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a Stage and Eclectic Approach applied to  
the Development of Survival Clusters  
in Latin America**

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**Abstract**

Previous studies indicate that clustering is not a simple and monolithic process, but it is a process that passes through different “stages”. Within this logic, the identification of the stage which each cluster is passing through is a key for both research and policy agents, especially in developing countries. This methodological approach would help them identify better what next development step could be feasible in the short-term. This paper identifies a second aspect that can have significant consequences for research and policy in developing countries. An “eclectic approach” is called for to explain fully the process of development in SME clusters. This approach hypothesizes that development is likely to be more fully and quickly implemented when three types of factors are taken together. Economic, social and policy factors need to be identified, and the main bodies of literature on SME clusters help achieve this objective. These two overall considerations change the perspective of development about SME clusters in developing countries, especially the so called “survival clusters”, which tend to be negatively assessed. In contrast, this approach recognises that even these clusters have a good chance to grow over time.

**Keywords:** SME clusters, development policy, developing countries, Latin America, Costa Rica, Nicaragua, Italy.

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## 1. Introduction

The literature on clustering shows that this is an important means to promote the competitiveness of small and medium enterprises (SME) in the global market. In the specific context of developing countries, if clustering is properly organized, it can also help to avoid the typical division of society that makes more difficult the way out of underdevelopment (Parrilli, 2004). In this paper, the analysis focuses on a specific type of cluster (i.e. survival clusters), which are quite common in developing countries, and identifies two main keys of interpretation and promotion of development in developing country clusters.

Two hypothesis are at the basis of this approach. The first suggests that SME clusters pass through various stages in a trajectory of growth. Analyses made on the history of IDs in Italy open up the possibility that SME clusters in general tend to pass through stages in a process of social and economic upgrading (Parrilli, 2005). This hypothesis introduces an opportunity to the development of many “survival” (Altenburg and Meyer-Stamer, 1999) and “satellite” clusters (Knorringa, 2002; Guerrieri and Pietrobelli, 2004) in developing countries, which can have the effect of dynamizing the policy support in those contexts. This approach represents a change with respect to the existing literature that tends to be more pessimistic about these clusters.

The second hypothesis refers to different but complementary factors that contribute to the development of clusters. For this purpose, this work explores the key-forces emphasized by the main theoretical and policy approaches to SME cluster development. The integration of these forces through an “eclectic” approach might help to explain better why many clusters have not grown as desired and help to plan more effective support policies and actions. This second aspect also introduces a modification with respect to the main policy approaches to SME cluster development, which tend to be less comprehensive, but for this reason maybe less effective.

In the following section, the theoretical framework is discussed. Thereafter, the empirical section 3 investigates the impact of the economic, social and policy factors on the growth process of clusters. The evidence is taken from two furniture clusters in Latin America (i.e. Sarchí in Costa Rica and Masaya in Nicaragua) and an Italian furniture

cluster, Forlì, in Emilia-Romagna. A final section of conclusions is presented, which draws the consequent conclusions and indications for development policy.

## 2. Theoretical Framework

### *2.1 Survival Clusters in Developing Countries*

The academic literature on SME clusters essentially focuses on very successful clusters in both developed (Marshall, 1918; Brusco, 1982; Piore and Sabel, 1984; Best, 1990; Becattini, 2000) and developing countries (Schmitz, 1992; van Dijk et al., 1994; Nadvi and Schmitz, 1999; van Dijk and Sandee, 2002). More recently, new tendencies of development are being explored, such as the establishment of trans-local and trans-national networks of SMEs (Guerrieri and Pietrobelli, 2004; Rabellotti, 2001; Gilly and Torre, 1998; Storper, 1998; Bianchi, 1998) and urban trans-sectoral networks and clusters (Fujita et al., 2001; Krugman, 1998; Audretsch, 1998; Scott, 1998).

The major trend in research on clusters focuses on the new competitive and technological frontiers of the most advanced types of clusters. This research effort is motivated by the need to find a developmental answer to the situation of many national economies based upon traditionally strong local production systems (i.e. Italy, France, etc.), which are struggling to maintain their share in the globalized market.

