under the Ministry of Industry, Development and Trade (MIFIC) to reinforce the institutional framework. Changes in its direction weakened temporarily the role of INPYME as counterpart. However, from the year 2000, an intense and sustained commitment towards the co-operation was developed.

The project continued and enlarged the activities of the project US/NIC/94/012, "Assistance to the Modernization of Micro and Small Scale Industries in Nicaragua", for the promotion of horizontal networks, which began in March 1995. In 1999 the promotion of vertical networks and industrial districts (clusters) was added to the objectives. This had a multiplier effect with regard to the previous project. Generally the project in Nicaragua is known as UNIDO project, in spite of the existence of other UNIDO projects in Nicaragua.

Demonstrating how much the MIFIC appreciated the project in the previous phase, its former co-ordinator was appointed as Executive Director of the Counterpart Agency. This was the reason for his substitution with a consultant of the project, as new Project Co-ordinator. The Executive Director's resignation due to personal reasons was the cause of a period of uncertainty for INPYME.

During the present project the coordination of the project, with the support of the UNIDO Project Manager, replaced some professionals who had opted for other activities and some contracts were not renewed. Personnel with even higher qualifications was recruited. The current team was finally completed during the second half of the year 2000.

The activity of the consultants is strengthened by the close co-operation with staff of the counterpart institution, INPYME, and of other institutions that are adopting the methodology proposed by the project.

Different international consultants gave an important contribution as much to the design, as to the implementation and adaptation of the methodologies and to the training.

During the year 2000, the relationship with CADIN, the Chamber of Industry of Nicaragua (started in 1999) was consolidated. This institution provided an office and some services to the team, which deals with the vertical integration of the enterprises, and it integrated the project team very visibly in its structure for special projects.

The project has established a wide network of co-operation and for the transfer of its methodology. This has facilitated the mobilization of economic and human resources to increase the impact of their work.

Considering the delays caused by external factors and the savings achieved by the leverage of external resources, the UNIDO project manager and the national co-ordinator decided to request a project extension until the 30 June 2001. It would be more convenient and possible to extend it further until at least the 31 December 2001, to facilitate the complete execution of the objectives and the bridging with a possible continuation of the project, which is recommended by the evaluation.

## 2. Project strategy

The project follows the philosophy and vision of managerial development, by which one of the fundamental factors for the managerial competitiveness is the system of relationships and connections between companies, through a co-operation approach within competition. These relations are strengthened by mechanisms of support that generate capacities and services. This system allows to consolidate the

production specialization and complementation among companies, to diminish transaction costs and to generate external economies, facilitating improvements of quality, productivity and economies of scale.

The project considers that co-operation relationships reinforce the capacity of the companies to obtain strategic information, to take efficient and effective decisions, to accelerate learning processes and to increase the flexibility and collective answer capacity in front of the challenges of the market.

The project intervention is targeted on goods producers in the industrial sector and on their relationship with the market, with other companies of all kind and institutions involved in managerial promotion. Also with state and private entities, related to the establishment of the framework and the rules of the market and providers of auxiliary and related services.

# The project:

- is conceived as catalytic element as well as guidance and support to processes of inter-company co-operation, realized thanks to the effort of the companies themselves and in co-ordination with state and private entities responsible for the SMEs promotion;
- supports the constitution or the strengthening of horizontal and vertical networks between enterprises (conceived as different types of long term interrelation, with different levels of cooperation and which; in many cases they are associations, co-operatives or industrial chambers);
- favors the generation of industrial districts or clusters (conceived as concentration of horizontal and vertical networks in a territorial space, around a sector or some branches as axis and involving all the companies and entities that offer them inputs or services. These networks or clusters are supported by private organizations of promotion and by the local, regional and/or national government);
- stimulates and promotes the establishment of networks of supporting entities at national and district level, trying to integrate state and private institutions;
- trains local consultants and professionals from public and private institutions in the concepts and methodologies of production chains
- is guided by modern business administration ideas that comprise the recognition of the fundamental role played by the people in each company, the respect and development of the role played by women and the social and environmental responsibility;
- keeps a strict political neutrality, thanks to its status as a United Nations project, which has made it easier to resist initial political pressures, with regard, for example, to the modalities of selection of staff and companies to attend;
- creates, develops and promotes the networks and clusters formation strategy, adapts and develops
  instruments to facilitate these processes, like guidelines and training events. Finally the project
  advises companies and trains their staff, starting with their managers. The technical assistance to
  companies includes some technical and administrative aspects with the scope of facilitating the
  generation of successful experiences in the constitution of networks.

The project has a small team of consultants, brokers and employees. If needed, also some other consultants are selected for the assistance in specific technical and administration aspects, many times mobilizing resources of other entities and of the enterprises themselves. The project multiplies its action through the transfer of its methodology and instruments to several other institutions. Some of these have the role of focal points at district level for the implementation of the strategy and for the formulation and execution of projects with the same philosophy.

The project emphasizes its action with the small and medium enterprises, but it reaches as well large and micro-enterprises.

To stimulate and guide the networks, the project focuses on participation. Therefore, with enterprises that are willing to participate, the formulation and implementation of common pilot projects is firstly proposed and discussed, to pass on then to wider projects, denominated strategic projects, which can help to reinforce the relationship in the medium and long term.

The management consultancy is instrumental to the promotion of networks because it facilitates and accelerates successful experiences. In order to achieve its three main objectives, the project gives its assistance recruiting, if possible, external consultants and preferably involving other institutions. In this way it is able to make available its staff for the main tasks and to stimulate the actions of other entities responsible for the promotion of SMEs and the training of management consultants. The consultancies target mainly at management problems, but also include some technical aspects.

Another component of the assistance given is the training offered at different levels. The training is offered to entrepreneurs of small companies as well as to executives of large companies, to consultants/brokers of the project itself and of other institutions responsible for the promotion of SMEs. In some cases, the training is offered to the technical staff of the enterprises. The project also offers diffusion of information about training possibilities and stimulates participation in them.

The orientation and the activities of the project contribute to develop and reinforce the institutional framework for entrepreneurship development that concerns values and behaviour rules, including the social responsibility, as well as the building and strengthening of relationships among entrepreneurs and institutions favorable to competitiveness.

The project coordinator of INPYME has told the evaluation team that the project reminds the Oriental tale of the bamboo seed: it takes a very long time to sprout, but then, suddenly, it grows at an astonishing rate.

## 3. Internal organization and structure

A national co-ordinator is in charge of the project, under the supervision of the UNIDO project manager, with the assistance of international short-term consultants. Additionally the project has benefited from a series of advisory missions of a UNIDO consultant, who has been assisting the project since the design phase and presently co-financed by CEPAL.

The team comprises, besides the co-ordinator, nine consultants divided in three sub-teams, which correspond to the three objectives of the project. The promotion of horizontal networks has five persons. The vertical networks have three persons. The development of industrial districts has one consultant (with support from the other two teams). These consultants play the role of networks brokers and provide technical assistance and training.

Each sub-team constitutes the support unit foreseen in the project document. In the case of the unit supporting the industrial districts, a consultant financed by INPYME has been added to the consultant recruited by the project.

The consultants/brokers of the project, with functions of assistance and promotion, have been carefully selected and are fully competent, which is generally recognized, internally and externally and not only by the beneficiaries of the project.

The project also has a small and efficient administrative and support team.

The evaluation team has verified the existence inside the project of efficient internal mechanisms of planning, follow-up and control of the activities.

Periodic meetings are organized with participation of the personnel of each unit. Other more general meetings could be organized more frequently to promote a bigger interaction among the initiatives and among the assisted enterprises. This is especially important to reinforce the promotion of industrial districts in the two selected departments, where the milk production sector is the most important, and to diffuse this working perspective in the other networks.

# 4. Budget, facilities and equipment

The budget of US\$1,366,600, provided by the Austrian Cooperation (excluding the contribution of the local counterpart), is covering three years of activities. It corresponds to the magnitude of the objectives and to the characteristics of a project entrusted to an international organization and utilizing international consultants. Something more than a million dollars had been spent until the end of 2000. The available remaining sum allows to cover the expenses of the project until the term provisionally extended of June 2001. A further extension until end of 2001 or beginning of 2002 is possible with the same remaining funds.

The rate of expenditures of the project, slower than foreseen, is due to a double-fold strategy: reduction of expenses to compensate delays in the first year, due to factors external to the project, and leverage of resources from other institutions to replace other incomes foreseen to enlarge the span of the activities of the project.

The project has a central office shared with a project of UNDP. The unit of vertical networks is hosted in the premises of the National Chamber of Industry (CADIN). The central facilities are not very large, but are sufficient and are well utilized.

Regarding the equipment the evaluation team has noted the inadequacy of computers, as much in number as for obsolescence, as well as of phone lines, which hinders the activities of the consultants. The evaluation team has also noted some logistical difficulties in the local transport. This point is more detailed under the Chapter on Recommendations.

# 5. Establishment of horizontal networks and of institutional capacities of production chains (objective one)

The project has contributed remarkably to establish, improve and make durable the relationships between companies of different scales and production sectors and between companies and institutions entrusted with promotion of SMEs. This has been mainly achieved through the promotion of the project philosophy and vision of competitive development, which is based on co-operation and association between entrepreneurs. This is accompanied by the transfer of the tools to implement this co-operation, through the methodology step by step, and also by information and the established network of relationships.

