

Assessment Of Industrial Policy In Mexico From The Point Of View Of Smes

Solleiro, J.L.; Castañón, R.; Morales, V.; Trens, E.; Vega, R. and Nuñez, I.

Institution: Instituto de Ingeniería, UNAM

e-mail address: solleiro@servidor.unam.mx

Abstracts

The economic and social importance of small and medium enterprises (SME), as well as the definition of public policies to support their development and competitiveness has been internationally recognised. In Mexico, different ministries and government agencies have participated in defining industrial policies directed at SME and their instruments. During 1998, the authors took part in a consultation carried out with over 400 entrepreneurs from small and medium enterprises, organised by the Senate of the Republic. Two fundamental objectives were pursued: to assess the effectiveness of present industrial and technological policies and prepare recommendations to adjust them to the needs of the enterprises. This work presents an analysis of the results of the consultation, both with respect to the diagnosis made of present industrial policy and to the entrepreneurs' recommendations. To this end the following dimensions have been used: education, fiscal policy, information, specific development programmes, technological assistance, financing, commercialisation, legislation and environmental aspects.

Key words : industrial policy, technological policy, small and medium enterprises, Mexico

Introduction

Small and medium enterprises (SME) play an important role in economies as they act as a mechanism for the distribution of income to the middle and lower strata of societies, through the generation of employment and value added (Lefebvre, et al., 1991).

In some cases, SME have proved more resistant to economic crises than large corporations. This is because their capacity for regeneration and flexibility is greater, even though individually they are more vulnerable as a result of their size. Similarly, it has recently been shown that they have a great capacity to integrate themselves into the productive processes of large enterprises through subcontracting. As well as these advantages, the small firm innovates with greater speed as its projects come to maturity in shorter periods of time. Indeed, many large enterprises in the advanced technology fields conduct their research and development (R&D) projects in small affiliates or with subcontractors.

However, SME still suffer from serious handicaps, for example: difficulty in preparing, consolidating and conserving directors; limitations on generating and adapting advanced, highly complex technologies; lack of financial resources and difficulties in obtaining technological and market information (Solleiro, et al., 1997).

Furthermore, SME, particularly in developing countries, are currently facing the challenge of becoming part of the globalisation process while, in most cases, they are still confronting the daily struggle to survive. Thus, the challenge is greater when it is combined with other factors, like fragile negotiating power (financial, political, economic); weak unions and co-operation and lack of agile, sufficient, opportune state support mechanisms.

Due to the size and nature of these challenges, as well as the benefits involved in having more competitive SME, almost all the industrialised countries have been obliged to establish policies, strategies and mechanisms to support these entities. Thus, the promotion, support and, in some cases, rescue of SME take place by means of financing, technical and managerial training, access to information, fiscal benefits, subsidies to innovative activities and exports, preferential public sector procurement programmes, associative models between SME and between SME and large enterprises, stimuli to collaborate with universities and R&D centres, etc.

Support mechanisms for SME have also been created in developing countries although their scope is more limited. Mexico has not been the exception and has created various support programmes for small and medium enterprises under a free market industrial policy.

The Commission for the Development of the Small and Medium Enterprise of the Senate of the Republic, in its concern over the impact the various support programmes have on SME performance, decided to directly consult entrepreneurs in order to diagnose the problems prevailing in this sector and to determine if the policy instruments are working or not. The results of this consultation are given in this article.

The SME sector in Mexico

The structure of Mexican industry consists of four strata of establishments, according to number of employees and annual sales¹. According to data from the Ministry of Trade and Industrial Development, there are some 127,419 manufacturing establishments in the country, 91% of which correspond to micro-enterprises, 7.3% to small enterprises and 1% to medium enterprises (Secofi, 1993). The geographical spread and unequal distribution among states (with high concentrations in Mexico City, the State of Mexico, Puebla, Jalisco, Veracruz and Nuevo León) characterises Mexican manufacturing industry (Arroyo, et al., 1993). In the period 1983-1990, small industry had an erratic behaviour with acceleration in growth in 1984 (7.8%), 1985 (7.5%) and 1990 (7.7%) and a decrease of as much as 1.5% in 1986.

In general, the supports provided by the Mexican government can be classified into those of a promotional character, protection and regulation (Clavijo and Valdivieso, 1994). The main support programmes for SME in Mexico are summarised in Table 1.