However, this focus leaves unanswered the problematic of other world regions and kinds of clusters that do not work close to technology frontiers. In fact, the development role played by plenty of “survival” clusters in developing countries is underscored from both a research and policy perspective. Despite possible internal differences within this category, these clusters can be defined as local systems composed by many craft producers working independently from one another (i.e. no division and specialization of labor) and elaborating individual products of rather low quality (i.e. little use of machinery) for the low-income segment of local consumers. In general, local firms do not grow, but tend to reproduce their own basic capital, giving to the owner’s family the means to subsist only. These local systems are often neglected, in spite of their

density and importance in the economic life of developing countries and the large number of operations that many development agencies realize for SMEs in developing countries. That is why focussing on these cases seems to us worthwhile.

On this issue, this work raises its overall argument, by widening the 1970s slogan on small enterprises: “Small is beautiful” (Schumacher, 1972). Introducing it into the core of this analysis, this work hypothesizes that “Clustering is beautiful”, of course under specific conditions. This approach underlines the good, although often small steps that also non-yet-competitive clusters make. As a consequence, it justifies the setting up of a more complete and strong policy support in that case.

This general perspective seems to contradict the reality, since SME clusters in the world are not similarly competitive; some are more competitive than others. Some theorists would argue that, among SME clusters, some have the capacity to grow, while others do not. This view indicates that many clusters in developing countries tend to be “survival clusters”, whose economic indicators tend to stagnate (Altenburg and Meyer-Stamer, 1999; Knorringa, 2002; Amin, 1994).

Other types of cluster, originally studied in the context of the U.S. economy, refer to a condition of dependence upon a (few) large firm(s) that can either be part of the cluster, in which case a “hub-and-spokes” cluster is determined, or outside the cluster, in which case a “satellite” cluster arises (Markusen, 1996). Both of these cases exist in developing countries, although the first tends to be a more dynamic kind of cluster, in which SMEs can dynamically reap competitive advantages (e.g. knowledge and capabilities), while the second tends to be a less dynamic kind of cluster, in which SMEs are too dependent on the large firm(s) and oriented to a low-road profile of development (Knorringa, 2002; Guerrieri and Pietrobelli, 2004; Pyke and Sengenberger, 1990).

## *2.2 A Flexible Stage Approach*

The general argument of this work insists that all kinds of clusters, at different extents and speed, can grow. This is what makes “clustering beautiful”. This view is based upon a previous study that indicates that even successful experiences, such as the

Italian IDs, passed through a trajectory of growth which started from basic types of agglomerations (i.e. concentration of workshops), which very much resemble to the category of “survival clusters” in developing countries, and upgraded into more developed ones, such as the present new competitive IDs (Parrilli, 2005).

One of the objectives of this paper is to establish a methodological approach which could have significant effects on policy-making for clusters in developing countries. It is a stage approach that is based upon the transformation of Brusco’s identification of four historic models that synthesized the debate on local production systems in Italy from the 1950s onwards (Brusco, 1990) into the effective sequence of stages IDs passed through in their trajectory of growth. The first of these stages concerns the process of agglomeration of small workshops, specialized in traditional manufacturing activities, which started in the Third Italy a few years before the Second World War (it is what mostly resembles to “survival clusters”). The second model relates to the 1950s and early 1960s, when a few large enterprises took the lead in local production systems, concentrating manufacturing activity, but also spurring the shift from craft to industrial production (i.e. scale economies for mass consumption).

The third model refers to the crisis of the Fordist system, which promoted an intense creation of dynamic SMEs capable of jointly producing and marketing their products abroad (Brusco calls it ID Mark I). This started at the end of the 1960s and went on till the end of the 1980s. A fourth model has been discussed in the last ten or fifteen years which refers to a globalized environment in which competition forces SMEs to shift up the technological frontier to avoid the “low-road competition” of newcomers (Pyke and Sengenberger, 1990; Kaplinsky and Readman, 2001; Guerrieri and Pietrobelli, 2004). These are called ID Mark II (Brusco, 1990).

In my view, these four models closely represent the historic sequence of the stages of development of Italian IDs. This consideration leads to hypothesize that “survival clusters” in developing countries, that resemble a lot to the early agglomeration of craft enterprises of the first stage of ID development, have the same kind of opportunity to grow over time. Of course, this does not mean that those clusters are progressing in the best possible way, but that they represent a reality with an interesting potential.