The project has promoted and supported the establishment (in some cases, the consolidation) of networks among enterprises of the same sector (horizontal level), both from the horizontal networks unit and the unit for the promotion of industrial districts. These networks include informal groups of enterprises, cooperatives, associations or cooperatives of enterprises, associations of cooperatives and the relationships among them. This refers to tanneries, metal-mechanic, wood and furniture and milk by-products sectors.

Thus the establishment or strengthening of the networks has been stimulated by the results achieved through the project concerning production, productivity and profitability. At the same time it has stimulated enduring dynamics of improvement and innovation in each enterprise. The concrete improvements which have led to these results, are, for instance, also in micro enterprises, the introduction of better machines and tools, new technologies, including environmental concerns, changes in the organization of production (internal planning, specialization, optimal use of the available resources, assignment and control of responsibilities, prevention, detection and correction of mistakes), exchanges of services among participants in the network, product development (models, specifications, finishes) and of

selling mechanisms (catalogues, premises for exposition to the public, support for export), more adequate relations with suppliers and traders, better registers and accountability.

In total, the project has promoted the following number of horizontal networks:

Type of assistance	Networks established	Networks closed <sup>2</sup>	Total
Direct	15	11	26
Via methodological transfer	21	1	22
Total:	36	12	48

The promotion is carried out directly, through the consultants/brokers of the project, and indirectly, through consultants/brokers, employed by other institutions.

As for the direct assistance, the project has assisted seven networks in the leather and footwear sector, of which three are still being promoted by the project, other two are well operating, with less monitoring, and two have stopped to function. Of those still in operation 55 micro- or small enterprises are tanneries and 30 in the footwear production. In the wood and furniture sector, assistance is given to three networks (two since 1997, one since 1999) comprising 24 micro and small enterprises. In one case, the co-operative is an old one, already supported by other projects, included one of the Austrian Co-operation. In this case the project targeted the problems of leadership and relationships among the partners carpenters. The other two networks are less formal groups, with only five members each, but with a very strong interaction that can work as example for other producers. Two networks ceased to work for internal problems. In the metal-mechanic sector two networks have been assisted since mid 1999, with 14 micro and small enterprises, while 7 networks ceased to work shortly after their establishment.

To these networks other five are added, whose work plan has been concluded and which will continue to operate without special support from the project. We sum up, therefore, a total of 15 networks established via direct assistance. The total of enterprises integrated in these networks is 182 (more precisely 181 plus a co-operative of 258 members).

The evaluation team has received satisfactory information that explains why some networks have been closed.

As for indirect attention, the project assists professionals from other support institutions to SMEs in the establishment and development of enterprise nets. These professionals learn the methodology of the project through a theoretical and practical training, made by a consultant of the project (one for each case), of about two years duration which includes exchanges of experiences. The institutions with whom this agreement has been signed and that have trained consultants are INPYME, IPADE, CECOOPEMENIC, CEPRODEL, FUNDE, World Vision, ACODEP, NITLAPAN, Project NICAMUEBLE (of INPYME) and the Foundation José Nieborowsky. This commitment and the systematic practical application constitute an important indicator of the impact and of the project's capacity to make others join the effort.

Presently eight indirect networks are functioning, assisted by five institutions, one in the milk sector (with 22 enterprises, in the area of industrial districts), five in wood and furniture (with 37 enterprises) and two in the metal-mechanic sector (with 16 enterprises). Thirteen networks are being established, assisted by other four institutions and one of the previous ones; they correspond to the textile and handicraft branches and the agricultural and tourism sectors. This process is followed by the project through the training and the monitoring of the consultants/brokers being trained in the methodology. The total of the enterprises

<sup>&</sup>lt;sup>1</sup> Including networks in operation and networks closed.

<sup>&</sup>lt;sup>2</sup> In these networks the methodological transfer was not successful.

participating in the networks assisted indirectly is around 140 (inclusive the companies of the 13 networks being established).

The sectors and the enterprises are chosen according to the strength of the sector and its contribution to the GDP, the characteristics, the potential, the attitude of the entrepreneurs, the geographical location, the existing relationships and the potential of interacting with other institutions.

The main methodological instruments for the assistance in the training and management of networks and for the training of consultants/brokers are:

- the manual "Introduction to the Productive Integration";
- a training workshop of 8 days, with field visits and;
- an evaluation tool NET (introduced and applied in August 2000 to six networks to measure and compare their development level, with the support of an international consultant).

The methodology of the logical framework approach is applied. It is necessary to highlight that the effort of methodological systematization made by the project has been remarkable. This is important because the systematization of such a know-how, means to put the bases, for an easier application and for a more efficient monitoring of the impact on one hand and, on the other hand, to facilitate the diffusion of the know-how to other institutions and other countries.

Besides the support in vision, networking and management, the project has provided to some networks small funds for studies and courses (denominated seed money in the project document), and it has supported all networks with small services like taking pictures, reproduction of materials, elaboration of catalogues, lending fax and telephone as well as transportation, occasionally.

The project has been able to mobilize resources, promoting the channeling of the appropriate use of the services of other institutions, mainly to the tannery sector.

The questionnaires distributed to most of the participating entrepreneurs, answered by more than 50 of them, show that more than two thirds are functioning as enterprises since more than ten years, that 40% employ less than 5 people and 10% more than 10 people, that 50% sell less than 20 thousand dollars and 20% also export part of their products.

The project has been able to lever other resources in the sense that it promotes the channeling and the adequate use of existing services of other institutions. This amounts to US\$90,000, mainly in tanneries.

The unit has systematic information of all the processes, precising the contributions of other institutions or projects with detailed data on the management results of the networks and of the companies assisted in the sectors of leather and footwear, wood and furniture and metal-mechanic.

The capacity of the project to replicate its intervention is outstanding. The unit achieves that through the transfer to other institutions with its follow up. This transfer makes possible that several institutions take advantage of the methodology of the project and apply it. This has also a positive impact on the sustainability of the activities of the project.

It is necessary to consider the convenience of differentiating the activity of networks as mechanisms and looser forms of connection and co-operation, on one side, and that of more organized structures, on the other side (as the case of some already existing co-operatives which function as an enterprise).

# **6.** Establishment of vertical networks (objective two)

The unit in charge of the promotion of connections between SMEs and large companies is located in the premises of the Chamber of Commerce and Industry (CADIN). This institution covers more than half of the current expenses, not counting the payroll (thus covering 12% of the whole annual budget of the unit). The commitment of CADIN is an important indicator of the perspectives of sustainability of this unit of the project. There is also a co-operation relationship with the Training Center of CADIN.

The objective is the integration of productive chains with emphasis on the development of suppliers, initially starting from the relationship among medium and big companies and medium and small suppliers. Therefore it introduces a practical model for the selection of suppliers and the improvement of relationships between suppliers and their clients through cooperation.

The experience allows the methodological adaptation and the extension of the relationship not only between clients and suppliers, but also among the suppliers and their own suppliers, often of smaller scale.

This way of working promotes a cultural change in the companies because they are considering the suppliers as partners, are more appreciating the quality and are introducing the notion of continuous improvement, together with a better planning, a more active involvement of the personnel and a larger investment in their training.

The main methodological instruments developed in co-operation with a project of UNIDO in Mexico (co-operation that has allowed to save funds of the project in Nicaragua), are a methodology of promotion of the suppliers relationships and suppliers' selection, a computerized method of diagnosis of each company and a plan of improvements elaborated with the participation of the staff and with verification mechanisms.

The diagnosis starts with a pre-diagnosis and includes a complex but very effective series of tools regarding quality, social climate, leadership and plain needs.

The diagnosis serves as basis for the elaboration of plans of improvement, whose initial execution is supported by the consultants/brokers of the unit. Afterwards the work is transferred to external consultants promoting in this way the consultancy and the consultancy market.

After an exploratory period, mainly with medium or large companies of footwear, leather, gas and wood, and some commercial contacts with small suppliers, during this phase the unit has worked with 4 large client companies (coffee, footwear, milk by-products and liquors) and 9 supplying companies of diverse branches (some connected to more than one client). This has resulted in the promotion of 13 co-operation connections (3 more than those foreseen in the project document). The clients have been selected among those members of CADIN more willing to take this challenge, and the supplying companies according to the methodology of suppliers' selection provided by the project. The clients have annual sales between 3 and 30 million US\$, the supplying companies between 50 thousand and 4.5 million of US\$.

The assistance to each company is adjusted to its characteristics and specific needs. The training is offered according to a few or many companies according to the relevance it has for them. Sometimes the assistance is recommended through courses offered by other entities. To share the costs the companies prefer in general training directed to several companies. Exceptionally a workshop has been organized for the whole personnel of a company, which often is the most effective way to guarantee a deep change.

The vertical network unit offers seminars and workshops, lasting from six to thirty two hours, several of them utilizing adapted tools of General Motors and of Japanese companies, on management, strategic planning, introduction to quality management, personnel development, purchases and human relationships, already realized, and quality control, leadership and communication, sales and client assistance, planned. The training on human relationships has been provided by another institution at no cost for the project. The detailed register of participants reveals an attendance of 90%. This and the large participation of main executive officers of the companies is considered by CADIN as an exceptional achievement.

