LEARNING PROCESSES AS DRIVERS OF CHANGE IN INDUSTRIAL FORESTO SMEs MISIONES

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Reception Date: 11/20/14 - Approval Date: 12/23/14

ABSTRACT

This is to analyze the behavior and actions of agents related to those changes produced in the emergence and spread of the driving forces of the change of SME enterprises in the Foresty – industry sector and related activities, processes learning that facilitate the process of joining an association within the sector.

This is a qualitative study in which data were collected through interviews to twelve entrepreneurs Foresty sector - industry and related activities, in the north of the Province of Misiones (the Alto Paraná). Such information was analyzed using Atlas ti version 4.1 program. For the analysis of learning processes, which allowed previous categories to simplify the procedure, as the expense of reading condition arose.

First, as a matter of policy, the theoretical frameworks from the praxis and reflection on the corpus studied were built, as well as the obstacles and difficulties encountered. This required bringing together a number of conceptualizations and around what looks relieved and analyzed. Without pretending to exhaust the references, numerous multidisciplinary input on the behavior of firms to locate more precisely, the conceptual framework that the cases found for the present research is framed and could characterize the territories and observe the relationship between them, local stakeholders and businesses.

KEY WORDS: Systemic Competitiveness; Learning Processes; Management of Partnership Between SMEs.

INTRODUCTION

This paper is included in a job of research called Associative management among SMEs in

the field of forestry-industry and related activities, in the Province of Misiones[1], required the development of several actions linked to specific targets[2], such as the realization of a so-called Knowledge Management Workshop (GC) surveys and analysis of keywords allowed to build a SWOT; Social Capital determinations of a sample of industry members, identification of the existence of resilient behaviors in entrepreneurs and characterization of such behaviors or coping adversity styles by themselves; identifying sources that directly or indirectly promote change processes of learning as a clear motivator for change.

This work aims to analyze the behaviors and actions of agents related to the changes caused by the emergence and spread of learning processes as driving forces for the change of firms SMEs sector foresty-industry and related activities. This element would facilitate the process of joining an association within the sector. The stated objective addresses some aspects of determining the feasibility of the mutual management among SMEs in the aforementioned sector in the Province of Misiones, to that end it had already made previous instances which identified other concordant aspects[3]. Also the purpose of this paper is to study what these agents could appreciate their environment to be influenced to certain actions and from there to pose in the future, operability points or external actuation.

Evaluate the feasibility of partnerships among industry players also imposed, in previous instances; identify variables operating in the management of this complex process. By doing this[4], arose not only the intended variables but also those categories that facilitate associability conditions and the eventual formation of clusters of SMEs linked to foresty-industrial sector of the Province of Misiones.

Making a link between the axes and categories emerged in the analysis of the conditions of association and the eventual formation of clusters of SMEs linked to foresty-industry, emerges as an axis of categories of knowledge and the development of learning processes and the increase of the

[1] It was proposed as a general objective of larger job Analyze the factors necessary to manage a partnership strategy of SMEs in the forest industry sector of the Province of Misiones and promote competitive improvement of all its members, laying the foundations for future joint actions within a framework of enhanced cooperation among those who are able to join.

[2] Were proposed, for the larger work, the following specific objectives: 1) Develop a comprehensive strategic assessment of Forestry – Industrial SME Sector and undertakings performing complementary activities, 2) Identify the need for cooperation between companies, 3) Specify the opportunities and threats in the environment and the strengths and weaknesses of the group companies, 4) Propose different approaches and designs that allow viable and initiate a partnership management; 5) Establish the role of partnerships, 6) Provide legal and institutional alternative tools to facilitate collaboration.

[3] One of them allow to identify Management Technologies of the members of the forest industry sector, in Misiones.

[4] The work is called: Variables that facilitate associability conditions and the eventual formation of cluster among forest-industrials SMEs in the Province of Misiones; took place between 2006 and 2010 and is completed.

innovative and creative capacity.

To help determine the feasibility of partnership between the companies, we proceeded to analyze the speeches of the managers and owners of firms. Perceptions about Learning Development were rescued, as an endogenous company's factor. The statements were surveyed using semi-structured interviews to twelve entrepreneurs in the forestry-industry and related activities, to the north of the Province of Misiones (area of Alto Paraná) sector. These entrepreneurs belonging to the same territory, similar in seniority in the activity profiles are characterized by the shape and the mechanisms they use to cope and survive adverse contextual conditions of the past five years.

Atlas ti computer system, version 4.1 was used, which allowed coding, categorizing and analyzing the speeches.