The analysis of stages is a useful exercise, even in the context of developing countries, since it suggests policy-makers to avoid crossing too many stages at once during too ambitious development efforts. This particularly occurs with that, for some researchers, do not show much potential for growth, such as the so-called “survival clusters” and “satellite clusters” (Altenburg and Meyer-Stamer; 1999; Markusen, 1996; Knorringa, 2002).

Overstating the feasible objectives of each cluster, leads national, local governments and parts of the private sector to expect too much in the short-term. This expectation creates barriers to an adequate development approach both among policy-makers and producers. For instance, local craft producers would feel inadequate to replicate the ID model and renounce to participate in governmental support programs, contributing to make these latter less effective.

Through the identification of the sequence of development of Italian IDs, this paper proposes the most feasible short-term development steps for less dynamic clusters in developing countries, as well as the policy framework that can produce effective results in such a timeframe. This does not mean that this paper suggests that every SME cluster has to necessarily pass through all the above-mentioned stages of growth. It rather reaffirms that the development of clusters is a stage process, whose steps and trajectory need to be analyzed in detail to plan adequate steps ahead through appropriate development policies.

### *2.3 The Eclectic Approach*

The first hypothesis can be complemented with a parallel hypothesis, which refers to the factors that promote the growth of clusters. This second hypothesis indicates that growth (and its speed) depends on several factors, being these economic, political and social in essence. This paper relates these factors to the major streams of literature on SME cluster development in developing countries.

A first relevant stream of literature on clustering shows the relevance of “collective efficiency” for the success of many clusters. In these cases, joint actions and

external economies are widely recognized factors that allow the local system to flexibly respond to market demand and grow (Schmitz, 1992; Van Dijk et al., 1994; Nadvi and Schmitz, 1999; van Dijk and Sandee, 2002; Pietrobelli and Rabelotti, 2004).

A second approach emphasizes the social factors that support the development process. In particular, these social features include the local social cohesion, which is visible in the tendency to trustful and cooperative relations, that ease transactions among local economic agents and reduce costs<sup>1</sup> (Becattini, 1990; Trigilia, 1991; Lorenz, 1992; Dei Ottati, 1994; Platteau, 1994).

The social approach to SME cluster development should involve another element to complement the first and shape a systemic approach to social development in SME clusters: the push to self-realization. In the context of SME clusters this is represented by the tendency towards intense local entrepreneurship, spin-off of new firms and innovation rates (Brusco, 1982; Bagnasco, 1988; Becattini, 2000; Bellandi, 2001) which sharply differ from other contexts where self-realization is searched through career in large corporations and public institutions.

The key-point of this systemic attempt is that the two afore-mentioned elements are not to be taken in isolation from one another, but as interdependent factors, that jointly produce a “positive sum game” for the local system as a whole. In fact, social cohesion alone tends to generate a socially comfortable but economically static society; while self-realization alone tends to create a dualistic society, in which a smaller part can join the international market and the technology frontier, while a larger part remains linked to very traditional productions and markets generating rather poor performances (Parrilli, 2005).

A third group of scholars highlight the proactive policy and institutions that contribute to the success of SME clusters. The known case of Italian IDs shows the several laws, incentives and institutions that allowed the producers to achieve higher development standards and competitiveness over time (Capecchi, 1990; Arrighetti and Serravalli, 1997; Bianchi, 1998; Bertini, 1998; Cowling and Sugden, 1999).

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<sup>1</sup> This approach partially overlaps with the first for the emphasis it puts on trustful local relations as a basis to lower down transaction costs and increasing efficiency (Humphrey and Schmitz, 1998; Nadvi, 1999).



A further stream of literature is focusing on the policy-inducement of the development process, but with a different emphasis with respect to the former. This group stresses the role of the governance system in which SME clusters are involved as a key that influence their growth opportunities. This aspect is based on the power relations in which they are involved, either being these hierarchical, network-based or market-based (Humphrey and Schmitz, 2000; Pietrobelli and Rabellotti, 2004).

In my hypothesis, these levels of factors (i.e. economic, social and policy-induced) spur development in a cumulative way. The history of successful SME clusters, particularly the Italian IDs, shows that such outstanding development has been promoted by many factors simultaneously at work (Parrilli, 2005; Becattini, 2000; Brusco, 1982). In this sense, when these factors work together, the development process is likely to speed up. When they do not, growth is likely to slow down. This would also help to explain why some clusters are more developed than others (e.g. Italian IDs versus “survival” and “satellite” clusters)<sup>2</sup>. That is why, on the whole, an “eclectic approach” to SME cluster development would be very useful to set up appropriate policies for the promotion of this important actor in developing countries.