Table 1. SME support programmes

Institution	Programmes	Comments
Nacional Financiera	Leasing	Especially machinery for small enterprises. The leasing firm is obliged to purchase certain tangible goods and grant their use in exchange for a counter-loan.
	PROMYP (Programme for micro and small enterprises)	Credit schemes destined to satisfy needs for working capital, investment and restructuring liabilities.
	PROMIN (Sole programme for financing industrial modernisation)	Credit supply aimed at small and medium enterprises for purposes of modernisation, technological development and environmental improvement.
	Prodem (Entrepreneurial development programme)	This is an attempt to strengthen the managerial profile of small and medium entrepreneurs. Various training programmes have been designed.
	Guarantee programme	Complements the guarantees required by banks in order to invest in fixed assets and working capital.
SECOFI	Industrial Property Law	Modified in 1994, the new Law contemplates novel aspects such as the patenting of inventions related to foodstuffs, biotechnologies and pharmaceuticals.
	COMPITE Programme	Workshops 4-5 days long held in the firm's installations. Analyses are carried out of the selected production lines.
	Regional Centres for Entrepreneurial Competitiveness (CRECE)	Services of a specialised firm of consultants are offered free of cost for elaborating diagnoses of the enterprises.
	Suppliers' development programme	Created in 1995 with the purpose of linking large enterprises with national suppliers.
	Regional Development Promotion Programme	To support industrial groups in order to favour exploitation of the potential of different industrial regions of the country.
	Mexican Foundation for Technology Innovation and Transfer (FUNTEC)	Organisation created in order to foster the import substitution process by sponsoring and financing studies, research and projects on SMEs.
Ministry of Labour	Integral Quality and Modernisation (CIMO)	Support is given to the development of personnel and improvement in quality, productivity and competitiveness in enterprises by means of training, specialised information and advice on processes.
National Council for Science and Technology	FIDETEC (Research and Development Fund for Technological	Trust Fund to stimulate private sector investment in development and the implementation of projects that imply innovation characteristics.

(CONACYT)	Modernisation)	
	FORCCYTEC (Fund for the Strengthening of Scientific and Technological Capacities)	Trust Fund to support the creation of research and development centres within enterprises.
	PREAME (Academia- Enterprise Linkage Programme)	Promotes alliances between higher education institutions and enterprises in order for them to carry out joint projects.
	PIEBT (Programme of Incubators for Technology Based Enterprises)	Support given for the start up and operation of incubators
BANCOMEXT	Short, medium and long term credit Integral financing for the development of investment projects Financing of risk capital operations Guarantees	Input importation Tarjeta Exporta (Export Card) Training Promotion and diffusion

Source: (1) Casalet, M. et al. (1995), “Red de apoyos públicos y privados hacia la competitividad de las PYMEs” in *Biblioteca de la micro, pequeña y mediana empresa*, no. 9, Nacional Financiera, Mexico.

(2) Trens, E. (1997) “Instrumentos de fomento a la pequeña y mediana empresa”. Report of the research project “Oportunidades de colaboración tecnológica entre las PYMEs de América del Norte bajo el TLCAN” carried out in UNAM.

(3) Unger, K. (1995) “El desarrollo industrial y tecnológico mexicano; estado actual de la integración industrial y tecnológica” in *Aspectos tecnológicos de la modernización industrial de México*, Pablo Mulás (co-ordinator). Academia de la Investigación Científica, A.C. Academia Nacional de Ingeniería, A.C. Fondo de Cultura Económica. Mexico.

Consultation workshops with SME entrepreneurs

The consultation workshops held with SME entrepreneurs had the objective of analysing industrial policy in Mexico by assessing the present support instruments and using the assessment to make proposals aimed at improving the policy.

Consultations with entrepreneurs were held through workshops in different states of the country. Entrepreneurs were called to participate in the workshops through industrial chambers and groups. The work was performed in four stages and small discussion groups were created. In the first stage, each entrepreneur presented his/her enterprise, explained how it was formed and the main problems it had. This information was used to arrive at a diagnosis of the problems

faced by SME as a whole. In the second stage, a review was made of the different support programmes in existence in the country with the purpose of the entrepreneurs indicating if they were familiar with them, if they had used them and giving an assessment of them. The third stage was designed so that each group would make proposals for an industrial policy with new elements. In the last stage, all the groups came together and each group's proposals were presented and discussed.

