

FORESTRY SMEs' COMPETITIVENESS

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SUMMARY

The objective of the present research is to describe the timber Small and Medium Sized Enterprises of the Province of Misiones which use inputs coming from the implanted forests and the derivative products, with the purpose of identifying the management variables and their impact on competitiveness and managerial productivity, contemplating the strengthening of the inductor aspects to the process of development of exports and the mitigation of those considered restrictive.

KEY WORDS: exports, Small and Medium Sized Enterprises (SMEs'), timber enterprises, competitiveness.

INTRODUCTION

The current research, takes the SMEs' as a universe installed in the Province of Misiones that saw the timber from implanted forests which are approximately 600 according to the 2003 census ¹

The lack of native wood, and the non repetition of these appreciated species, determine the low number of sawmills that do not dedicate themselves to pine and eucalyptus wood. As a result, the contribution of native wood sawmills is low, in the economic indicators of the Province, in contrast with that of the implanted forests which are those which most contribute.²

1 See table Forestry Industries Census 2003. MERNRyT. Province of Misiones.

2 Origin of the Raw Material Used Monthly. 2003 Forestry Industrial Census. Misiones 1st Four yearly Statistics

The enterprises that conform the sample are analyzed through the management variables that allow to build the variables of competitiveness and productivity. It is considered that these last ones are decisive for the growth of the sector and for the income of foreign currency to the Province, results that can be achieved by those enterprises that export.

In Misiones the enterprises that export or want to export, it is supposed that they have developed or are developing their domestic market, just as was expressed in the Forestry Master Plan³, "it is a conditioning basic that the forestry industry SMEs' are competitive at first in the domestic market and, later on, in the regional and international market". It is difficultly for those that do not operate in a competitive way at domestic level, will be able to reach the regional market nor the international one. This means that they have or should have a convenient production scale, to possess some product differentiation and to have resolved their process problems⁴. This latter implies quality and production continuity.

On the other hand, these exporting enterprises due be it for the location in a context of poverty or for the influence of a multinational enterprise, are a very difficult panorama for the development of the SMEs'.

The objective of the current research is to describe the timber SMEs' of the Province of Misiones that use inputs coming from the implanted forests and the derivative products, with the purpose of identifying the management variables and their impact in competitiveness and managerial productivity, contemplating the strengthening from the inducer aspects to the development process of exports and the mitigation of those considered restrictive. From what has been expressed we find the following specific objectives: a) to diagnose the current state of the SMEs' of the Province of Misiones which process wood coming from implanted forests; which implies among other matters: To analyze the commercialization channels used; to prospect the international expansion of the SMEs' forestry-industries of the Province; to determine the idleness starting off from the analysis of the installed capacity and production of each enterprise and the degree of execution of fulfillment of the scheme for national and international requirements. b) to

Compendium on Misiones' Forestry Industry Sector- Dec. 99 - Dec. 2003 MERNR y T. Misiones Province. Native Monthly Volume: 10%. Implanted Monthly Volume: 90%.

³ Forestry Master Plan, Strategic Plan, Chapter 5.

⁴ Porter, Michael E. *Estrategia Competitiva*. Técnicas para el análisis de los sectores industriales y de la competencia (edición revisada). Mexico 2001

identify those forestry-industrial SMEs' that have export capacity and those that carried out exports within the last five years. After that one seeks to compare the indicators of the SMEs' which are exporters with those which are not.

The theories are presented starting off from which variables were identified, to achieve greater competitiveness, productivity and quality. Also those that analyze the influences of the multinational and transnational enterprises in an environment such as this.

METHODOLOGY

In this research, of quantitative and descriptive kind, the gathering of the data was carried out through a semi-structured survey to managers / forestry-industrial enterprise owners in the Province of Misiones. The sample was made up of 39 SMEs'. The surveyors were Masters and PhD's from the Faculty of Economic Sciences of the UNaM (Misiones National University, Argentine Republic), during 2006.

The construction of the instrument for the gathering of data was designed starting off from a matrix that contemplated the necessary information of the variables and the respective operationalization. Variables were identified by those of the enterprise, as of their managers themselves. Amongst the first ones, were considered: management, productivity, competitiveness, quality, safety, legal, ecological or environmental and ethical aspects. Amongst the second ones, those which had to do with the managers' profile and their appreciations regarding unemployment.

The gathering was carried out with the purpose of conforming a database whose analysis did not end with the present research, since it only approaches some aspects of the enterprises, attending to the outlined objectives. The database and the latter-processes are carried out with the SPSS version 11.5 statistical program.