DEVELOPMENT

To submit a theoretical framework for this paper demanded to satisfy certain conceptualizations and looks that are constructed from a practice and a reflection on the corpus studied, as well as obstacles and difficulties encountered. Without pretending to exhaust the references, we surveyed numerous multidisciplinary contributions regarding the behavior of the companies, in order to locate more precisely the conceptual framework in which the cases found for this research fall thence, characterize the territories and observe relationship between them, local stakeholders and businesses.

From empirical studies, the development of learning processes was established as an endogenous factor predominantly in companies and it is a driving force of change in most industry players.

Distinction paradigms

For endogenous growth theories, the technology employed by a company is the result of activities planned by companies with direct or indirect assistance of universities, technological institutes and scientists, etc. However, neoclassical theory focuses more on the effects of technological change in connection with their sources. The company appears as a passive automaton that reacts to external signals, either market prices or anticipated behaviors of firms.

In the evolutionary view, the company is a creative, perceptual organization, learning and actively develops opportunities. Moreover, in the neoclassical view opportunities are given, being opposed to the evolutionary view where they are created on purpose. This is why evolution is not

understood endogenously and in response to some exogenous variables, as considered in this work.

While for the neoclassical equilibrium exists, it is unique and is stable, to evolutionary theory there may be multiple equilibriums, they may be moving quickly or the system may be far from equilibrium.

Thus evolutionary theory may be less decisive in their predictions and explanations, but not because its theory is weak but some systems may be too complex to make predictions or ad hoc explanations.

Need of Learning

According to Burachik, G. (2000) a study by Katz (1976) on Argentina's manufacturing industry, showed the "importance of technological efforts at the plant... as sources of productivity growth" [Burachik, G., 2000, p. 85](1). Apparently it was recommended that companies conform or build a ladder or driving a first bearing to support technological capabilities to optimize the use of imported technologies at that time, which was then occurred a side effect explaining a significant proportion of the efficiency gains obtained.´ In turn, the increased production itself also contributed to such improvements through the Verdoorn[5] effect whereby the importance of ´productive business history´ is highlighted. Katz argued that ´the production of mature products ... is associated with improvements that, in turn, are learning that takes place within firms that adopt them´.

As a corollary of the expressions of Katz there emerges the importance of intangibles represented, in this case, learning that involves the construction of knowledge. Burachik, G. adds (2000), extending the above, according to Fransman (1985) "The two processes of transformation implicit in this formula (production experience are transformed into knowledge and knowledge into technical change) are subject to the specific actions of firms" [Fransman, 1985, pág. 595](2), warning about the increasingly automated nature of ´learning´ as a result of ´doing.´ It follows from here the importance of learning other than the way or those of learning -by -doing.

To address the mechanisms of learning it is necessary to agree with Simon (1991) that all knowledge is initially created or acquired by individuals[6]. Put in terms of Alonso Ramirez, G.

[5] The Verdoorn effect is the influence of cumulative production (learning-by-doing, learning by doing-the same product and the learning-by-using-learn-using the same machine and the same process) on the joint productivity of production factors. The counterparts of this effect are cost learning curves. In Berumen, Sergio (2006, p. 170).

[6] According to C. Medina and M. Espinosa (1994) the authors place the phenomenon of learning from the

(2008) "individual learning is a prerequisite for organizational learning…After individual learning, knowledge is transmitted to other individuals who share very near similar schemes of interpretation" [Ramírez Alonso, G., 2008, pag. 17][(3)]. Brown and Duguid (1991) point out that given as a community of practice. It is clear that the social context of knowledge transfer between individuals is only part of the process of collective learning.

How learning occurs in companies

According C. Medina and M. Espinosa (1994), other authors recognize that learning and change accordingly are triggered by some form of imbalance, disagreement, challenge, novelty and diversity required to undergo a process of reformulation. The problem of learning has to do with the emphasis on environments where conflict or imbalance occurs, whether internal or external to the organization[7].

Learning in companies typically occurs when issues occur or originate from internal motivations, called endogenous, and those who are driven by external factors companies, called exogenous. There is here a brief development of the latter.

Mechanisms of exogenous learning are recorded first, which occurs when suppliers of machines, tools and equipment transact with future users agreeing, in their contracts, the necessary technology transfer, ensuring the maintenance and advising on adaptation as provided for achieving the tasks, providing training and advice on the suitability of other processes and design review of products and related processes. The same applies if they are inputs or provision of seeds or seedlings. This form of learning originated when, from the collection of information, who decide on the purchase of products or renewal of technologies, they set out to narrow the decision.