A total of nine workshops were held in the states of Jalisco, Oaxaca, Puebla, Chihuahua, Nuevo León, Yucatán, Sinaloa, Baja California and Mexico City. The results given below are a synthesis of the proposals generated in the nine workshops.

Diagnosis of the problems of SME

The entrepreneurs' observations were grouped under the following headings for the purpose of analysis, and the design of programmes and legal instruments: education, fiscal policy, information and diffusion, specific development programmes, financing, technological assistance, commercialisation, legislation and environmental aspects.

A synthesis of the problems identified in the workshops is presented below. It is important to mention that, in order to prepare this synthesis, the most frequent observations were taken into account, that is, those with the highest level of consensus from the entrepreneurial perspective.

1. Problems related to education

Lack of linkage between the educational system and enterprises. There was complete consensus in that the educational institutions, their study programmes and research projects are not linked to the needs of enterprises.

Lack of training. There is insufficient trained labour with which enterprises can face the challenges of competitiveness. The enterprises consulted agreed that workers are poorly qualified and have an unfavourable work culture. They recognised that there are Federal Government support instruments, administered by the Ministry of Labour, that work well, but that are not enough to overcome an underlying problem related to general deficiencies in the educational system.

Lack of entrepreneurial culture. In all the workshops lack of entrepreneurial culture was emphasised. This is reflected in the firms' lack of capacity to handle important aspects such as administration, marketing, financing, identification of business opportunities and human resources management.

2. Problems related to fiscal policy

The tax burden is excessive and discourages the formation of new enterprises and at the same time strangles firms that are already established, as it considerably increases their cost structure.

There is no differentiated tax structure giving specific treatment to enterprises according to their size, degree of maturity and economic activity. Fiscal schemes are applied across the board to large enterprises and to SME, which was considered to be a mistake because SME should receive special treatment.

Tax incentives are virtually non-existent. Fiscal policy has not been used as a mobilising agent to change entrepreneurial behaviour. Neither has the possibility of generating employment been contemplated.

Taxes are not used to provide good services, which means that there is no government compensation. Most of the enterprises consider that public services are very bad.

The informal economy represents unfair competition. The entrepreneurs perceive the existence of a fiscal terrorism regime in which the one who pays is pursued and the one who does not is tolerated.

Fiscal proceedings are long and bureaucratic and demand a considerable amount of time and effort from the entrepreneurs. Furthermore, audits are not programmed and constitute harassment of the enterprises by the fiscal authorities.

3. Problems related to information

There is a lack of information about SME support instruments. Even though there are hundreds of programmes administered by different institutions and levels of government, a common denominator is that they are not known by the enterprises. Considerable efforts have recently been made to provide information about them over the electronic media, but few entrepreneurs have access to Internet and therefore the majority do not find out about the information on development programmes.

There are insufficient resources to circulate information on the various subjects of great importance to enterprises such as opportunities in foreign markets, the legal investment framework, import and export procedures, such legal aspects as the use of the land, requirements needed to be fulfilled to create a new business, etc.

The chambers do not fulfil their role of informing entrepreneurs as they are not articulated and are far removed from the problems and needs of their members.

The SME entrepreneur lacks information on the opportunities offered by public sector procurement.

There is no information with respect to where to go when there is a complaint about services offered by the different government support programmes.

4. Problems related to specific development programmes

The costs of public services and infrastructure are excessive and dramatically affect the cost structure of small firms. The entrepreneurs demand a thorough review of the quality and prices of these services as a means to have a direct impact on the development of SME's activities.

There is no structure of institutions and enterprises that offer support to entrepreneurial activities and competitive projects. As an example it is possible to mention the lack of laboratories to accredit quality, maintenance and metrology.

Government procurement is not used as an instrument to foster sales and SME development, thus these firms are not considered when opportunities arise to supply this important market segment.

There is no specific industrial policy for different sectors, which represents a serious problem as it can hardly be thought that all branches of entrepreneurial activity have the same conditions and needs.

5. Problems related to financing

High rates of interest. The high cost of credit constitutes a large barrier to gaining access to financing for entrepreneurial activities.

There is a lack of institutions to answer for and support new projects as well as a culture of investment risk. On the whole, the criteria applied in granting financing are inadequate.

Most of the financing schemes are designed to take care of the needs of large enterprises.