There is also a workshop, in two parts, of two and thirteen days respectively, for the training of consultants in suppliers' development.

There is a very detailed report on the assistance given to each company, including the progresses and limitations. The assistance to a second group of clients and supplying companies is being prepared.

As for co-operation connections with other institutions, the unit co-operates closely with four universities (UNI, UNICA, UCS, UCEM), regarding training of consultants. There is also co-operation with

consultant companies and with senior expert services of Canada, Germany and Spain. With GTZ and Swisscontact there is a mutual cooperation in services, exchange of methodologies and databank of consultants.

# 7. Establishment of industrial districts or clusters (objective three)

This objective foresees the creation of three industrial districts and the development of the local capacities of support to the enterprises, the establishment of focal points constituted by other institutions, which take the methodology, and the generation of co-ordinated actions for a sustainable development. The international experience shows that this objective is too optimistic. Therefore, the project has readjusted this objective propitiating the initiatives for the generation of industrial districts and has reduced the intervention to two departments, Boaco and Chontales (with extension to the neighbouring area of New Guinea, in Zelaya), and has centered the action in the milk sector, main axis of the economy in this area.

This responds to the fact that 70% of the land of Nicaragua is dedicated to cattle raising and that milk contributes 25% to the agricultural GDP. Of this 80% is processed by micro and small enterprises and in these two departments takes place more than half of the milk production, which represents more than 90% of their GDP.

The methodology tries to identify, with the participation of all the economic, political and social actors, the potentialities and development opportunities as well as the bottlenecks to face in the territory, with relation to a specific economic sector and the chains of value that it involves. The methodology is to promote specific strategies of development, articulating companies and institutions, based on strategic plans. A basic mechanism for their elaboration and execution is the promotion of agreements through inter-institutional commissions.

The staff of this unit, the responsible member of the project team and the person designated by INPYME (who was before working in the Foundation Niebrowsky) are specifically qualified. They have made a systematic work, promoting and integrating horizontal and vertical networks in the milk sector, and stimulating the local organization for the promotion of production, with private and state actors interacting (from the central and municipal government). They have developed in both departments a very good level of relationships and of knowledge of the milk sector.

It is comprehensible, that due to scarce staff and the short time, there has been little interaction with related and auxiliary sectors. This point has to be reinforced in the future.

Thanks to the mobilization of resources of other entities, especially for the assignment of the consultant/broker trained previously by the project, it has been possible to carry out the work of the unit with a saving of around two thirds of the foreseen total budget.

To promote the local competitiveness the unit has instruments for diagnostics, with the participation of local partners, and for the specific analysis of the technology, the market and existing organizations, as well as for the elaboration of action plans and the selection of focal points.

For the development of its work the unit has as strategic allies INPYME, the National Program of Competitiveness and the Program of Livestock Development, (PRODEGA, financed by the Finnish Cooperation), and as focal points, in Boaco the Foundation José Nieborowsky and in Chontales INDE.

PRODEGA provides technical assistance to the milk producers, has assumed the philosophy of the project and supports the staff of the project in the field. In turn PRODEGA receives support from the project concerning management of producer organizations (in this case cooperatives). The project concentrates its technical support on the producers of milk by-products.

The stimulating and not overbearing character of the project is evidenced by the heterogeneous answers to the offers generated by the project on behalf of the big milk processing companies toward producers and suppliers. Some of them have accepted the offers and conditions requested by the large companies, while others have preferred not to make it, but maintaining in both cases the co-operation with the project.

# 8. Coordination and national and international cooperation (objective four)

The team, in particular through the national co-ordinator and the unit co-ordinators, has established a large network of relationships with the State, entrepreneurial and promotion entities which allow to fulfill the objective of promoting the coordination and synergy among different actors in the promotion of networks and industrial districts, facilitating in this way the accomplishment of the objectives.

It has been noted in numerous cases that the relationships with private and state institutions in Nicaragua are good and there is no evidence of conflicts.

The project has excellent institutional ties with the National Program of Competitiveness, of the Vice-presidency of the Republic, with the respective authorities of four ministries, with numerous entities of promotion and of international co-operation, as well as with universities.

The co-operation with UNDP Mexico has reinforced the methodological contribution and the alliance with ECLAC meant a significant saving in expenses for the consultancy of the international adviser of the project.

The management of the project decided to leave aside the electronic platform, because the mechanism foreseen by UNIDO in this respect, was not realized for factors external to the project itself.

In October 1999 the project participated in Santiago (Chile) in one of the two foreseen training seminars for the consultants/brokers of networks organized in co-operation with CORFO, Association for the development of the production (Chile). The seminar has allowed a better understanding of the methodology by the three active staff of the project and by other 6 persons of other institutions of Nicaragua. The realization of a second seminar is foreseen this year in Managua. Moreover, two courses in Managua with international consultants' support have also been organized.

As regards diffusion, the project has maintained a low profile, having opted to publish information notes in the bulletin of a project of managerial promotion (the NGO Nitlapán), also financed by the Austrian Co-operation.

The project has attracted the interest of other institutions supporting SMEs in Central America. These institutions have requested support to learn and apply the methodology of productive integration. To respond to this demand, under the activities of the fourth objective, the project has provided awareness raising seminars for technicians and companies of the Chamber of Industry of Guatemala (in the framework of a UNIDO project financed by the Swiss Co-operation) and it will organize this year another similar seminar in El Salvador, financed by Swisscontact.

# 9. Project staff

The project has been able to attract and maintain highly qualified consultants, with attractive, but not excessive, salaries for the Nicaraguan professional market. The personnel is loyal to the ideas of the project and its methodology. The staff has professional capacity, strong motivation, enthusiasm, dedication and is efficient, showing practical sense. The evaluation team has also perceived a great cohesion inside the team and a remarkable external recognition to all the members of the project (which includes attempts made by other institutions trying to convince the staff of the project to work for them, leaving the project).

Part of the personnel has been replaced progressively to improve the qualification of the group. The few persons who have left the project, have made it for personal opportunities or problems.

During the interviews the evaluation team has received appreciation for the work of the previous consultants and for the continuity in the assistance despite the changes.

The national project co-ordinator exercises her responsibility in an efficient and effective way. She is unanimously appreciated and enjoys an extraordinary external recognition by all the parties involved in the project.

# 10. International consultants' participation

The project has had the services of international consultants, somehow linked to UNIDO or other organizations in the United Nations system. In several cases through co-operation agreements that have allowed to save funds of the project:

- Marco Dini is the joint author, for UNIDO, together with Alejandro Pardo, for UNDP Mexico, of
  the document "Introduction to the Productive Integration" (1999), that picks up experiences of the
  project of Nicaragua and that it is used by this project as instrument for the training of the
  consultants.
- Carlos López Cerdán is a Mexican consultant that has co-operated in the elaboration of that document. He is adviser in several Latin American countries on matters concerning industrial integration and networking.

Both consultants had interviews with the evaluation team during the mission in Nicaragua.

The project has also promoted the participation of international consultants in certain technical aspects. Based on external opinions, on the revision of the documents produced and the practical results of their participation one can consider that these consultants have been very well selected and that they have fully honored their commitments.

This can be noted in the studies prepared, the manuals produced or adapted by them and through the recognition demonstrated by the clients, the counterparts and other institutions, when their collaboration was involved.

## 11. Considerations about gender and environment

Explicit gender considerations are not indicated in the project document. However, the management of the project in Nicaragua and also UNIDO promote equal opportunities for men and women in the team, in the client companies and in the entities receiving the transfer of the methodology.

The attention to gender can be noted in the weight of professional women in the team (UNIDO project manager, national co-ordinator, responsible for the unit of clusters promotion, responsible for administration) and in the active participation of women in activities and in management positions in networks promoted by the project (even in cases where the husband is also a participating member).

Although it is not an explicit objective, the project continuously takes care of environmental consideration. This consideration serves as criterion for the selection of possible alternatives in the promotion and co-operation with other entities including the guidance of technical solutions. In that sense the project has co-operated closely with the Environmental Unit of INPYME, and, once overcome the problem regarding the institutional location of the project of Cleaner Production (also financed by the Austrian Co-operation), it has started to co-operate with this project in the leather branch. A larger co-operation in the milk sector is also foreseen.

The evaluation team has noted that the project has contributed to the development of the environmental conscience among entrepreneurs, combining criteria of social responsibility with the opportunities of reduction of costs and risks.

## 12. Reports on activities and monitoring

The project has prepared the foreseen reports and has organized a tripartite review meeting in February 2000, but has not carried out the foreseen second one.

There has been good communication between the co-ordinator and the responsible for the Austrian Co-operation in Central America, but the modality and a certain irregularity in submitting the reports has not facilitated an appropriate understanding of the dynamics of the project, motivating justified doubts in the Austrian Co-operation on the success of the management of the project.

To this has contributed, regarding the communication with the Headquarters in Vienna, the lack of information in English (not foreseen in the project document). The local Nicaraguan counterpart has also mentioned that, beyond the established co-ordination, it would be useful to have also written periodic information to be transmitted to the national authorities.

The evaluation team has noted the existence of a good system of internal registration that has allowed during the evaluation, to produce reliable and systematic information on the activities and on their impact on companies and networks. This has also permitted to answer exactly to the questions made by the evaluation team (with the help of charts).