### 3. Empirical Evidence from Three Clusters

#### *3.1 The Context*

This section analyses data from three SME clusters, which are localised in three different countries: the furniture clusters of Masaya-Nicaragua, Forlì-Italy and Sarchí-Costa Rica.

Considering standard indicators of performance (e.g. sales, income, export and fixed assets), it becomes evident that these clusters - as well as their countries- are not

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<sup>2</sup> Consistently with the objective of this paper, this consideration does not reflect the meaningful effects that the macroeconomic structure and stability of the country certainly has on SME cluster development (Perez and Stumpo, 2000).

equally competitive. They represent different situations and development prospects<sup>3</sup>. But this type of analysis is not interested in analysing standard indicators of performance; it is rather interested in understanding what development process these clusters have gone through, whether they can grow further and what future steps/stages they can effectively target.

A simplified observation indicates that the Italian cluster ranks at an intermediate position between what Brusco calls “ID Mark I” (i.e. traditional IDs) and “ID Mark II”, which represents the new competition mode that IDs have undertaken in recent years of growing globalisation (Brusco, 1990:8-12; Parrilli, 2005). The two Central American clusters represent something close to the craft mode of production with attempts to upgrade to industrial production. In this sense, they represent examples of the aforementioned “survival clusters”.

This preliminary consideration does not prove that all SME clusters are going to upgrade from lower to higher competitive stages. Discussing this hypothesis is the first objective of this paper, which should help to express the actual dynamism of each type of cluster, against the widespread idea that “survival” clusters in developing countries do not grow.

The second objective refers to analysing the development of the three clusters adopting an eclectic approach that integrates three types of factors of development, which represent the main approaches to SME cluster development briefly summarised above (i.e. collective efficiency, policy inducement and social embeddedness). These aspects should help explain the different competitiveness of these clusters.

This analysis is based upon 95 case studies of micro, small and medium enterprises in the three clusters (30 in Masaya, 33 in Sarchí and 32 in Forlí). Quantitative and qualitative information has been collected through a random selection of enterprises based upon the universe of local enterprises (BCN, 1996; Murillo, 2002; CNA, 2002). The information collected does not focus specifically on performance indicators, but rather on those factors that the main approaches to SME cluster development identify (i.e.

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<sup>3</sup> The income mode ranges from 40,000 to 200,000 euro per month in Forlí (with higher peaks), against 3,000-6,000 dollars in Sarchí (with higher peaks) and 2,000-3,500 dollars in Masaya (with higher peaks). Fixed assets range very differently from 1.1 million euro in the case of Forlí, to about 30,000 dollars in Sarchí and 10,000 dollars in Masaya (author’s survey).

external economies and joint actions, social cohesion and self-realisation, national and local policies).

### 3.2 *The Cluster of Forlì, Italy*

This cluster is specialised in furniture production and involves 240 enterprises for about 3,200 employees. Half of these firms focus on core productions (i.e. upholstery), while another half centre to the supply of parts, such as wooden structures, metal nets, gum bumpers, leather. It is a well recognised and competitive cluster, being one of the main upholstery production areas in the country, with a consolidated export market, especially in France and Germany. The overall district production is about 360 million euro, 60% of which is exported (Bardi, 2000).

Following the proposed stage approach, this analysis goes through the history of this cluster. Before World War I, which is also before industrialisation took place in this area, no furniture production was visible here. But just before World War II one thousand workshops were operating and employing about 1,880 workers (Fauri, 2000:5).

**Table 1: Number of firms and workers in wood and furniture in the Province of Forlì**

|                    | 1911 | 1927  | 1937  | 1951  | 1961  | 1971  | 1999  |
|--------------------|------|-------|-------|-------|-------|-------|-------|
| No. of Enterprises | Few  | 955   | 1,007 | 1,140 | 1,297 | 762   | 688   |
| No. of Employees   | Few  | 2,016 | 1,886 | 2,632 | 5,694 | 4,015 | 5,800 |

Source: ISTAT, III, IV, V Censimento generale dell'industria e del commercio, in Fauri, 2000.