With respect to the banks, they lack specialists who thoroughly understand the needs and conditions of small enterprises. Hence the procedures necessary to obtain financial support are excessive as is the time taken in giving replies.

There is a lack of competitive schemes to finance export projects and improvements in production.

There is a great fear among entrepreneurs over instability in interest rates, exchange rates and the banks' policies. Similarly, the entrepreneurs resist disclosing confidential information to officials responsible for financing programmes, as they perceive the possibility of confidentiality not being respected.

6. Problems related to technological assistance

SME face large barriers to accessing technology due to lack of information and economic resources.

The Universities and research centres do not offer adequate solutions to the enterprises' technical problems. Many firms are afraid of approaching this type of centre.

The technological development supports seem to be designed only for large enterprises.

There is a lack of incentives to stimulate investments in technological innovations. Neither are there agile schemes to support the participation of small enterprises in high-risk projects.

There is a lack of schemes to support enterprises in incorporating anti-pollutant technologies and in developing an ecological culture.

Advice and technical assistance are expensive and there are not sufficient economic support mechanisms for the firms to have access to them.

Technological support programmes for enterprises, both in the private and the public sectors, do not have credibility.

7. Problems related to commercialisation

The smallest enterprises face terms of exchange imposed by large enterprises that are unfair. There are no mechanisms to regulate the practices of large firms in purchasing goods and services from small ones.

SMEs also face unfair competition from informal businesses that have clear cost advantages.

There are not enough programmes operated by the government or by chambers of commerce to foster the development of suppliers.

The economic crisis and decrease in sources of employment have provoked a large decrease in sales and difficulties in paying suppliers. The market urgently requires reactivating.

There are still no adequate channels by means of which SME can offer their products abroad and develop their capacity to export.

With respect to government procurement there is corruption beyond the reach of SME, which means that most of the contracts are given to large enterprises.

SME do not have sufficient resources to advertise their products nor time to develop a marketing strategy; neither are there specific supports to generate these types of capacities and activities.

8. Problems related to legislation

There is no law that effectively establishes the framework for granting incentives to enterprises. The Law for Fostering Microindustry and Artisan Activity is inoperative.

The Federal Labour Law prevents the development of flexible mechanisms for hiring and paying the worker. Small enterprises therefore avoid contracting labour commitments as they consider it very risky.

The Social Security Law imposes conditions, requirements and procedures that are difficult for a small enterprise to comply with and it is therefore necessary to develop a framework that would give them special treatment.

The Public Sector Procurement Law does not give the same treatment to small national enterprises as it does to foreign concerns.

The official norms still lack clarity and mechanisms for applying them in the market.

9. Problems related to the environment surrounding the enterprises

Lack of public safety plays a determining role in the competitiveness of enterprises since it implies large additional costs and losses.

In Mexico too much emphasis has been given to foreign capital and the export markets. The internal market has been neglected and this is a threat to the survival of the productive capacities of SME.

There is a lack of an attitude of collective participation on the part of entrepreneurs in solving their problems. The chambers and associations are not fulfilling their role adequately.

There is corruption and red tape involved in most government procedures. There is no co-ordination between the different ministries and government institutions, which means that entrepreneurs must devote an excessive amount of time to various inspections and audits during the year.

The devaluations of the Mexican peso affect entrepreneurs both economically and emotionally.

There is great diversity in economic policy and no defined direction in the development of the country.

Due to lack of clarity in economic programmes and the preference given to imports, productive chains have been broken causing harm to the smallest enterprises.

There are sectors in which price controls damage enterprises.

The entrepreneurs continue to face the problem of centralisation in decision making by a large number of government agencies. There is not sufficient delegation, which provokes red tape and very long delays in procedures.

Proposals developed in the workshops

In order to facilitate analysis, the proposals have been divided into the same groups as the problems. The proposals that achieved the greatest degree of consensus are presented below.

1. Education

The universities must be supported in order to create specific programmes to link them agilely and efficiently with the productive sector, including accessible advisers' fees in this linkage. Linkage between universities and technological institutes and enterprises must include a social service programme (that could be qualified as "professional" service) in which the students involved in specific projects work directly in the enterprises.

The training support mechanisms of the Ministry of Labour work well and it is therefore recommended that they be strengthened by increasing their coverage and scope. Similarly, financial incentives for training SME personnel must be broadened. Training services must give priority to preparing administrative and managerial capacities.