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individual, because it is individuals who act and learning within the framework of the organization, are March and Olsen (1976), Hedberg (1981) and Dodgson (1993). Later C. Medina and M. Espinosa (1994) say that are others who criticize this position (Duncan and Weiss, 1979) arguing that the explanation is partial and unsatisfactory. And in his explanatory proposal reaffirms the importance of the organization and its structure as immersed in the learning process (Cyert and March, 1963, Duncan and Weiss, 1979, Levitt and March, 1988; Mezias and Lant, 1990) agent. One possible answer to this question is directed towards the improvement of individual and organizational experience through training, coaching and achieving an unlearning.

[7] Organizational learning is the process that allows acquisition and knowledge creation, processing, dissemination and use in the business. According to Nonaka and Takeuchi (1996), is the process by which knowledge created by individuals is amplified and crystallized as part of the knowledge system of the organization. According to Jimenez, there are different definitions of organizational learning that refer to aspects such as the encoding process and modification of routines that involves the acquisition of knowledge, increased organizational capacity to carry out a productive activity and the interpretation and performance consequently, the development of knowledge about action-outcome relationships or about the detection and correction of errors. Some believe that learning is a result (Levitt and March, 1988), others that it is a process of detecting and correcting errors (Argyris and Schön, 1978).

Another way to place learning occurs when some officers of a company are preparing to observe and learn from colleagues from other firms. The steps are summarized in the classical general mechanisms of technological learning that often occur following steps already known to all that were generated after the development of inter-company relationships (or sometimes by individual relationships of agents). Generally this type can accumulate knowledge from the outside that is used to innovate in processes and strengthen the competitive position. When these actions are performed by convention from the systematized technology benchmarking, otherwise they may be considered as a simple act of surveillance or monitoring technology[8].

Just as there may be learning by interacting with colleagues it can also occur when interacting with other players who complete the known model of the five competitive forces of Porter M. (1979)[9], the two most important in relation to the effect: a) Buyers or Clients b) Suppliers or Vendors. The first (a) because from the specifications and the trust relationships and trends standardize lines [10], set quality guidelines (and policy), etc.[11], the second (b) because they often use as a sales strategy to persuade the buyer to incorporate future product lines and equipment that were not planned for that exercise, Still considered among the tactics to - maturity often include to make comments about the state of the industry (and its members).

Another way to make exogenous learning occurs when climbing Micro level (where there were competitors, suppliers, customers, etc.) To go to Meso level (where the institutions are located, nearby agencies, NGOs, etc.). Companies often establish more informal links with research institutes, universities nearby and local development agencies to tap into sources of data or information that will lead to learning. Learning also occurs when driving financial institutions to borrow providing advisory services and training. Needless to say that one of the most relevant sources of learning Meso level, are the omissions and failures in local governments (municipalities and provincial government departments) incur and which are set in stone as in the experiments of Pavlovian or the Skinner behaviorism.

Formal training usually produces endogenous, exogenous and mixed learning. When the training team acts trying to transform tacit knowledge into explicit learning it is often called

[8] It should be added, to what appears as a current way that the isolation experienced by these types of forest-industrial ventures drives the agents to resolve current problems using informal procedures with other companies (exchange of parts, supplies, machinery and engines), which leads lending transactions or barter exchanged for other products or transactional reporting on new forms or styles of contracts.

[9] Bargaining power of buyers or customers; bargaining power of suppliers or vendors; Threat of new entrants, threat of substitute products and rivalry among competitors.

[10] Industrial customers typically receive information on regional, national and global trends.

[11] Emergence from here not only established aspects, and therefore belong to the past, but also the progress of development of various mechanisms of change that allows them to customize innovative activities. These comments come as industrial lighting and any potential changes in products and processes, especially when it comes to international customers.

endogenous (exogenous intervention although they are required to produce knowledge management[12]. They are considered exogenous when the training team basically brings information that cannot be found within the firm. Joint training programs for both operating personnel and are hierarchical learning mechanisms that drive to make contributions for the transfer of the agents involved to nearby institutions and also companies who dare to open their doors to change levels skills and qualifications of some of the industry in general coordinated with the intermediation of the Association or Chamber of actions group.[13]

As a result of these types of learning, which are usually achieved in most cases, relatively minor changes in the plant, increasing the strengths of the basic capabilities generated by firms which translate into increased productivity, increased interactions among firms that are not limited to market transactions, stimulation to undertake new learning activities that encourage new investments in innovation program (not limited to the purchase of new machinery or renewal of existing equipment), conducting administrative changes (enabling departments to control the quality of processes and products), recruitment of skilled drying personnel drying and/or specialized, etc. The above experiences accumulated become actors form a productive organization and not always recognized as intangible assets.

Construction of Knowledge

Knowledge means, to a first approximation, those truths, beliefs, experiences, perspectives, concepts, expectations, procedures, methodologies, technologies, guiding thoughts, behaviors and communications of people. Getting to construct knowledge in an enterprise that requires the displacement of the beliefs and assumptions by proven ´truths´ (or pseudo-truths) within the environment in which the construction process is performed.