RESULTS DEVELOPMENT

A synthesis of the obtained results is presented up till the present, since the research is in the analysis stage and data construction, and the completion is foreseen for September 2008. The text was ordered according to the results obtained in the statistical calculations carried out in each one of the variables made up starting off from the matrix data. Work hypotheses were made to guide

the different analyses.

Regarding the preparation which the enterprises have for the domestic market, it was verified that 25 of those interviewed declared, that among the activities that they carry out for it are: to eliminate waste, to develop reliable suppliers and to assist the domestic market.

On the other hand, the enterprises were classified by **size** (small, medium and large) and the existent relationship was studied previously with the three aforementioned activities. The conformation of a gradient was observed in their execution, and the size, that is to say the larger the enterprises the greater the possibilities of fulfilling the requirements. This result is nothing new, was good enough fundamentally to control the internal coherence of the data report.

The statistical correlation between the variables **'Size of the Enterprise' and 'Preparation for the Domestic Market' with 'Foreign Sales'** gave significant values, that is to say that the enterprises that sell to the exterior are the biggest and those that have successfully approached the domestic market. The 36% of those that fulfill the requirements for the preparation of the domestic market export. An important contribution of the work will be to identify those that although they carry out the corresponding activities for the preparation for the domestic market, but export. These are eleven cases to which could be advised so that in the future they could to revert this situation.

Regarding the variable **"Quality"**, there were 13 cases of high participation in the enterprise quality improvement processes, and the high motivation to do it. It was obtained that a 33% of the enterprises are highly involved and participate of the quality process.

It was observed that almost all (92%) carried out quality of products, 41% declared that they carry out statistical control of the process, while 18% declared that they are doing so, or have already carried out a total quality program, which showed the lack of upgrading the quality paradigms. It was also observed as a result of the analysis, that 7 cases were making or they have already done something on total quality, while they did statistical process control, 7 cases had it projected, 7 cases only did statistical process control and 18 cases did not do anything. Which confirmed what had previously been said. When new constructions were made one learnt that only two enterprises (5%) were placed in an up-to-date paradigm, while other 9 were in an interim state and the remaining 28 were in an old paradigm.

The results showed that only a single case did a quality certification.

When the '**international channels**' variable was studied, it was observed that the enterprise that declared to have foreign contacts was the one which also sold to foreigners.

In general, it would seem that most communicated in Spanish and in second place in Portuguese. On the other hand the exporter enterprises were those that maintained contact with the enterprises that marketed with foreigners. For the most part those that sold to foreigners corresponded to those which spoke a language different from Spanish.

Diverse indicators showed that language is a communication obstacle in foreign commercial transactions, since very few of those that communicated personally did so in Spanish and it was not very frequent that they use interpreters.

It was proven that only 9 enterprises had the 3 outstanding requirements for carrying out international contacts, these variables were: 'communication modality', 'language used' and 'nationality of the contacted enterprise.'

It was observed that the 15 enterprises which exported during the last year mainly used external customs agents or middlemen for the most part and in fewer cases, internal customs agents. It could be noticed that the small and medium enterprises went to middlemen. These last ones also did their export through internal and external customs agents. This contrasted with some medium and all the medium – large enterprises that only did so with external customs agents.

It was observed that 6 enterprises that did not export but contacted themselves with foreign enterprises, could be said to be potential exporters by the light of this variable.

One of the built results showed that practically there were no enterprises with a high exporter profile, except two enterprises (a small one and a medium one) which were exporting all their production, although in small volume. The medium-large and large assisted the export with their surpluses as they did not figure in the high percentages of committed production for export.

In the analysis of the variable '**domestic channels**' it resulted that the enterprises that had destined their products to small markets did the distribution in a direct way, on the other hand those that approached the medium and large markets, using the three resources ('Domestic Commercialization Channels ', 'Distribution Forms ' and 'vehicles that they use', conveniently

reordered) but preferably the direct form, which in turn was an indicator of the low scale.

It was shown as the competitiveness of the forestry-industrial sector was related with some characteristics of the human resources, nevertheless only three enterprises (33%) declared that they possessed a Human Resources plan.

It was possible to determine the variables prioritized as to the motivational elements, it was observed that 15 cases mentioned the 'economy incentive', followed by: species incentive, financial incentive, hierarchical recognition, social interaction and diverse combinations. These data allowed to deduce that for the most part the managers were located in the "X" theory and very few in the "Y" theory.

On the other hand, in the variable 'ascent criteria', it was that 41% (16) only opted for 'the competence' and there followed (7) those that gave an opinion with expressions which once again emphasized competence. Very few (4) used approaches connected to 'behavior.'

Consulted about the realization of evaluations and performance registrations, 25 cases do not carry out any of the two. The small enterprises did not have a written registration, while the large ones did so, in their majority.