Educational institutions and training firms must be motivated to develop training programmes in accordance with the problems of the enterprises and establish a discount policy for the smallest ones.

Entrepreneurs must also become more decidedly involved in training, not only by increasing their investment in this item, but also by organising workshops and courses in which entrepreneurs are the instructors so that they can transmit their experience.

A new educational plan must be introduced in order to promote an entrepreneurial mentality among the young people in the country. In this context, it is also suggested that university students' social service be used as an option to promote the generation of microentrepreneurs.

The last recommendations mentioned above mean that the Education Ministry will have to simplify procedures to up date the different study programmes.

A co-ordinated effort must also be made by firms and authorities to make technical training more attractive, so that there is strong motivation to produce more trained workers and decrease staff turnover in these areas.

2. Fiscal Policy

Mexico should perform a kind of benchmarking of the tax systems and incentives for small enterprises that exist in other countries in order to adapt them to our conditions. It is very important to have more tax incentives and fewer requirements so that entrepreneurs will invest.

One concrete proposal for tax incentives refers to firms that draw up a programme based on the recommendations of the diagnoses prepared by some development programmes. Specifically speaking, tax exemptions should be given for investments made when these programmes are implemented.

In order to be able to develop differentiated fiscal schemes that give preferential treatment to SME, the criteria for classifying enterprises must be revised.

Additional efforts must be made to incorporate informal businesses into the tax regime. To this end, it would help to establish easily understandable procedures and drastically decrease paperwork in the Ministry of Finance.

The Ministry of Finance must give up its practices of fiscal terrorism and apply the resources accruing from taxes in such a way that the quality of services continually increases. It must also make its activities transparent by providing citizens with information on the allocation of resources.

A measure of exoneration for the many firms that cannot recover due to their tax debts is also recommended. The introduction of such a measure would increase internal consumption and reactivate production.

The levels of taxation and tariffs for the use of public services should be more flexible and depend on the size and line of the enterprise. Consumer taxes must also be reduced.

There must also be mechanisms for a fiscal truce for new enterprises that cannot proceed to the consolidation stage when they have to face an enormous tax burden just as they begin operations.

As a concrete proposal to decrease the specific weight of the informal sector, it has been proposed that the items enterprises can deduce from their taxes be increased as a stimulus to issue invoices.

Accelerated depreciation systems for transport, computation and environmental protection equipment must be introduced.

Better tax incentives, technological development and environmental protection activities are urgently needed.

3. Information and diffusion

The programmes of the Industrial Development Ministry, the Ministry of Labour and other government agencies must be given greater diffusion using different media. Internet pages are not sufficient and must be complemented with information published in conventional media and with a more intensive use of mass media like the radio and television. A greater effort must also be made with respect to direct promotion by visiting enterprises and attracting them to informational forums whose organisation can be shared with educational institutions and non-governmental organisations.

Since the institutional programmes have a serious problem of lack of credibility, the generation of false expectations must be avoided and the information given out must be true and exact with respect to the scope and potential of the programmes.

There must also be co-ordination between the different institutions and support programmes for enterprises. This means that the officials themselves must be well informed, not only with respect to the programmes they are responsible for. It will be important to have just one desk with information on all the programmes that can channel entrepreneurs to the most suitable ones for them.

Enterprises not only require information on existing programmes. There must also be greater diffusion of information on commercial (including government procurement), fiscal, export opportunities, credit programmes and financing, and training aspects among others. The chambers must fully assume their role as providers of information for their members.

The mechanism of public sector extenders should be freshly explored.

The different programmes must also give greater publicity to their success stories so that the credibility they lack can be built up.

With respect to technological information, entrepreneurs must be made aware of the importance of keeping themselves up to date as a means to make better decisions. To this end, different institutions should become involved in a training programme in an information culture that will bring about a change of attitude in the entrepreneurs, making them assume an active rather than a passive role. This programme will mean strengthening the libraries and information services in such a way that they can offer opportune, complete information.

4. Specific development programmes

It is important to promote the development of industrial estates, grouping land uses together for priority projects in accordance with economic vocation studies for each of the locations. These groups of enterprises would contribute to achieving economies of scale in services and infrastructure.

Discount prices must be designed for services and infrastructure depending on the age, size, line and location of the enterprise.