To arrive at the concept of knowledge often requires the previous definitions of the terms: data and information. Data means data representing facts or phenomena through signs and signals

[12] It is understood by Knowledge Management (KM) the construction, renovation and application of knowledge, systematically, explicit and deliberate made, to maximize the effectiveness and return on knowledge assets of a company. The input for the construction and renovation is often tacit or uncoded knowledge, that correspond to all non-formal and difficult to define skills(know-how), together with all schemes, mental models, beliefs and perceptions of each person. It is, therefore, a personal knowledge and difficult to define, expressed by the formal language and to transmit and share (Nonaka and Takeuchi, 1995). With the process of KM is pretending to transform tacit knowledge into codified or explicit, whose characteristic is transmissible through a formal and systematic language (Nonaka, 1994).

[13] Not always local institutions such as business associations are responsive to the needs of its members. While one of its main functions is to serve the interests of the sector is not always ensures this point to get to the formation of nets. This means limit the private appropriability of knowledge generated by existing firms, facilitating technology diffusion into new businesses and less productive experience, acting in articulating and facilitators of the learning process.

(numbers, text, images) generally isolated, they are often associated with the observations of a subject, for some objects. Information is defined as the sum of the data with meaning, relevance and purpose, and for this purpose the data is structured and they are related to a given context to proceed to its interpretation, where the data have been processed, organized, analyzed and interpreted, they acquire meaning. Knowledge is understood as the ability to transform data, information and expertise of people in action, it requires to interconnect such data, information and accumulated experiences.[14] Jiménez Jiménez (2006), taking expressions of Huber (1991), says that knowledge refers to learning a more complex product, such as interpretations of information, understanding of cause and effect or the more general ´know-how´. Furthermore, knowledge is considered the result of the processes of creation of new knowledge or learning, i.e., the transformation of information into new knowledge (Nonaka y Takeuchi, 1995; Bontis et al., 2002)[15].

Analysis of data from indicators that refer to the behaviors and actions of agents related to the changes caused by the emergence and spread of the driving forces of change of some companies, in the Alto Paraná - Misiones. Analysis of the data relating to the development of learning processes qualitative analysis made by Atlas ti. software.

It was tried to describe the development of learning processes from the following four categories:

1. Lesson from the crisis
2. Linking knowledge - action
3. Identification of strategies for promoting knowledge
4. Training

Operationalization of categories

The categories were defined before starting with Atlas Ti qualitative analysis. These, also referred as fixed codes include concepts that deserve to be differentiated. They are, in the order they appear in the utterance, Four: Learning, Knowledge, teaching and training. These terms may be, in some cases, approached from the organizational and others, also from the individual.

[14] There are many definitions almost all coincide, as Davenport et al., (1998) defining the resulting knowledge of the data that have been processed, organized, analyzed and interpreted, and they acquire meaning. Knowledge is also considered information combined with experience, context, interpretation and reflection.

[15] Nonaka and Takeuchi (1995), in their theory of knowledge creation, proposed that there are four modes of knowledge conversion: socialization, externalization, combination and internalization, indicating that innovation occurs when members of an organization share tacit knowledge and convert it into explicit form of product and service.

- Learning: taking expressions of Katz (1976), one assume that building knowledge learning is usually triggered by some form of imbalance, disagreement, challenge, novelty or diversity (on Medina, C. y M. Espinosa; 1994). According to SAR (RAE)[16], in a first sense, it is ´action and effect of learning a craft, trade or otherwise,´ in psychology it is the ´Acquisition by practicing lasting behavior.´ Turn to RAE Learning means ´knowledge of something through study or experience.´ For the purpose of this work it is synonymous with learning and knowledge exchange (with the potential to facilitate the resolution of problems, to have the latter), both in people and in organizations.

- Knowledge: According to Fernandez (2001) "Knowledge is more valuable than the mere accumulation of data and requires mainly the involvement of persons" [Fernández, 2001, p. 58](4); Nonaka y Takeuchi (1995) say it is a dynamic human process under which personal beliefs in search of ´truth´ are justified, for its part O'Dell, Jackson and Essaides (2001) state that ´knowledge is information in action.´ Bueno Campos (2002) states that, unlike information, knowledge is about beliefs and commitment, knowledge, and action on meanings. Moreno and Vargas (2003) defines knowledge as a personal skill that when shared can become an asset to the organization. According to Davenport and Prusak (1998) this information combined with experience, context, interpretation and reflection. Therefore, we can agree that knowledge is the next instance to individual or social information processing.