However it has to be pointed out that the criteria for gathering and elaborating the information are not uniform. This caused additional time for the project staff to elaborate the information and for the evaluation team to process it.

UNIDO, from the Headquarters in Vienna and through periodical trips of the project manager, has carried out a systematic monitoring and has contributed to the appropriate orientation of the work.

#### IV. RESULTS AND ACHIEVEMENTS OF THE PROJECT

#### 1. General results

The project constitutes an original and effective contribution to the entrepreneurship development, especially of the small and medium enterprises in Nicaragua. Its action is situation mainly, at the micro and medium level, introducing fruitful strategies and methodologies, which are requested and can be adopted by several entities. The project has evident effects at macro level in the design of state policies and in what some analysts call the level "meta", concerning values and attitudes of the actors.

The project has covered the productive sectors and branches and the geographical areas foreseen and has reached in general the goals of the four objectives. This has meant to work in 17 municipalities located in the area of bigger concentration of population of Nicaragua, with emphasis in six departments (Managua, León, Masaya, Granada, Boaco and Chontales). The productive branches have been selected considering their importance for the national economy, their dynamism and receptiveness as well as the local density of the SMEs.

Regarding the objectives one and two, the promotion of horizontal and vertical networks, the success has been total. In the case of objective three, the development of industrial districts, the result has been partial due to a non-realistic formulation of the objective. In the case of objective four, the achievement has been partial due to the non-realization by UNIDO of the necessary electronic platform.

In verifying the impact of a project it is difficult to abstract other influences, and it is impossible in a context of multiple projects like Nicaragua. Sometimes even in the same areas and sectors and with the same clients. However, on one hand, there are not many clients of the project assisted directly by other projects, and on the other hand, the project tries to help the enterprises to take better advantage of all the factors of competitiveness at their disposal, including the offers of other projects.

The impact of the project regarding the competitiveness of the enterprises (which we will present later in more detail referred to each objective) is expressed in absolute terms in increments of productivity, sales and earnings. In relative terms, it can be measured comparing the results of similar companies, in a context of widespread recession of the economy and considering sharp problems in the leather, footwear and milk sectors. There are some remarkable cases of recovery of companies thanks to the support of the project.

The project has contributed to guide the client entrepreneurs in a very exact appreciation of the needs, real possibilities and risks of obtaining credits, identifying location and access to funds and to credit entities. Moreover, the project has contributed to a better knowledge of the national and international market and of the possibilities and risks of the export also using the experience of the participating enterprises themselves.

However, the project has not taken note systematically enough of these experiences, as learning tool for all, both enterprises and consultants. These experiences could have been diffused (anonymously or with the permit of the actors) and analyzed jointly.

An important effect of the project is the optimization of the impact of other projects through the synergy expressed in the spreading of information and contacts, enabling them to act with more competitive entities, which leads to a reduction of the risks. This is true both for projects of support to production and of credit.

The project has achieved a remarkable fine-tuning with large and small enterprises and big and small entrepreneurs associations concerning the social responsibility which includes the environmental responsibility.

The project has been able to counter its own tendency towards dispersion. It has also overcome the usual resistances of the enterprises, and other resistances, more specific of Nicaragua, deriving from the type and level of polarization, and especially from recent negative experiences with a cooperativism subordinate to the State.

The project has achieved impacts that go beyond the foreseen objectives. The impact is evident in the spontaneous replication of the methodology by the participant entrepreneurs and it has generated a demand requiring more attention than what can be given. These demands are coming to the project from small managers of various departments as well as from companies members of CADIN, through networks and assisted entrepreneurs and the consultants/brokers themselves.

Contrary to many projects for SMEs that, in practice, work mainly with micro-enterprises, the project has been able to maintain the focus on the small and medium enterprises and at the same time, to include micro-enterprises with potential, to transform themselves in small companies, and also some large enterprises able to mobilize smaller ones.

In total the project has worked with 364 companies of various sizes (322 in the area of horizontal networks, 13 in vertical networks and 29 in industrial districts) to which you have to add 16 cooperatives in the milk and cheese sector, which alone include around 1400 members.

#### 2. Horizontal networks

As it has been mentioned above, the project has established 26 networks through direct assistance (15 continue to function, with 181 companies and a cooperative of 258 members) and 9 networks in an indirect way (8 continue to function, with 75 companies), through the work of five institutions. Thirteen horizontal networks comprising 65 companies are in the establishment process with the support of four additional institutions.

All the assisted industrial branches have suffered, in the year 2000, the economic recession (increased by the political uncertainty related with the municipal elections) that has implied the crash of several banks, with as a consequence the reduction of the internal market and the lack of working capital of the client enterprises.

Regarding the economic indicators monitored in the networks: in the four networks of the leather and footwear branches are observed very significant increments in the sales up to 1999, more than 30% between 1998 and 1999, but with a similar fall in the year 2000, which brought a crisis to the whole branch. This is due partly to the increase of the price of the raw leather for shortage derived from the epidemic of the mad cow disease in Europe. This has caused an increment of export, reduced availability and raised the prices of skins in the national market. The employment had increased between 1997 and 1998 and, stayed or ascended lightly in 1999. But it lowered in about a third in 2000. There have been significant investments of the networks and of their partners with own funds, as for instance the purchase of a plot of land and of machinery and improvements of the work conditions to increase their competitiveness.

In the three networks covering the wooden branch and carpentry there have been significant increases in the sales in the year 2000. In one network the growth of sales has been of almost 100% in two years, in the other of 50% in three years. In these three networks there has been a decrease of the employment in year

2000, demonstration of efforts to reduce the costs in the face of the crisis. These networks had significant investments for the improvement of the infrastructure, equipment and machinery (so much individual as collective) and supply of raw materials.

In the metal-mechanic sector the sales of the two networks, in spite of the crisis, have been stable, and the employment has lightly increased.

#### 3. Vertical networks

As it has been mentioned in Chapter III, the unit has stimulated, guided and facilitated the establishment of various types of relationships among four large companies, as clients and nine companies as suppliers (some of them to more than a client) for a total of 13 established connections.

These enterprises have received training and have paid an important part of the cost of the six seminars -workshops, in which 170 people have participated. Until the end of the project, other six seminars are programmed with the participation of 252 people. The enterprises also cover US\$23,000 for the costs of assistance during nine months.

The unit has achieved to mobilize almost US\$ 21,000 complementary to its resources. Of those 50% as contribution in kind from CADIN, around US\$3,000 from the participant enterprises, US\$5,000 from MIFIC and INPYME and the rest from other institutions and enterprises.

Since the unit has started its operations in 2000, it is premature to attribute changes in the financial situation with certitude to the work of the project. The best impact indicator for the participating enterprises, which have a developed managerial culture, is the financial participation in the project, and, mainly, the time devoted to the project by the owners, managers or other officials. This participation is considered as extraordinary by the management of CADIN. There is evidence of the role of the unit in the survival of one troubled medium size enterprise and that the sales have increased for some of the supplying companies.

Another important indicator of impact in this area is the commitment of CADIN to continue co-financing the Unit and to promote its work among its members.

Finally it is important to highlight the promotion of specialized services of support to the enterprises (financial and non-financial) that this unit is providing together with other institutions, such as GTZ, Swisscontact, the local universities and private consultants' groups. The idea is that a better and more complete offer of services is promoted to favor the vertical networks and the development of the market of these services.

## 4. Industrial districts or clusters

The excessively ambitious formulation of this objective has meant its only partial execution. This in spite of the fact of having carried out a really extraordinary work that has allowed the execution of the adjusted objective limited to the departments of Boaco and Chontales, with the milk sector as axis. The work carried out has been directed mainly at micro- and small enterprises grouped in cooperatives and networks and their relationships with entities of the central and local governments and with promotion organizations.

The clients enterprises, which benefit more or less directly from the project (through the assisted cooperatives) are around 750 in Boaco and almost 700 in Chontales, involved in the production of milk

and milk by-products, mainly cheese. Twenty-nine SMEs (19 in Boaco and 10 in Chontales) have also received training and in-plant advice.

The project has contributed decisively to the active participation, of all actors involved, in the milk Commission of the National Program of Competitiveness, in CANISLAC, in the inter-institutional commission (which includes the ministries) to facilitate the decentralization of the central government decisions, as well as in local working commissions. The project has contributed to the realization and the diffusion of three technical norms concerning the milk and its by-products.

At the level of cheese producer participants, in close collaboration with a project of INPYME with resources of the IDB (that provided technical assistance of three months to the companies), the project has contributed to the improvement of hygienic and working conditions, quality and diversification of products and of production techniques. This includes the pasteurization, the reduction of production costs, thanks to yield increases of 25% in average (between 10 and 50%, according to product and producer), together with the decrease of residuals, recycling, and mitigation of the environmental impact caused. A better knowledge of the market has also been promoted and the negotiation capacity has been reinforced. Some companies have invested their own resources in equipment and in additional technical advisory services. A strategic plan of relocation of the enterprises that are in the urban area is being formulated to avoid environmental damages and to take advantage of economies of scale in the services.

The evaluation mission has noted also the strong impact on the state entities linked with the milk sector in the two departments of Boaco and Chontales. These entities have been stimulated to coordinate with each other, to adapt their services and control measures to the characteristics of the sector and, thanks to their synergy, to intensify the action with the actors of the project.