It is important to encourage specialised programmes in order to promote and finance integrator enterprises in various business lines so that their operations will be viable in the medium and long term.

Programmes must also be promoted to encourage the generation of new products in enterprises and the creation of new businesses.

Development functions must be decentralised at state level so that entrepreneurs can define, with their respective governments, the main areas where they should act.

It is important to foster economic development councils whose representatives would include entrepreneurs with experience, executives from the financial sector and local government officials. The universities must actively participate in this type of council.

A large percentage of government purchases must be reserved for SME, including obligations to pay punctually.

It is recommended that the different government agencies study, test and adapt SME development programmes that have been used in other countries.

Supervision of specific development programmes must be the joint responsibility of entrepreneurs and authorities.

The different development programmes must be coherent and link together. It is better to have few programmes that work than many that do not.

5. Financing

The rates of interest must be competitive at an international level so that they not only foster access to credit but also create equitable conditions for SME to compete with enterprises from other countries.

Conditions must be created to award long term financing of different types including credit, venture capital and subsidies for innovation, modernisation and environmental projects.

Development banks must operate like commercial banks and train their officials so that they have a thorough understanding of the problems facing enterprises and can speed up the decision-making processes.

New criteria must be developed in order to decide whether to give a credit or not and no longer make decisions on the basis of guarantees alone. The development banks must participate in this and strengthen their guarantee schemes.

Specialised financial programmes must be developed for preferential economic lines that will be defined on the basis of economic vocation studies for each locality.

6. Technological assistance

In order to improve access to development and technological assistance projects, it should be possible to deduct SME expenses in this type of project carried out by research institutions and universities from Income Tax.

Institutions like the National Council for Science and Technology and development banks should support SME with at least 50% of the cost of more advanced technologies and anti-pollutant equipment.

Chambers and other entrepreneurial organisations must collaborate with enterprises advising them on technological projects.

The large State enterprises must promote programmes to develop suppliers clearly associated with SME.

Larger budgets should be assigned to research and technological development institutions that collaborate in the solution of enterprises' concrete problems.

7. Commercialisation

Specific regulations must be generated to supervise and sanction the commercial practices of large consortia that exploit SME with unfavourable payment, unjustified returns, etc. The formation of commercial unions to face these large consortia has also been recommended. In this way it would be possible to achieve better prices in bulk purchases and a greater capacity to negotiate with this type of client.

Market reserves must be established for small enterprises, particularly in relation to public purchasing preferences.

An enormous effort must be made to secure equal working conditions in formal and informal businesses and thus avoid unfair competition.

A financial and advisory support programme must be designed so that SME can develop innovative, effective promotion and publicity instruments that are within the scope of their budgets.

Subsidies must be granted to SME for them to attend exhibitions and present their products.

A programme must be created that avoids intermediaries, as this in itself means an increase in costs for firms and the excessive price of products that inhibits consumption.

8. Legislation

Legislation must be passed ensuring that fiscal supports for enterprises are instituted and that they do not have their characteristic volatility as a result of their being simple programmes.

A law must be created to foster micro, small and medium enterprises that enter into specific commitments with the Government in order to attend to their problems.

A law must be created to place the responsibility on civil servants that do not adequately fulfil their functions of promoting, fostering and facilitating entrepreneurial activity and on those who are involved in acts of corruption.

The Federal Labour Law must be revised and reformed in order to promote hiring and payment under new, more flexible schemes.

The participation of the entrepreneurial sector must be promoted in issuing new laws and regulations, incorporating the concept of obligatory technical advice in the legislative process.

The legal framework for SME must clearly include mechanisms that will oblige the governmental authorities to establish, give follow up to and reliable information on plans, programmes and results of support instruments.

The monopolistic practices of large enterprises that press small producers to sell their products exclusively or else be subject to blockages must come to an end.

The regulations and codes of law governing the activities of street sellers must be improved.

Efforts aimed at legislative development must be accompanied by advisory programmes and diffusion with respect to the legal framework so that entrepreneurs can become acquainted with them and understand them.

.9. Environmental aspects

Police functions must be improved by means of selection and training processes. Entrepreneurs must participate in better systems of public safety giving priority to collective efforts. At present a great deal is spent on security systems for firms that could be better used in co-ordination with other entrepreneurs and the public authority.