In the 1920s and 1930s plenty of small workshops started up their activity in Forlì and its surrounding small towns (e.g. Cesena, Meldola, Castocaro). Production was organized in craft enterprises that employed an average of two workers each and that sold their furniture in local markets. It was in the 1950s that a big jump was made, from that basic kind of craft agglomeration to industrial production. A local entrepreneur set up a modern industry with around 60 employees. Production was industrialised and this

catalysed further developments in the cluster, by pushing other entrepreneurs to make similar investments in technology and upgrading the production capacity of this cluster.

After about ten-fifteen years, this cluster entered into the next development stage. This evolution occurred when, in the early 1970s, the local medium-large firms entered into the crisis of the Fordist system, which led to closing down or restructuring of operations. Many small firms arose from the initiative of specialised workers leaving those medium-large firms. Often their former employers helped by lending or selling them good quality machinery in order to externalise production and reduce costs.

A second event pushed this cluster to upgrade from a craft-type of agglomeration led by a few large firms to a true ID (Mark I). It was the participation of local artisans to the international furniture trade fair in Milan in the early 1970s. Producers got to know French traders, who appreciated the skills of these artisans. They visited the cluster and decided to open up a trading channel for upholstery production. In a few years a dynamic ID was operating and exporting tens of millions of dollars to the European market (Belussi and Bertini, 1998; Fauri, 2000).

In recent years this cluster has been put under pressure from the growing competition of the southern Italian cluster in Matera, but also from production in China and Eastern Europe. At the end of the 1990s a wave of public and private efforts have been made to overcome this problem. Firms started targeting the higher-income segment of consumers in order to shift away from the low-road type of competition with those areas (CSIL, 1997; Bertini, 1997). Some interesting outcomes can now be observed (Camera di Commercio, 2004).

Among the forces that pushed this cluster along a trajectory of growth and development, “collective efficiency” is one of the most important. From the early history social and political organizations supported collective actions of craftsmen. In the 1960s and 1970s most firms associated in craft and industry associations (e.g. *CNA*, *Confartigianato*) and, at present, almost hundred per cent of the firms are associated to these business organizations. These perform a double function: firstly, they are political organisations that discuss relevant issues with public authorities and obtain their commitment for public support; secondly, they give important services to SMEs (e.g. labour accountancy, information about environmental protection, tax charges, etc.). Two

promotion consortia have also been created by groups of local leading enterprises (one case is a rather old consortium, but after a long “lethargy”, it is renewing its efforts) with the objective of exploring new international markets, such as the U.S. and China.

This interesting story has also a downside. Consensus about the way these consortial efforts need to be managed is not easily reached and internal dissatisfaction exists. Many entrepreneurs complain about the scarce support they actually receive from their associations, which is limited to the delivery of few basic services for a market price. For these reasons, nowadays local entrepreneurs seem not to rely too much upon associations, but they tend to rely mostly upon themselves and work in an individual way.

In terms of external economies, Forlí benefited for years from the abundance of “Clients” and labour. International traders were responsible for the boom that this industry experienced in the 1970s. At present, this flow has been shrinking, since traders are often looking for cheaper bargains somewhere else.

Between the 1920s and the 1960s “labour” was abundant due to the intense migration from the countryside to the town; in the 1960-80s it was due to the expansion of furniture production. More recently labour is provided by the rather intense migration from Northern Africa, but it is not the skilled type of labour, which is actually needed. In fact, specialised workers search for better paid jobs in other sectors (e.g. in metal-mechanics).

Other external economies were weaker in the past and stronger today. The flows of “innovation” and “information” were scarce within the craft agglomeration of the 1930s and 1940s, but also in the phase of large firms-led industrialisation and in the 1970s and 1980s IDs, because local production was characterized by middle to low quality standards and cheap prices. But nowadays global competition does not leave much room for continuing this kind of production; that is why local producers show an increasing sensitivity to these externalities and the capacity to capture them.