- Education: According to the RAE is the ´action and effect of teaching´ it is also the taught ´System and method of giving instruction´ and ´The knowledge, principles, ideas, etc, to someone.´ Methods of teaching have not only been considered in this work to formal, as cited by the accessed Dictionary (Example, action or event serving experience, teaching or advising how to act in analog cases) but also omissions, mistakes or otherwise that constrain the behavior of agents in relation to teaching – learning.

- Training: According to Mauro Rodríguez Estrada (1991), from a collective approach, discusses the set of activities to provide knowledge, develop skills and change attitudes of staff at all levels to better perform their work. Meanwhile, in a view from the individuality, Carlos Reza Trosino (1995) says it is the "action or set of actions to provide and / or develop the skills of a person, in an effort to prepare properly to carry out its occupation or job and immediate superiors" [Reza Trosino C., 1995, p. 25] (5). In this paper we have observed from both aspects, individually and in groups.

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Views from the expressions of each case, based on the development of learning processes

Case 1: From the processing with the Atlas Ti were obtained the following 11 codes, which were extracted 12 quotations:

Table N°1: Case 1

Categories	**Emerging Codes 1**			
Lesson from the crisis	• Linking with the camera • Use intermediation	• Assessment of integration • Good communication	• Solidarity with employees • Incommunication with government	• Tax Adversity • Homelessness
Linking knowledge - action	Identifies the action and does not reach to knowledge	Identifies the action and does not reach to knowledge		
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge			
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 1 of Development of learning processes. The qualitative interpretation can say:

The businessman facing the crisis is connected to the camera and promotes communication and solidarity within the company. Explicit government homelessness, and uncommunicated detention and from there just has formulated what should happen, but manages to propose alternatives. Identifies a government action that does not translate into knowledge. While identifies some institutions that promoted knowledge does not mention any training in the area.

• Case 2: From the processing with the Atlas Ti were obtained the following 11 codes, which were extracted 12 quotations:

Table N°2. Case 2

Categories	**Emerging Codes 2**			
Lesson from the crisis	Identifies the probelm			
Linking knowledge - action	Identifies the action and knowledge			
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge			
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 2 Development of learning processes. The qualitative interpretation can say:

Regarding what he learned from the crisis mentioned above impossibility of exports and the current situation in which it does. Knowledge refers to the example given. No mention training conducted in the area. All these characteristics show a very poor profile in the development of processes of knowledge.

- Case 3: From the processing with the Atlas Ti were obtained the following 7 codes, which were extracted 10 quotations:

Table N°3. Case 3

Categories	**Emerging Codes 3**			
Lesson from the crisis	Political Adversity	Internal Market Adversity	He achieved learning alone	
Linking knowledge - action	Identifying an action	Identifying an action	Identifying an action	No action identified
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge			
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 3 Development of learning processes. The qualitative interpretation can say:

In the context with multiple adversities and few relationships with colleagues, managed to notice that must balance between risk and investment alone. It refers to a single institution that promoted the knowledge and know whether there were training. Comes to identify government actions but not linked to any knowledge (remember that this agent identified actions and events that contributed to technological change).

- Case 4: From the processing with the Atlas Ti were obtained the following 6 codes, which were extracted 7 quotations:

Table N°4. Case 4

Categories	**Emerging Codes 4**			
Lesson from the crisis	Fiscal adversity	Labor adversity	Frequent changes in the rules	
Linking knowledge - action	Identifies the action and knowledge			
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge	Identify institutions that promoted knowledge		
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 4 Development of learning processes. The qualitative interpretation can say:

Recounts the hardships of context and has no lesson learned from the crisis. The action of energy shortage leaves a chaotic situation which learns to reorder. Clearly identifies the institutions established knowledge and strategies which he can access or not. No explicit the reasons why he could not eligible to enter. No mention training.

- Case 5: From the processing with the Atlas Ti were obtained the following 7 codes, which were extracted 11quotations:

Table N°5. Case 5

Categories	**Emerging Codes 5**			
Lesson from the crisis	Fiscal adversity	Fluctuations in prices of commodities x 2	He achieved Learning alone x 2	Homelessness x 2
Linking knowledge - action	Identifies the action and knowledge			
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge	Identify institutions that promoted knowledge		
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 5 Development of learning processes. The qualitative interpretation can say:

Describe the adversities and teachings that they entailed. Facing the helplessness of the government, from contradictions manifest, learn the need to provide and isolated. Identify two national institutions that promote knowledge, but failed to mention any training at provincial level.