In order to decrease corruption related to inspections of enterprises, the rules of the game must be clearly laid down and an agenda drawn up for the inspections that are carried out by different authorities in an attempt to achieve better co-ordination between the different public offices.

Small firms recommend the establishment of mechanisms to fix the exchange rate and ask for the country's economic development planning to be long term, thus avoiding sudden, frequent changes in direction that prevent them from planning the development of the enterprise.

The participation of entrepreneurs must be fostered so that alliances can be formed with local governments in order to establish economic development goals, the business environment and commercial promotion instruments.

Economic vocation studies must be promoted at a municipal level so that policies can be set in accordance with said vocation.

The government must pay more attention to the reality of the country and support its small enterprises as it does the foreign capitalist and large enterprises.

More frequent discussion forums must be organised in order to give continuity to the process of proposing solutions to SME problems.

Conclusions

Without doubt, the direct consultations with entrepreneurs were of great use to determine precisely the performance of industrial policy established by the Mexican Government and put into practice through its support programmes.

In general, it could be observed that even though present policy programmes have been used by various entrepreneurs, they lack agility and do not always respond adequately to the real needs of the SME.

The nine groups into which the entrepreneurs' proposals were divided clearly mark the areas that must be given more attention and resources. However, it is important to point out that although from a methodological point of view the groups can be separated, in practice they are closely related and therefore measures that apply to one of them will have an impact on the others.

The positive reply from the entrepreneurs to participate in these discussions clearly shows that there is an urgent need for change that must be attended. With the proposals generated, the Senate of the Republic has many elements with which to take concrete steps towards proposing a law that will really foster the development of SME that are an important motor of the Mexican economy.

References

Arroyo, P. et al., (1003) “Micro and Small Mexican Firms: Survival, Subsistence or Global Competitiveness?”. Manuscrito, Universidad de Texas, Austin,.

Casalet, M. et al. (1995), “Red de apoyos públicos y privados hacia la competitividad de las PYMEs” en *Biblioteca de la micro, pequeña y mediana empresa*, número 9, Nacional Financiera. México.

Clavijo, F. y Valdivieso, S. (1994). “La política industrial de México, 1988-1994” en Fernando Clavijo y José I. Casar (comps.), *La industria mexicana en el mercado mundial, elementos para una política industrial*. Fondo de Cultura Económica. México.

Lefebvre et. al., (1991). “Technological Experience and the Technology Adoption Decisiones in Small Manufacturing Firms”, *R&D Management*, vol. 21, núm. 3, pp.241-249.

Solleiro, J.L. et al., (1997). Una aproximación de política tecnológica para las pequeñas y medianas empresas frente a la apertura comercial, UNAM-ANIERM-AMTEC, México.

Secofi (1993). Estadísticas de la industria nacional, junio de 1992, Dirección de la Industria Mediana y Pequeña y de Desarrollo Regional, México.

Trens, E. (1997) “Instrumentos de fomento a la pequeña y mediana empresa” Informe del proyecto de investigación ‘Oportunidades de colaboración tecnológica entre las PYMEs de América del Norte bajo el TLCAN’ ; UNAM, Mexico, unpublished paper.

Unger, K. (1995) “El desarrollo industrial y tecnológico mexicano: estado actual de la integración industrial y tecnológica” en Pablo Mulás (coordinador), *Aspectos tecnológicos de la modernización industrial de México*,. Academia de la Investigación Científica, A.C. Academia Nacional de Ingeniería, A.C. Fondo de Cultura Económica. México.

ⁱ The Ministry of Industrial Development classifies enterprises in accordance with the following parameters: Micro: 1-15 employees and annual sales of 110 times the annual minimum wage. Small: 16-100 employees and sales from 111 to 1,115 times the annual minimum wage. Medium: 101.250 employees and sales from 1,116 to 2,010 times the annual minimum wage. Large: over 250 employees and sales of over 2,010 times the annual minimum wage.

Title: Assessment Of Industrial Policy In Mexico From The Point Of View Of Smes

Solleiro, J.L.; Castañón, R.; Morales, V.; Trens, E.; Vega, R. and Nuñez, I.

Institution: Instituto de Ingeniería, UNAM

Address: Apartado Postal 22-510, 14091

City: México, D.F.

Country: Mexico

Telephone (including area code): 522-5 662 5868/5869/5871/5872

Fax (including area code): 652-5 662 5852

e-mail address: solleiro@servidor.unam.mx