A large milk company at national scale, applying the model of vertical networks, has established supply relationships with cooperatives of producers, which include the use of a local brand combined with the utilization of the brand of the company for the export of cheese.

For some activities of promotion of the networks, the project has contributed to mobilize resources of other institutions for more than US\$40,000.

According to all the testimonies received by the evaluation team, it has been thanks to the support of the project that the Nicaraguan Chamber of the milk sector (CANISLAC) has been constituted. It brings together cooperatives of stockbreeders, small milk producers, cooperatives and small agro-industrial producers and large companies processing milk. The Chamber promotes the vertical ties but it has also favored the cooperation among big milk production companies, and it has already an active participation in the formulation of polic ies for the sector and in the relations with other Central American countries.

The Chamber has just been an idea for the past five years, but only recently the catalytic intervention of the project has allowed its constitution, and in a very short time.

## 5. Coordination and national and international cooperation

The project has close relations with several entities and projects in Nicaragua and in some cases also at international level.

A very close coordination exists with the counterpart institution INPYME, which allows an active collaboration with the activities of the project, particularly in the case of the promotion of industrial districts. The cooperation allows also the application of the philosophy and methodology for the strategic

and daily planning of INPYME, which is getting ready to assume or share, in the medium term, the role now developed by the project.

The cooperation with the Center of Cleaner Production, another project of UNIDO financed by the Austrian Cooperation that has as counterpart the National University of Engineering, has been less effective than expected, apparently for the long implementation process of that project. From November 2000 a coordination exists among those responsible for both projects. A cooperation has begun in the tanneries in León and a larger interaction is foreseen to start in the phase of replication of the first experiences of cleaner production. There is no overlapping of functions or structures between both projects, but a positive point of contact in the services that the Center of cleaner production can provide to the companies assisted by the project.

Besides the important cooperation with PRODEGA the project is starting a cooperation with FADES (Project of Reinforcement of the Self-management for the Social Development), financed by the Government of Finland, with GTZ and Swisscontact, and with projects of multilateral banks.

The diffusion of the activities and achievements of the project have been limited to the verbal transmission and through a bulletin of a promotion unit also supported by the Austrian Cooperation, the NGO NITLAPAN. The foreseen web page has not been realized as the installation of a mother system by UNIDO has not been completed.

At international level the methodology has been transferred to a project of UNIDO in Guatemala, financed by the Swiss Cooperation. UNIDO is starting similar projects in other three African countries (Tanzania, Zimbabwe and Senegal), also financed by Austria.

# 6. Impact on the development policies

The high authorities of MIFIC agree with the philosophy and methodology of the project and are committed to its systematic application. This materializes in the inclusion of the promotion of networks and clusters as explicit policies of the Ministry, in the incorporation of the proposal in the policies formulated by the National Directorate for SMEs, and in the contributions to proposals for the leather and footwear sector. The project also participated, on invitation of the INPYME, in the National Commission of Competitiveness, together with MIFIC, where it participated as executive secretary. In this commission four subcommittees for clusters promotion have been constituted: leather, wood, handicraft and milk. In the milk subcommittee the project has made the analysis of the cluster, a benchmarking of better practices and the facilitation of connections among actors.

The project has also contributed to the elaboration of the Strategic Plan of INPYME and upon request of INPYME, participates in the work of CONICYT, Nicaraguan Council of Science and Technology.

The evaluation team had a short meeting with the Minister of Industry, Development and Trade who confirmed the interest in the project and in its continuation, already expressed in an official letter to UNIDO and in its conversation with the Austrian Minister of Foreign Affairs in Vienna.

The philosophy of the project has been endorsed by the Municipality of Masaya (the Mayor is a former consultant of the project). The municipalities of Granada and Leon as well as Juigalpa, have taken measures to support and replicate the project.

With the decisive support of the project and a complementary financing of the UNDP the Chamber of Industry and Trade has elaborated an industrial policy proposal directed to the Government and the political representatives, which includes the main ideas of the project.

## 7. Relevance of the project

The project transmits to managerial sectors of the private and state institutions modern concepts and techniques to stimulate and support the increase of competitiveness. This is very important and urgent for an economy like the Nicaraguan, confronted with a regional and international market of growing competitiveness.

The project contributes significantly to reduce the transaction costs among companies and SME promotion entities and to generate synergies among them, reinforcing the effect of other projects and promotion efforts.

For many state and private entities of SMEs promotion the project has become a fundamental reference. However, it is necessary to strengthen the relationships with some international projects in Nicaragua.

The project has already served as inspiration, orientation and methodological source for other three projects of UNIDO in Africa and it would be extremely useful if its application could be extended to other countries, in particular Central and South America.

# 8. Effectiveness and efficiency of the management

Everything indicates that the management has been effective and highly efficient. It has been able to adequately develop its operating capacity and to achieve significant results in most of the objectives foreseen with a yearly disbursement less than the one budgeted. In this case that does not mean the frequent difficulty of projects to meet the physical investment goals.

The image that the project has given to the evaluation team during the ten days of intense scrutiny is that of an intense and responsible operation, with measured and rather austere use of the resources allocated and an orderly and efficient administration. This has also been evidenced in the realistic programming of the evaluation and the precise execution of the same in spite of the number of persons and institutions involved.

The direction and coordination of the project have applied the foreseen strategy and have adjusted it appropriately to the changes in the context, especially for the temporary internal difficulties of the national counterpart INPYME.

## 9. Clients' appreciation of the services rendered

The unanimity of the positive appreciation of the project by all the interviewed entrepreneurs (micro, medium and large) in the departments visited, has been surprising.

In most of the cases the entrepreneurs have shown the acceptance and understanding that the project does not transfer or offer financial or material resources, but intangibles. On one side, through training, and on the other side, in the form of ideas, orientations, suggestions, information, connections and motivation for a more realistic appreciation and better use of their own forces and the opportunities of the market (avoiding or counteracting the risks) and of the relationships among entrepreneurs and with diverse institutions.

With different nuances the evaluation team has received several times the comments that the project provides to the small entrepreneurs the management support for which the large enterprises pay a lot of

money and that is not generally affordable by the small ones, although they would be willing to pay for it according to their possibilities.

Although it is clear enough that the project does not have as function to provide them credit or market, but just to help them to put together forces to improve their decisions making and to increase their negotiation capacity in front of the markets and the existent credit sources. However, there are some entrepreneurs requesting support for the formation of own credit and commercialization units, especially for the export.

This does not correspond to the objectives of the project and would normally lead to initiatives with few or null chances of success because of the funds and the capacities they need to be profitable. Moreover, this would distract forces of the tasks that the assisted companies have concerning production and the knowledge of the characteristics and opportunities of the goods and financial market.

It has been frequently heard as statement that the consultants of the project have opened new perspectives and made possible conjunctions of efforts that did not seem possible. This can be seen, for example, in the associations of micro- and small entrepreneurs, on one hand, and, on the other one, in the constitution of the Nicaraguan Milk Chamber, dreamt of five years ago but realized only recently with the orientation and the impulse given by the project.

The Chamber of Industry, CADIN, has incorporated the component of promotion of vertical networks in its structure and it values the project so much that it expressed its readiness to become counterpart in case of a continuation and to build the necessary premises. Among their appreciations it has to be highlighted that they consider extraordinary the capacity of the project of putting together people. A demonstration is the full participation of the highest executives of companies in the training events and their paying for it.

## 10. Appreciation of the services by the State and by other institutions

The authorities of MIFIC and of the National Commission of Competitiveness, under the Vice-presidency of the Republic, affirm that the project has opened new perspectives to the policies of promotion of SMEs and that its strategy and methodology is being incorporated in the state policies.

In the meeting with the National Director of SMEs in MIFIC, it was pointed out that they consider the project unique in its concept and fundamental for the optimization of the impact in many other projects in the country. In the meeting had with the Directors of the National Program of Competitiveness the representative of MIFIC said that it is the appropriate project, with the appropriate personnel, at the appropriate moment and in the appropriate context.

The direction of INPYME follows a policy of active cooperation, which is demonstrated in assigning qualified people for a combined work with the project team, and in requesting training for others. INPYME wants to incorporate the strategy and methodology of the project in its plan and is looking for modifying the structure of INPYME to facilitate the application of the strategy.

The interviewed officials of the Agricultural and Forest Ministry (MAG-FOR), of the Ministry for the Environment and Natural Resources (MARENA), of the Ministry of Health and of the Institute of Rural Development, consider that the project has helped to be more efficient and to integrate the activities in the milk sector, in the departments of Boaco and Chontales.

Several municipalities are cooperating in the activities of the project to generate framework conditions more favourable for the SMEs. The Mayor of Masaya has been interviewed by the evaluation team and has expressed his appreciation and support for the project.

# 11. Perspectives of sustainability

In all the countries of the world where the development of the SMEs and micro enterprises is promoted, this activity is subsidized by the State at various levels (central, regional or local) or by private entities of promotion, or in some cases, also by their own entrepreneurs associations.

In a country of lower resources, also penalized by natural problems and internal conflicts, this development task, with more reason, has to be subsidized.

In that sense the perspectives of sustainability can be analyzed at two levels:

- i. How feasible it is and under what conditions a project of this type can achieve its objectives and be self-sustainable?
- ii. How and how much can the enterprises contribute, considering their different scales, to continue this service, to increase its impact and to facilitate its orientation according to the market and the social components?