- Case 6: From the processing with the Atlas Ti were obtained the following 6 codes, which were extracted 7 quotations:

Table N°6. Case 6

Categories	**Emerging Codes 6**			
Lesson from the crisis	Economic Adversity	He achieved Learning alone		
Linking knowledge – action	Identifies the action	Identifies the action and knowledge	Identifies the action and knowledge	
Identification of strategies for promoting knowledge	No identified			
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 6 Development of learning processes. The qualitative interpretation can say:

Displays few expressions that demonstrate learning. More cautious before the crisis, customer regarding it becomes. Identifies government actions that did not result will benefit, while

recognizing the usefulness for others. No mention or institutions that promote knowledge and training strategies.

• Case 7: From the processing with the Atlas Ti were obtained the following 5 codes, which were extracted 5 quotations:

Table N°7. Case 7

Categories	**Emerging Codes 7**			
Lesson from the crisis	Survival	Adaptability		
Linking knowledge - action	No action identified			
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge			
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 7 Development of learning processes. The qualitative interpretation can say:

It comes as quite isolated, as surviving the hardships of context. Criticizes government action and does not identify any training. Recognized financial institutions as those promoted by facilitating knowledge technology. Inability to learn lessons as intangible product of all experiences is observed.

• Case 8: From the processing with the Atlas Ti were obtained the following 8 codes, which were extracted 9 quotations:

Table N°8. Case 8

Categories	**Emerging Codes 8**			
Lesson from the crisis	• Financial adversity • Adversity undefined x2	Export adversity	Naturalization obtaining education	Feel part of a type of companies: sector size
Linking knowledge - action	Identifies the action and knowledge			
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge			
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 8 Development of learning processes. The qualitative interpretation can say:

Describe a cyclical process of adversity and revivals which gives the entire industry. Identifies knowledge gained as a result of omissions of government (energy policy). It also

identifies two institutions that promoted knowledge and mentions the provincial ministry as a trainer entity.

- Case 9: From the processing with the Atlas Ti were obtained the following 6 codes, which were extracted 8 quotations:

Table N°9. Case 9

Categories	**Emerging Codes 9**			
Lesson from the crisis	Caution	Political adversity	He managed learning alone	
Linking knowledge – action	Identifies the action and knowledge x 4			
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge			
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 9 Development of learning processes. The qualitative interpretation can say:

Describe some political setbacks, provides recommendations that arise from what is happening now, and expresses learning from the lessons they entailed. Clearly identified on four occasions, shares and derivatives knowledge. Recognizes two institutions that promoted knowledge in the area (for example, promotion plans that facilitated access to technologies). Not identify any training.

- Case 10: From the processing with the Atlas Ti were obtained the following 8 codes, which were extracted 9 quotations:

Table N°10. Case 10

Categories	**Emerging Codes 10**			
Lesson from the crisis	Homelessness	Legal adversity	Caution	Economic Adversity
Linking knowledge - action	Identifies the action and knowledge x 2	Identifies the action and fails to knowledge		
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge			
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 10 Development of learning processes. The qualitative interpretation can say:

The knowledge from the crisis are adverse as it becomes distrustful of customers, feels helpless and this forces him to take precautions.

The contextual adversity led him to optimize the use of energy and better target machines, but in the case of paved roads fails to identify benefit and a critique of the political sense of the action.

No mention training and confuses the initiative of the Forest Fair and is attributed to the government when in fact belongs to a private entity.

• Case 11: From the processing with the Atlas Ti were obtained the following 4 codes, which were extracted 4 quotations:

Table N°11. Case 11

Categories	**Emerging Codes 11**			
Lesson from the crisis	Unidentified adversity			
Linking knowledge - action	Unidentified action			
Identification of strategies for promoting knowledge	Unidentified			
Training	No mention			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 11 Development of learning processes. The qualitative interpretation can say:

It does not take lessons from the crisis because of its absence during it. Actions, strategies, institutions that promoted the knowledge, training, everything in general manifest disregard: Regarding the other categories any kind of knowledge is identified.

- Case 12: From the processing with the Atlas Ti were obtained the following 6 codes, which were extracted 7 quotations:

Table N°12. Case 12

Categories	**Emerging Codes 12**			
Lesson from the crisis	Naturalization of the crisis	Naturalization obtaining education	Fluctuations in commodity prices	
Linking knowledge - action	Identifies the action and knowledge			
Identification of strategies for promoting knowledge	Identify institutions that promoted knowledge	Identify institutions that promoted knowledge		
Training	He mentions some			

Source: Own Elaboration

The same can be seen in the corresponding graph interrelated to Case 12 Development of learning processes. The qualitative interpretation can say:

Naturalizes the crisis considering that in recent years there was no crisis, from which was no learning, however states that learns. Identify institutions that promoted training and mention some who conducted training for the sector.

Interpretation of the results

They have been made from codes found from the qualitative analysis and individual partial conclusions that correspond to each case for the development of learning processes. Similarly it did something similar to group all those obtained in the previous analysis codes, of the 12 cases (listed below in alphabetical order and with a multiplier after the 'x' signals the number of times that the code is repeated), to arrive at partial findings of the group.