**Table 2: Producer Perceptions on External Economies in 2002**

|                              | FORLI,<br>Italy | SARCHI,<br>Costa Rica | MASAYA,<br>Nicaragua |
|------------------------------|-----------------|-----------------------|----------------------|
| Good Clients Inflow          | 3 <sup>rd</sup> | 1 <sup>st</sup>       | 2 <sup>nd</sup>      |
| Good Information Flow        | 1 <sup>st</sup> | 4 <sup>th</sup>       | 4 <sup>th</sup>      |
| Good Innovation Diffusion    | 1 <sup>st</sup> | 3 <sup>rd</sup>       | 3 <sup>rd</sup>      |
| Abundance of skilled Workers | 4 <sup>th</sup> | 2 <sup>nd</sup>       | 1 <sup>st</sup>      |

Notes: 1<sup>st</sup> is the external economy producers perceive as the strongest, 4<sup>th</sup> is the external economy that producers perceive as the weakest. Source: author's elaboration on the basis of entrepreneur perceptions.

This differentiated weight given today to these externalities expresses the changing priorities of this cluster. Firms cannot compete anymore on the basis of low prices, because of the increased cost of labour. They have to present new competitive advantages in the field of knowledge and innovation. This is why local producers are very much sensitive to the flow of information and innovation that help them to upgrade production (e.g. in the use of new materials) and marketing practices (e.g. selling through webpages).

The second relevant approach to SME clustering emphasises the “social factors” of development: “self-realisation” and “social cohesion”. With respect to the first, a changing trajectory can be observed. Table 1 illustrates an extremely high tendency to firm creation in the post-World War I. This tendency was more latent in the 1950s and 1960s. While most workshops continued their operations involving new family members in their daily activity, many other people searched for employment in the rising large firms. In this way, the individual spirit of initiative focused on learning new production practices (e.g. assembling in large firms) and earning a better income, that will be useful means of production in the following phase of development of IDs.

In fact, as soon as these large firms entered a phase of crisis (1970s), many workers decided to leave and set up their own small workshops. The interest to be one's own master, take every important decisions and maintain closer relations with workers, often family members, were strong stimuli for people to create their own enterprises. This

is proved by the 93% of spin-off origin in the firms that operate now and that arose in the late 1970s-early 1980s.

This aspect is changing nowadays. New perspectives have been opening to young people, who are now less willing to undertake entrepreneurial initiatives in this sector or substitute their own parents at the lead of the firm. This is creating serious problems to this cluster, since the entrepreneurial push has been weakening. For example, the spin-offs generated by workers are few and the rate of firms creation is low (table 3).

**Table 3: Enterprises created from Workers (%)**

|                                   | FORLI,<br>Italy | SARCHI,<br>Costa Rica | MASAYA,<br>Nicaragua |
|-----------------------------------|-----------------|-----------------------|----------------------|
| Worker origin of the Entrepreneur | 93.7            | 75.7                  | 80                   |
| Firm creation by Firm's Workers   | 25              | 75.7                  | 53.3                 |

Source: Author's interviews, July-November, 2002.

This new trend does not transform Forlì into a static cluster; it just represents a new phase of life of this mature cluster. The present saturation of the European market and the higher barriers to entry (e.g. start-up costs are much heavier than thirty years ago, when small workshops started up in the backyards of family houses with few or no machinery), also explain this decreasing dynamism.

That is why, nowadays, firms target the transformation from traditional to innovative enterprises that avoid the low-price type of competition by investing in sophisticated technologies to present unique and well-remunerated products to high-income consumers in globalized markets. The new entrepreneurial tendency to create joint-ownership firms among two-four partners (instead of the traditional individual or family enterprise), represents another aspect of this competitive strategy, which is planned to pull together specialized knowledge and skills.

With respect to social cohesion mixed perceptions come about. For instance, producer's participation in social networks (e.g. hobbies, religious groups), which are supposed to strengthen social cohesion within the cluster, is quite low. Only 25% of them participate and it mainly refers to sport activities. On the other hand, there are other

indicators that show the presence of a social “glue” within the cluster. One of these is the length of the work relations between the producer and its suppliers, clients and workers.

**Table 4: Length of Work Relations with Suppliers, Clients and Workers**

|                 | Suppliers | Workers | Clients |
|-----------------|-----------|---------|---------|
| Number          | 11        | 19      | 171     |
| Mode (years)    | 10        | 8       | 7       |
| Average (years) | 9         | 6.9     | 6.2     |

Source: Author’s survey, 2002.

The length and selectivity in working relations is significant, which confirms the value that these entrepreneurs attribute to having consolidated relations among people within the locality (e.g. entrepreneurs with workers, suppliers with producers, etc.). These relations, based on mutual understanding and trust, has the general effect of lowering transaction costs and of increasing the competitiveness of local production.