A continuation of the project has favorable elements in both senses:

- On one hand, a favorable institutional framework has been generated in the State, with the creation of the National Program of Competitiveness and the institutional development of INPYME, and, in the private sector, with the Chamber of Industry (which participates in the formulation of projects) and the Chamber of Milk Sector both ready to continue the kind of activities carried out by the project. It is not probable that the results of the national elections at the end of this year will change this framework, whichever their result.
- On the other hand, the enterprises have had a surprising level of contribution in a country with many promotion entities that offer free services. Additionally it has to be noted that many enterprises are ready to cover a significant part of the costs of specific services and to invest efforts and resources in the realization of the technical, managerial and cooperative plans together with the project.

In this context it is useful to mention that the project had an income, thanks to the services given to enterprises and institutions. The amounts received have been deposited in a bank account opened for this purpose. This sum will be reinvested in support activities for the micro and small enterprises in the framework of the project.

The methodological contributions, the supervision and the image of UNIDO increase the probabilities of success and sustainability of the project.

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In consideration of all the above mentioned and taking into account the total impact of the project, both as reinforcement of the managerial competitiveness as well as the strengthening of the capacities of the local institutions, it can be said that the budget of the project has been invested productively. Although it is not possible to quantify it, the relationship between the cost of the intervention and the generated benefits is largely positive, both in global term as well as in comparison with other projects of technical assistance of the International Cooperation.

### V. CONCLUSIONS

## 1. General appreciation of the project and its context

- o The project is addressing the needs of the development of the industrial sector in Nicaragua, particularly of the small and medium enterprises, as well as dynamic micro-enterprises. The project has been developed with a modern concept of promotion of competitiveness through networks and production chains, based on strategic alliances. The perspective is to develop industrial districts or clusters.
- The project is operating in a coherent way at micro and meso levels for the promotion of the competitiveness, having influence on the final beneficiaries regarding the development of proper values and attitudes at the level of the target enterprises, institutions, government and of the public awareness.
- According to some high level staff members and representatives of the government of Nicaragua, this project is unique in its concept and fundamental for the optimization of the impact of several other projects in the country.
- o The project demonstrates the increasing interest and engagement of the Government of Nicaragua for the development of the small and medium enterprises and for the relevant national and promotional institutions. The project has presently as national counterpart INPYME (Nicaraguan Institute of Support to Small and Medium Enterprises, previously PAMIC), which belongs to the Ministry for Industry, Development and Trade (MIFIC). The INPYME, thanks to its new director, has presently overcome the problems which had delayed in the past the development of the project. The INPYME is deeply committed to the success of the project and is including its methodology in the strategic planning.
- o INPYME is strongly committed to the project and is taking the necessary steps to be able to continue in the future the activities of the project. Changes in its management and a long period of interim direction had affected the action of INPYME until mid 2000. Both, INPYME and MIFIC (through the General Directorate for Industry) have taken the philosophy of the project as guidance for their policy of development of the country and of the SMEs. Moreover the project has the strong support of the National Chamber of Industry (CADIN), which is strongly interested in the continuation of the project and, as part of its commitment, is sheltering the unit of the project dealing with the development of the vertical networks.
- o Generally, it can be said that the project has been implemented successfully, covering the productive sectors and the geographical areas foreseen in its project document. The four immediate objectives have been reached, however with some limitations regarding the third objective, concerning the development of three industrial districts, due to the excessively ambitious design of the project. In relation to the fourth objective, the electronic platform has not been realized, but this has to be ascribed to the fact that the Cluster Electronic Platform planned at UNIDO Headquarters, as provider of information to the business community and to the SMEs related institutions, has not been implemented due to factors external to the project. Other delays are also due to factors independent of the management of the project, like internal problems of the counterparts and some changes in the economic and social context of the country that led to reasonable adjustments in the project implementation.
- o The project has a catalytic role for processes of conglomeration coherent with its objectives, which went even beyond them.
- o The management of the project has been efficient, with competent, motivated and dedicated personnel, both at consultant and administrative level.
- The project has become a fundamental reference for most other institutions supporting the SMEs.
- As indicated by a high-level staff member of MIFIC, during a meeting with the National Council for Competitiveness, under the authority of the Vice-presidency of the Republic, it can be said that

- it is the adequate project, with the adequate personnel, in the adequate moment and in the adequate context.
- The management of the project has very well prepared and organized the evaluation program and has effectively cooperated with the evaluation team in a transparent manner.
- O Very good conditions for the completion of the project have been established and also for its possible continuation. Considering the outstanding quality and the absolute political neutrality of the personnel of the project, there are all the reasons to believe that the present conditions will continue, independently from the results of the next national elections, which are scheduled for the end of this year.
- Considering that this kind of project is normally highly subsidized, even in more developed countries, the surprisingly high disposition of most of the enterprises involved to contribute financially to the project's activities, favors its partial sustainability; and the institutional framework, concerning national and local government and entrepreneurial organizations, allows to expect a long term sustainability of this kind of activities with an appropriate degree of subsidy.

## 2. Regarding the organization and implementation of the project

- The project has benefited of qualified international experts, who have contributed to the development of studies, methodology and instruments, utilizing the results already obtained by similar projects of UNIDO and other institutions in other countries. This achievement results in the large documentation of practical and didactic manuals. Additionally the project has invited to Nicaragua international experts for training courses, highly appreciated by the participating enterprises and institutions.
- The national coordinator of the project is very effective, entertains very good relations with all the parties and is unanimously appreciated by the staff of the project and by the other partners at entrepreneurial, institutional and governmental level.
- The national professionals recruited for the implementation of the project activities are of outstanding quality and highly appreciated by all the parties involved, they are strongly motivated and believe in the methodology of the project. All the parties interviewed by the evaluation team have unanimously recognized the professionalism, the enthusiasm and the efficiency of the project team. The internal relations among the members of the project are very good.
- The project is adequately located and shares the office with a UNDP project. Its internal organization and administration seem adequate, having mechanisms for planning, follow up and internal control. The evaluation team finds that there are some limitations due to the insufficient quantity of computers and telephone lines in relation to the work developed. Additionally there are some logistical difficulties regarding transportation.
- o The project is regularly directed and monitored by the Headquarters in Vienna.
- Although the project has presented more reports than foreseen in the project document, the
  evaluation team has noticed a certain irregularity regarding the timing of the presentation of the
  reports to the Donor, the recipient country and to other sections of UNIDO. The second foreseen
  tripartite meeting has not been realized.
- The relations with the national counterpart, INPYME, are presently very good and continuous, with reciprocal cooperation. INPYME is preparing itself to be able to assume networking and, in the medium term, eventually become the executing agency for the activities of this or a similar project.
- O As UNIDO project it benefits from the positive image of this international organization in the country, politically neutral, which facilitates relations, and from the direction, specialized advisory, supervision, personnel selection and monitoring as well as from the strategic alliances with other organizations of the UN system.
- The evaluation team came to the conclusion that there is no overlapping of functions or of organizational structure with the UNIDO project for the establishment of a "Cleaner Production Center".

## 3. Regarding the achievement of the objectives

- The project has significantly contributed to establish and improve the relations among enterprises of different scales or sectors and also between enterprises and institutions dealing with the promotion of the SMEs. The main role of the project has been to effectively transmit a vision of competitive development based on the cooperation and association of entrepreneurs, providing instruments for this cooperation. At the same time the project has played a very important function in catalyzing and orienting these processes. The project is working with male and female entrepreneurs.
- o Among the achievements of the project stand out the establishment of vertical and horizontal networks in various sectors, the diffusion of the logic concerning clusters and networks and the practical steps undertaken for its implementation.
- Other achievements are:
  - The establishment of ways and actions for the cooperation among enterprises.
  - The training provided to facilitators and entrepreneurs in negotiation skills to prevent and solve conflicting situations.
  - The strong feeling developed among the interviewed entrepreneurs of the importance and of the value of the training received and of the non-immediately perceptible results provided by the project.
  - The building of consciousness about the weak and strong points, the opportunities and the risks of the business (still with limitations concerning the financing possibilities, commercialization and export).
  - The improvement of the management of the enterprises (particularly regarding marketing, business plans, feasibility studies and general orientation) and the training of the managerial personnel.
  - The improvement of the quality of the manufactured products.
  - Better knowledge of market channels, both national and for export
  - The diffusion of information regarding training possibilities.
  - The fact that enterprises have contributed in cash to the costs of the training (in the vertical networks 100% from the large enterprises and 50% from the supplying companies).
- The project has contributed to develop the consciousness for environment considerations and has established some relations with the "Center for Cleaner Production of the National University of Engineering" (UNI), other project implemented by UNIDO. A common action shall allow profiting of the potential synergy between the two projects, especially in the field of milk production and tannery.
- o The incentive to develop cooperation has encountered resistances, due not only to individual tendencies, but also to past negative experiences of a cooperativism subordinated to the State.
- The support of the project has represented for numerous entrepreneurs concrete improvements in productivity and profitability, with better figures than those of comparable enterprises, including the recovery of some enterprises in critical situation. The improvement stimulated by the project range from the maintenance of at least the same levels of sales and profits in sectors with a global decreasing trend, as leather and shoes manufacturing. In some other cases, thanks to the project, several entrepreneurs have registered sales increments of 20/30% in one year, with, in some cases, peaks well above this percentage.
- The impact of the project has been so significant that large and small enterprises of various sectors not covered by the project have requested through the Chamber of Industry of Nicaragua (CADIN), or through the assisted networks, or directly through the consultants of the project, that the action of the project be extended also to their sectors.