Adaptability
Adversity export
Adversity internal market
Economic adversity x 3
Financial adversity
Fiscal Adversity x 3
Legal adversity
Labor adversity
Undefined adversity x3
Political adversity x 4
Good communication
Helplessness x 4
Fluctuations in the prices of commodities x 3
Frequent changes in the rules of the game
Identify institutions that promoted knowledge x 13
Identify the action and knowledge x12
Identify the action and not notified to x 3
Identifying a problem
Identification of an action x 4
Lack of communication with government
It achieved a Learning itself × 5
Mention any x 2
Naturalization of the crisis
Naturalization obtaining teaching x 2
No action identifies x 3
Not identified x 2
No mention x 10
Precaution x 2
You feel part of a type of business: size | industry
Solidarity with employees
Survival
Use intermediation
Integration Rating
Bonding with chamber

Conveniently obtained by grouping the codes related to the four categories initially presented Development of Learning processes (without trying to quantize the analyzed qualitatively and thus cut what was achieved), we have:

Table N°13. Grouping codes

Categories	Emerging Codes			
Lesson from the crisis	• managed learning only x 4 •Fiscal Adversity x 3	•Fluctuations in the prices of basic products x 2 •Naturalization obtaining	•Financial adversity •Legal adversity •Labor adversity	•Lack of communication with the

Categories	Emerging Codes			
	•Helplessness x 3 •Economic Adversity x 2 •Undefined Adversity x 2 •Policy Adversity x 2	teaching x 2 •Caution x 2 •Adaptability •Export Adversity •Internal market Adversity	•Take the risk •Good communication •Frequent changes in the rules •Identifying a problem	government •Naturalization of the crisis •You feel part of a company-size type-industry •Solidarity with employees •Survival •Use intermediation •Integration Rating •Bonding with chamber
Linking knowledge - action	•Identifies the action and knowledge X 7	•Identifies the action and not notified to x 3	•Identification of an action x 2	•Not identified
Identification of strategies to promote awareness	•Identify institutions that promoted knowledge x 10	•Not identified x 2		
Training	•Mention any x 2	•No mention x 10		

Source: Own Elaboration

Insights from the categories related to the element Development Learning processes, for all cases

Regarding Teaching left by the crisis, almost half of expressions adversities of all kinds (export, domestic market, economic, financial, tax, legal, business, political and non-defined) that appear next to the distresses, changes in the rules and non communication, contribute to learning from emotion and not from reason. Relatively few cases have shown a different, more rational learning, either express that who sympathizes with employees learn 'recipes' for survival, identify problems, communicate better, delegate and / or use mediation, rating the integration, linked with the chamber, etc.

Regarding the knowledge Bonding - Action, cause pleasure to note that there was a preponderance of those who identified the action and knowledge, except that when the remaining feature, which leave the process incomplete either because of identified actions are not completed with knowledge, or even when the actions are identified, this assumption is extinguished.

Regarding the identification of strategies to promote knowledge, almost all identified institutions that promoted knowledge, although there are no other descriptions.

Finally, with regard to training, very few mention something about what evidence the de-

actualization in this sample of the HR Sector.

Table Nº14: Levels reached in each categories

Categories	Estimated Nevel		
	Low	Medium	High
Lesson from the crisis		X	
Linking knowledge - action		X	
Identification of strategies to promote awareness			X
Training	X		
Trend of occurrence of marks for these categories		X	

Source: Own Elaboration

It can be concluded that the group of respondents has levels in the categories represented, the average level of which is shifted to a lower value.

Quantitative Analysis

For this analysis, a different procedure is followed than the earlier one done (where from each category, defined as the qualitative analysis above, had selected some codes, which were taken as variables in the statistical system used-SPSS-) and now we consider all the codes that emerged, they made a ranking and from that order was weighted with the value ´0´ which did not provide any value for the analysis and 4 that had the maximum value (the multiplier that appears after the ´x´ indicates the number of times that said code appeared). Thus resulted:

Table N°15. Training

Emerging Codes		Amount	Weighing	Qty X pond.
Mention any x 2		2	4	
No mention x 10		0	0	
Sum	12		4	0.33

Source: Own Elaboration

Table N°16. Lesson from the crisis

Prom (qty)	Weighing	Qty X pond.
Adaptability	3	3
Export Adversity	1	1
Internal Market Adversity		1
Economic adversity x 3		3
Finantial adversity		1
Fiscal Adversity x 3		3
Legal adversity		1