With regards to those 'personnel selection approaches' on behalf of the enterprises, the greatest recurrence was in the 'qualification and competence' approach, followed by "competence only" and "qualification only". The values showed that the enterprises that attended to the approach of 'competence' were the big ones, while those that attended the 'qualification' approach or partial indicators were the smaller ones.

When the managers expressed themselves on the efficiency indicators on behalf of the personnel, it was observed that 'production' was, as an evaluation indicator, in the first place (20 cases) and 'performance' in second place (10 cases).

Regarding 'technology' it was considered that to a greater quantity of technological changes, greater impacts would be achieved and that they were, due to management changes of the most severe material resources. The enterprises which had the greater number of areas with personal computers were those that showed with greater number of technological changes, likewise those that were expressed about the impacts due to those changes. The technological changes were accompanied by management changes of the material resources, amongst them 'elimination of

residuals' and 'greater use of inputs'. Approximately 62% had implemented new technology. The reason of the technological change in only two cases was considered for 'the credit stimulus', it was considered that it could be due to the fear of facing indebtedness, as well as to a reactive attitude. There were 6 cases that declared to be motivated by 'obsolescence' and by 'clients' requirements' but they did not have any idea of implementing new technologies, this year.

Most (1/3 of the samples) were motivated by an external factor which was the 'clients' requirements.'

With regards to the professionals and as was expected, the largest enterprises were those that had the most of them. To the largest numbers of professionals in the Management area most of them were in the Production area. That leads to higher volume of sales, obviously impelled by higher production.

For the personnel's profile their instruction level was considered, which only in three cases it was said to be of the superior level of studies (8%). With high school level 31% approximately, and 26% with complete primary.

CONCLUSION

At this level of the research one concludes that the enterprises that attended to quality included all the factors even the legal ones, that is to say that the higher the law enforcement degree and of the regulatory schemes there should be more quality indicators and enterprise size.

To evaluate that, a variable was built, starting from 'labor normative knowledge', 'law enforcement' and 'execution of the regulatory scheme'. After correlating it with 'total quality' and 'enterprise size' the hypothesis was verified.

In the analysis of the SWOT, and when working with 'strengths' it was found that most (12 cases -33%) emphasize the quality of the product in the first place. In a minority the interviewed considered as a strength in the Human Resources, "capable management", and those "superior technological capacities"

BIBLIOGRAPHY

Albornoz, M. y Yoguel, G. *“Competitividad y redes de producción: un desarrollo conceptual*

aplicado al sector automotor argentino"; en Tercera Jornada Anual de investigación, Universidad Nacional de General Sarmiento, noviembre. 2 001.

BID. "*Políticas Forestales en América Latina*". Washington D.C., EE.UU., 2000.

Boscherini, F. y Yoguel, G., "*El fortalecimiento de la capacidad innovativa: el caso de las PyME exportadoras argentinas*", Documento de Trabajo n. 71, CEPAL. 1996

FAIMA. "*Sector Forestoindustrial en Argentina – Competitividad y Propuestas para su Transformación*". Buenos Aires, Argentina, 2002.

Gobierno de La Provincia de Misiones y Ministerio de Ecología y R.N.R.. *Censo de la Foresto-Industria*. Misiones, Argentina, 2000.

Gobierno de La Provincia de Misiones y Ministerio de Ecología. *Resumen de Acciones del año 2000 y Planificación del 2001*. Misiones, Argentina, 2000.

Ministerio de Economía. *Panorama Económico Provincial*. Misiones, Arg., 2001.

Moori Koenig, V., Milesi, D., y Yoguel, G. "*Las PyME exportadoras argentinas exitosas: hacia la construcción de ventajas competitivas*", Miño y Dávila, Buenos Aires. 2001.

Porter, Michael E. "*Estrategia competitiva. Técnicas para el análisis de los sectores industriales y de la competencia*" (edición revisada). México. 2001.

SAGPyA. *Sector Forestal*. Buenos Aires, Argentina, 2000, 2001 y 2002.

STCP ENGENHARIA DE PROJETOS Ltda. *Plan Estratégico para el Desarrollo de las Pequeñas y Medianas Industrias Madereras de la Provincia de Misiones y Noreste de Corrientes*_.SAGPyA

.PFD-01/01 Informe Final .Bs. As. Arg. 2002

Villarreal, R. & Ramos de Villarreal, R. "*México competitivo 2020: un modelo de competitividad sistémica para el desarrollo*". México: Océano. 2002

Yoguel, G., "*Creación de competencias en ambientes locales y redes productivas*", en Revista de la CEPAL n° 71, Santiago de Chile. 2000.