- Additionally, the project has achieved the acceptance of its philosophy of development of SMEs by private institutions and by the State. The transfer of the methodology has already successfully started to some of these institutions through qualified consultants.
- The project has also transferred its methodology to a UNIDO project in Guatemala, which is financed by the Swiss Cooperation.

#### a. Objective 1 - promotion of horizontal networks

- The project has promoted and supported systems of cooperation of various types among enterprises of the same field of activity, including associations of producers.
- Thus associations of tanners, cooperatives of metalworkers and of woodworkers, groups and cooperatives of small milk producers have been constituted thanks to the help of the project. Now, they have a well-established organization and good prospects of business.
- The project has directly promoted 26 networks and 22 indirectly, through the methodological transfer to other institutions. Of the above mentioned, 12 of the newly created networks have not succeeded. 13 networks are still in the process phase.
- The project has established a training system for consultants/brokers of 8 other institutions, on a contractual basis, by which the methodology will be transferred in 18 months with close monitoring of the process. Each consultant of the project has the responsibility for a few network brokers and networks (thus covering the 22 indirectly attended by the project).
- The project has developed the methodology and adapted the instruments to the conditions of Micro and SME in Nicaragua.
- As concrete results the project has enabled most of the participating enterprises to have better achievements than those of similar enterprises operating in the same branches. In many cases increasing their earnings and benefits, while in other cases, especially in the leather branch, at least limiting their losses if compared to other similar enterprises.

### b. Objective 2 - promotion of vertical networks.

- The project has facilitated the establishment of various kinds of relations among four large enterprises and nine of their suppliers, introducing a practical model for improving the competitiveness through the cooperation, with a potential for replication already practiced by some of these companies towards other clients and suppliers. This is, in essence, the introduction of modern management techniques in each enterprise, applying vertical links.
- For assisting the enterprises the main instrument is the preparation of a diagnosis of the company and the elaboration of a plan of improvements.
- The project has adapted a methodological package for the promotion of vertical networking, which includes criteria and tools for the proper selection of suppliers.
- The project contributes to the improvement of the market for consultant services, directly and through a specific training of consultants together with GTZ and Swisscontact.
- The participating enterprises have improved their systems and their results; the best market measure is their contribution in cash and time to the training and practical activities.

# c. Objective 3 - the establishment of industrial districts

- The formulation of this objective has been too ambitious and exceeds the possibilities of the project. For this reason, and correctly, according to the evaluation team, the management of the project has reinterpreted this objective as the systematic support for the enterprises and the institutions towards the establishment of territorial industrial clusters.
- In this sense the project progressed significantly in two of the three geographical zones foreseen (the Departments of Boaco and Chontales), centering the activities in the already existing groups of milk producers and milk agro-industries, working and interacting at horizontal and vertical levels.
- Thanks to the project many cooperatives and enterprises have significantly improved their quality and earnings, and have diminished the negative impact on environment.

- It has to be emphasized that thanks to the support of the project, the Chamber of Nicaragua for the milk sector (CANISLAC) is grouping for the first time cooperatives of stock farmers, small producers and agro-industrial cooperatives, and the large milk production factories. This is fostering the vertical links, but is also supporting the cooperation among the large enterprises.

## d. Objective 4 - Coordination and dissemination

- The project keeps a continuous, but partially informal, contact with the person responsible for the project in the Office for technical cooperation in Central America of the Embassy of Austria.
- The cooperation with Nicaraguan institutions, both at local and national level, is working well and it is very useful for the enlargement of the impact of the project. There are special working relations with two NGOs financed by the Austrian Institute for North South Cooperation (IPADE and NITLAPAN, participating in the methodological transfer of horizontal networking). The cooperation is less developed with the international cooperation institutions operating in Nicaragua and should be intensified (except for the joint training effort in vertical networking with GTZ and Swisscontact).
- The project has successfully organized the necessary coordination for the progressive transfer of the methodology to INPYME and other institutions, through the appropriate training of consultants/promoters of networks.
- There have been relations with the Center for Cleaner Production, another UNIDO project also financed by the Austrian Cooperation, located at the National University for Engineering (UNI). The result has been a common action regarding one of the tanneries in Leon. A larger cooperation has not been possible due to the limited human resources of the Center and its policy oriented towards enterprises already selected by its management committee. The policy of the Center regarding the future replication of experiences shows a potential synergy concerning other tanneries in Leon and enterprises of the milk sector in Boaco.
- A clear example of tight cooperation with other international projects is the joint activity in the area of Boaco and Chontales with PRODEGA (Program for Cattle Development), financed by Finland. The Program gives technical assistance to the same milk producers assisted by the UNIDO project (as far as organization and cooperation are concerned). The Program shares the strategy of entrepreneurial cooperation towards the development of milk industrial clusters in these departments. In fact, the UNIDO project is taking care of the technical assistance to the cheese producers of the area.
- The management of the project has continued the policy outlined in the report on the project situation (prepared for the tripartite review meeting), which was planning to replace its own information bulletin, giving instead its contribution to the periodical bulletin prepared by the NGO NITLAPAN, with the support of the Austrian Cooperation.

## 4. Regarding the levels of influence on the policies and the institutions of Nicaragua

- The project has a strong influence on the design of the policies at national and municipal level and in the fostering of supporting structures for the SMEs.
- The evaluation team has noted this influence during the meetings held with high-level officials of the Ministry of Industry and of the Municipality of Masaya. Furthermore, this influence has been confirmed during the meetings held with the director of INPYME and the coordinator of the projects sponsored by INPYME.
- Furthermore, this opinion has also been confirmed in a short meeting held with the Minister of Development, Industry and Trade (MIFIC), who has expressed his interest in the continuation of the project. This interest was already showed during his visit in Vienna last month and his talks with the Austrian Minister of Foreign Affairs.
- Examples of this influence are the participation in the National Program for Competitiveness and
  in CONICYT, the contribution to the Strategic Plan of INPYME and the general policies of the
  National Directorate for SME and the review of the specific policy for the leather and shoe sector,

the cooperation with local governments and the weight of the project unit in vertical networking and policy formulation in the National Chamber of Industry.

# 5. Regarding the perspectives of the project

- The high impact of the project at the level of enterprises and of the institutions concerned with the promotion of the SMEs, suggests the extension of the project for another phase and the utilization of the recommendations of this evaluation as guidance for the future activities.
- The success of a further extension of the project seems to be assured through the quality of its design and the good levels of cooperation already reached with the enterprises, the institutions and the State.
- Positive future results will also be assured by the good will of the present government, (which most probably will be maintained by the following one, independently from the results of the elections), to organize INPYME in order to take over the methodology of the project, together with the other counterparts involved in the development of the SMEs.
- The Chamber of Industry (CADIN), through its director, has expressed to the evaluation team its willingness to continue and enlarge the activities of the project, offering the necessary premises.
- The evaluation team does not foresee significant risks for the project and its possible continuation.

### VI. RECOMMENDATIONS

The evaluation team can conclude that the project has been successful, has reached its immediate objectives (however not as foreseen, but with justifications, for the objectives 3 and 4) and has obtained a positive impact on the attended enterprises and on the institutions responsible for the support to the SMEs. The following are specific recommendations to the parties involved in the project.

Therefore in the light of the above-mentioned conclusions, the evaluation team recommends:

## 1. To the project authorities

## a. Regarding the general orientation of the activities

- o To further develop the concept of promoting the industrial development through the cooperation of enterprises of different sizes, in the perspective to create clusters.
- To further concentrate the efforts on the horizontal and vertical integration, utilizing instruments for improving management and cooperation, besides training and technical assistance for accessing to the financial support provided by other institutions.
- To contribute to the efforts of improving the design of programs of technical assistance and financing, including micro-credits, to take advantage of the potential offered by the networks and by their territorial inter-relations. In doing so, the access to these services for the enterprises participating in the network will be facilitated.
- o To consider in a more structured manner the global supporting and related activities connected to each network, specially regarding production and commercialization services.
- o To stimulate major interaction between the horizontal and vertical networks, giving priority to some well-determined geographical areas.
- To consider the impact of the activities of the project on the national consultants market, in order to promote its development, enhancing the qualification of the consultants and convincing the companies of the convenience of paying for the consulting services.
- o To continue the refinement of the methodology and of its instruments, preparing a simplified version for the smaller companies.
- o Enlarge the activities through the establishment of fees to cover, at least partially, the costs of the consultancy, foreseeing, at the same time, incentives for the companies complying with the engagements taken.
- o To establish a stronger cooperation with the project forecasting the creation of a Center for management and technical services in Boaco.

## b. Regarding the management of the project

- o To better define the respective responsibilities with the institutional counterpart INPYME.
- o To increase the interaction among the teams, particularly between the units of horizontal and vertical networks.
- o To strengthen the ties with other projects of promotion of SMEs, aiming at improving the competitiveness.
- To better diffuse the outcome of the project, for instance through a quarterly bulletin addressed to the clients, the institutions and all agencies of cooperation in the country.