Labour adversity			1	
Non defined Adversity x3			3	
Political adversity x 4			4	
Good communication		3	3	
Helplessness x 4		1	4	
Fluctuation on prices of basic product x 3		1	3	
Frequent changes in the rules of the game		1	1	
Identication of problems		3	3	
Non communication with government		1	1	
Alone reached Learning × 5		4	20	
Crisis Naturalization		1	1	
Naturalization in obtaining learning x 2		2	4	
Precaution x 2		1	2	
One feels part of an enterprise: size / sector		2	2	
Solidarity with employees		3	3	
Survival		3	3	
Use intermediation		3	3	
Integration Valorization		2	2	
Bonding with chamber		3	3	
Sum	46		79	1.72

Source: Own Elaboration

Table N°17. Identifying strategies to promote knowledge

Identify institutions that promoted knowledge x 13		2	26	
No identified x 2		0	0	
Total	15		26	1.73

Source: Own Elaboration

Table N°18. Linking knowledge - action

Identifies the action and knowledge x 12		4	48	
Identifies the action and not notified to x 3		2	6	
Identification of an action x 4		2	8	
No action identifies x 3		0	0	
Total	22		62	2,82

Source: Own Elaboration

The quantitative description of the development of the processes of learning, from recently performed procedure, allowed to construct the following table where some differences occur in relation to what was presented in the qualitative analysis.

Table Nº19: Table presents the levels reached in each of the categories

Categories quantified according to the procedure indicated	Average value			
	0	**1**	**2**	**3 4**
Lesson from the crisis			X	
Linking knowledge - action			X	
Identification of strategies to promote awareness		X		
Training	X			
Average values prom.	1,65			

Source: Own Elaboration

This procedure was performed in view of the futility of the previous one, where it was intended to contrast-some hypotheses from analysis of variables according to isolated codes and / or grouped (constructed Vspss). This form of quantization, however, was useful to compare some developments graphically in each case.

Partial conclusions from the analysis of the speeches of some entrepreneurs from the forest-industry sector, from the perspective of the dynamics of change

The originally planned in this work is to analyze the behavior and actions of agents related to the changes caused by the emergence and spread of some dynamic elements in SME companies in the foretry - industry and related activities sector. Planned to address the development of learning processes. Had not planned monitoring of the performance of the agents but analyzes of expressions occasion achieved in individual interviews, which, after being transcribed, would be addressed and processed.

We noticed that the number of rescued categories of items Developmental Learning Processes was imposed: Teaching leaving the crisis, Bonding knowledge - action, Identification of strategies to promote awareness and training (four in total).

For various reasons the categories that characterized each element came together so that the four elements showed trends for average levels (ie, located approximately between the ends of a continuum whose ends are considered high and low). This conclusion can claim to have identified the categories that should operate for short-term impacts when it is intended to facilitate entry into a process of association within the sector.

Categories to operate realted to the Development of Learning Process

The one that has one of the lowest levels achieved by the various categories of all elements, is the training. This should occur at all levels of the companies, emphasizing the upper and middle levels, with a workload that is around 10% of the total agents. The other three

categories that make up this item (Teaching leaving the crisis, Bonding knowledge - action and identification of strategies to promote awareness) can be addressed in spaces upgrade or add mainstreamed as the subjects selected for permanent training.

Perhaps most important for this element is that managers and decision makers of industrial foresto companies, located in the territory studied within the Province should assume that your post should be less management and direction, becoming animators permanent change the entire environment that surrounds them, learning not only for themselves but for infecting others in the learning process, to impregnate with this new culture to all their friends. It is not all become teachers, but allow such practices are installed and consolidated, with mechanisms for continuous updating and revising their practices enabled by carefully monitored climates environments.

CONCLUSION

This qualitative research allowed to build a conceptual framework to set all the keywords found in achieved cases, which could more accurately locate the agents, their relationships and the characteristics of the territory in which they operate. Also it was possible to explore the many multidisciplinary contributions regarding the behavior of firms and theories that guide the best companies in the sector studied.

Development of learning processes, which were formed as a predominantly endogenous factor in the companies. Those who showed, as had been assumed and was implied, have based this on the Theory of Systemic Competitiveness, this interrelationship cannot be considered in isolation or fragmented but approached as a complex whole.

It had been raised in this paper to study what the agents were able to appreciate in their environment to be influenced to certain actions and from there to raise points of future exterior operability. This purpose was developed in the Development of Learning Process, as a catalyst for of change agents and companies, in the territory of the province studied, as has been shown.

The objective set at the beginning of this work has been fully done and thus be able to address some aspects of the determination of the feasibility of the mutual management among SMEs in the field of foresty industry in the Province of Misiones.

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BIOGRAPHICAL ABSTRACT

Please refer to articles Spanish Biographical abstract.