- o To spread the proper name of the project (Development of industrial retworks), in order to facilitate its distinction from other UNIDO projects. Presently the project is known as "UNIDO project", although there are other UNIDO projects in the country.
- o To elaborate quarterly short progress reports, in English and in Spanish, for UNIDO, the Donor, the national counterpart and other concerned State institutions, as well as for CADIN and the assisted networks.
- To procure better equipment regarding computers and phone connections. Furthermore, a solution should be found for the shortage of means of transport, possibly forecasting in the budget a provision for the rent of cars from UNDP, for visits outside Managua.

## c. Regarding the implementation

- o To continue, but with less frequency and with the assistance of external consultants paid directly by the enterprises, the assistance to the selected companies (clients and sub-contractors) in the vertical network, after the completion of the first period of engagement.
- o To include in the assistance, in a more systematic manner, the training for the prevention and solution of conflicts between enterprises, as well as within associations and networks.
- o To give priority in the selection of the clients to the more dynamic small enterprises.
- O To pay attention that the component of technical assistance continue to maintain its character of instrument for the promotion of networks; therefore, avoiding that activities, like enterprise assessments and elaboration of plans for management improvement, obtain priority in respect to the promotion of the networks.
- o To intensify the interaction with the other projects financed by Austria and implemented by UNIDO, like the Center for cleaner production, located in the National University of Engineering.

#### 2. To the institutional counterparts in Nicaragua

- That the governmental institution responsible for the promotion of the SMEs, in the Ministry of Development, Industry and Trade, clarifies in its program the aspects of the methodology of the project that they wish to implement for the development of the SMEs.
- o That INPYME establishes a permanent structure for the interaction with the project.
- o That the National Program for the Competitiveness, belonging to the Vice-Presidency of the Republic of Nicaragua, grants the project a function of permanent consultancy.

#### 3. To UNIDO

- o To stimulate the potential synergy between the projects implemented by UNIDO.
- To reinforce the activities of the project establishing contacts with the UNIDO Program of Subcontracting, which is well developed in Latino-America (several SPXs Subcontracting and Partnership Exchanges have been established, particularly in Mexico).
- To support the relations established by the project with CEI (Center for Import and Export of Nicaragua) to stimulate joint actions with the network of ITPOs (Investment and Technology Promotion Offices) of UNIDO, in order to enlarge the business options for the enterprises assisted by the project.
- o In case a third phase of this project is approved, with a similar mandatory joint in-depth evaluation, this should take place at the mid-term of that phase, as a mechanism for enrichment and adjustment of the activities of the project.

o Since the project has been able to generate income for the reattributed services given to enterprises and institutions (Chapter IV, item 11 – Perspectives of sustainability refers), the evaluation team recommends auditing this bank account to see how the mobilized resources have been spent. This audit is recommended with the purpose of accountability to the Donor and to give visibility to the image of UNIDO. The project has been lasting for more than three years and will last for, at least, six more months.

### 4. To the donor

o To authorize, for the time being, a re-programming of the project until 31 December 2001, without any additional funding, using the remainder of the funds already assigned to the project.

### **5.** General recommendation

To elaborate and approve a continuation of the project to capitalize the results obtained so far, mainly the capacity building concerning its direct objectives and its potential to reinforce the other cooperation efforts, considering that the modernization of the economy involving different entrepreneurial scales is a fundamental component, both for economic development and poverty alleviation.

#### VII. LESSONS LEARNED

The experience gained in the Project can be useful for other projects. Some particular and general lessons are:

# 1. Particular lessons concerning the promotion of small and medium enterprises, more specifically in the industrial sector

- Networking is a powerful tool for enhancing the immediate environment of small enterprises and fostering their competitiveness, as it favors flexible specialization, reduces their transaction costs, broadens their opportunities, facilitates product and technological innovation, quality amelioration and cost reduction. Thus it counters market imperfections.
- o SME (small and medium enterprises) promotion is reinforced if it extends both to large enterprises serving as locomotives and to micro enterprises able to grow (as opposed to subsistence micro enterprises).
- Horizontal and vertical networks need specific tools, facilitated by consultants acting as network brokers; both kind of networks interact in practice and this should be furthered in a systematic way.
- An industrial district or cluster will be the result of a long process, in which the existence and development of strong local institutions for the promotion of networking are crucial (called focal points in this project).
- o The development of industrial districts benefits from the highest possible decentralization of the State with more autonomous local and/or regional governments.
- Network promotion should be centered on the links between enterprises and other entities,
   Governmental and non-Governmental, and the tools to make the se links more effective, but it applies also to the relations among entities promoting SME development.
- Network promotion must also use several more specific management tools, provided as non-financial services, to help the enterprises to answer quickly to new opportunities and challenges.
- o This means a contribution to the development of the market for non-financial services by showing their effectiveness and giving criteria to appreciate their quality.
- O Continued provision of free or highly subsidized services over an extended period of time causes market distortion and creates client dependency. "Spoon feeding and charity", including business advice, at length cease, while a businesslike approach enhances understanding of and responsiveness to the market economy.
- Therefore these services must be provided as soon as possible against effective payment of at least a significant and increasing portion of its cost by each enterprise or network, best on a contractual basis, in order to foster their subjective importance for the entrepreneur, favor their effectiveness and avoid as much as possible distortions of this market.
- This treatment of the service market requires a common understanding and cooperative effort of the donor agencies and NGOs, as well as state agencies and universities involved in consulting activities.
- o Network promotion means basically to catalyze and guide processes in which enterprises and institutions are the main actors.
- o The flexible design of networking tools makes it easy to adapt to the specific characteristics and needs of certain enterprises and to make it sustainable after a certain time.

- o Smaller networks often don't achieve all the benefits because of insufficient scale or scope, what speaks in favor of larger and more complex networks, when possible.
- o In the case of horizontal networks normally a minimum of 18 months of regular assistance is needed, and an additional period of monitoring and occasional assistance. Vertical networks, especially those involving larger firms, may need a shorter time.
- o This kind of networking means a transfer of modern management philosophy and techniques, including gender and environmental considerations, to SME and even a layer of dynamic micro enterprises, a higher valuation of the industrial sector in local, regional and national development and a reinforcement of democratic institutions. Thus it helps building the conditions for effective long-term poverty reduction.
- o It furthers the development of a technological and managerial leadership for SME, at enterprise, organizational and state level.
- o The transfer of the methodology to other institutions is best done on a contractual basis with theoretical and practical training and a medium term assistance, which accompanies the new network brokers in practice. This process should be reinforced by a continuous exchange of experiences. Conditions for success are a real commitment of each institution and broker, the inclusion of the transfer process in the institutional planning and the on time provision of the needed resources.
- o The success depends as well on a good project design and institutional frame, as on the quality of its leadership and staff, which must be highly motivated, have a good knowledge of entrepreneurial management, excellent relational skills and common sense.
- O Although this kind of projects therefore imply high costs in personnel (and the impact is difficult to assess), their essential goal, efficient networking, and their essential methodology, catalysis of entrepreneurial vision and decisions, permit easily spontaneous replication, although at a much slower pace, be it through the assumption of their philosophy and methodology by enterprises and networks, or through the influence on other institutions not specifically involved in the methodology transfer.
- O Such a project needs a special methodology for the assessment of its success or failure, defined at its formulation or at the first phase of implementation, which must include a sample of similar enterprises not attended by it; even then an evaluation will always need an expert appreciation and rely heavily on the real action and the opinion of the enterprises and institutions involved, which constitute its market.

#### 2. General lessons

- o The proper selection of the national coordinator and of the national staff of the project is very important for the successful and smooth implementation of the project.
- O Without well established relations and lines of communication between the Executing Agency, the Project coordinator, the national Counterpart Agency, the other local actors and the Donor, satisfactory and fully informative reporting is not achievable. The Project coordinator should report to the Executing Agency (with copy to the other local counterparts) and the Executing Agency should report directly and periodically to the Donor.
- o In cases, like for this project, where the language of the project, although being an official working language of the organization, is not the language of communication of the Organization with the Donor, the reports for the Donor should be provided in the established language of communication. Following this procedure it is not only matter of courtesy with the Donor, but it will allow the Donor to follow regularly the activities of the project, therefore, understanding timely the problems encountered.
- The replicability or the "demonstration effect" is always aimed at in a project. In this case it has been realized that the crucial elements to obtain this result have been the following:

- The project, after an initial difficult period due to some internal problems of the national counterpart, gets well along with the local authorities and the local entrepreneurs.
- The professional competence and experience of the staff of the project is well recognized and accepted.
- The good reputation of the project among the local business community and the capability of its staff, inspire confidence. So, their suggestions and recommendations are taken into serious considerations.
- The success of the consulting services with the business community assisted, shows the importance of an entrepreneurial approach to business consulting. "Do as businessmen do".
- Recruiting and appropriately training experienced national professionals saves time in implementing the project, by cutting the learning curve.
- o The need for providing adequate means of transportation should be carefully analyzed in projects that cover a large territory, in order to increase the efficiency, particularly when the clients are scattered over the country and the public transportation is not well developed.
- o When the project document foresees an independent mid-term evaluation, this exercise should be timely coordinated with the Donor and take place as stipulated. The evaluation must be accomplished at least six months before the end of the project, in order to assure timely continuation of the activities, in case of the extension of the project.