The third type of factor refers to the policy-inducement of development. Forlí benefits from the long-run supportive national legislation for SMEs, which started from the early 1930s, at the time of the craft agglomeration, with the statute of craft enterprises. This support continued in the 1950s with new laws for the promotion of SMEs, which have been strengthened in the 1960s, through the 1965 “Sabatini law” for financing technological restructuring in SMEs. In the 1970s, the Ossola Law was approved to guarantee exporting firms in their internationalization process. In the 1980s and 1990s, laws on firm creation (law 44), innovation (law 81) and regional planning and investment (law 341 on “territorial pacts”) supported the move from traditional IDs to new competitive IDs (Bertini, 1998; Bianchi, 1992; Arrighetti and Serravalli, 1997).

These national provisions have been complemented by significant support at the local level, which applied the afore-mentioned instruments, but also promoted the provision of business development services from the mid 1970s-early eighties and the creation of a number of “industrial areas” around the town in the past ten years (Belussi and Bertini, 1998).

In synthesis, the history of Forlí shows two relevant aspects. First of all, this cluster passed through different development stages, which permitted a gradual



upgrading from lower to higher competitive levels. Secondly, this analysis shows the important role that the factors taken into account in the eclectic approach have had to promote the shift from a stage to the following. National and local policies have been at work all the time, supporting the growing role of SMEs in Forlì and in the whole country. Joint actions and external economies have been at work all the time too, promoting economies of agglomeration and scope that help to make these SMEs more competitive. Social strengths (i.e. self-realization through entrepreneurship and social cohesion through cooperation) have also promoted the passage from one stage to the next, although in different ways over time (e.g. creating new SMEs in the 1930s and in the 1970s, learning know-how in the 1950s, 1960s and in the 1990s).

The growing and recent competition from other areas in Italy and outside spurred the need to discuss within the cluster what development strategies were needed. Nowadays, apart from the problem of entrepreneurial turnover in some firms, significant changes are occurring in the cluster, with special reference to the entrepreneurial attitude towards business. In fact, together with the traditional belonging to business associations (although criticized), which characterizes one of the main strength of IDs, many firms are also investing in new technologies, both in production and marketing (e.g. CNC machinery, web pages). Producers are also more keen on reaping the external economies linked to innovation and information spillovers. New support policies have also been recently set up at both the governmental and local level. In this sense, Forlì does not represent a static cluster, but one that is restructuring to increase competitiveness and remain an upholstery leading exporter in global markets.

This analysis constitutes a significant point of reference for survival clusters in developing countries. In fact, it shows the history of a cluster that started from a very artisan character, but moved onto a more industrial typology of SME cluster to become in more recent decades a typical industrial district and, nowadays, to struggle to become even more innovative and competitive. This is a trajectory of growth that could be followed by SME clusters in developing countries.

Let' see now whether in those less developed countries there are the basic conditions that permit them advance along this possible trajectory of growth.

### *3.3 The “Survival Clusters” of Sarchí, Costa Rica, and Masaya, Nicaragua*

Both of these clusters are quite new, since furniture production was undertaken in a significant scale in the 1980s. In this sense, a first similarity can be seen between these two clusters and Forlí in its first stage of craft agglomeration.

Sarchí is a small town (25,000 inhabitants) on the central mountains of Costa Rica, fifty kilometers away from the capital San José and thirty kilometers from the other main towns of the country, Alajuela and Heredia. About 120 micro and small firms produce whatever kind of furniture, mainly for the national market, with limited projections into export markets (MINSA, 2002). It is an old cluster with traditions in oaxcart production. It was only in the 1980s that some artisans started focusing on furniture, due to the fall in demand for oaxcart production, that became more of a decorative art, and the growing demand for furniture expressed by national consumers (Perez-Sainz, 1994). Little by little the number of micro and small enterprises reached 120 (Minsa, 2002).

Masaya is a small town of about 100,000 people. Typically, the people work in craft activities linked to production of shoes, clothes, hammocks and furniture. This town is situated 30 kilometers away from the capital, Managua. As Sarchí, also this is a new cluster, since before the 1980s few workshops were producing furniture for local consumers. Through the 1980s many more workshops started operating and benefiting from the governmental institution delegated to the purchase of inputs abroad and sale of products: the Chamber of the National Industry (CONAPI). With the election of liberal governments in the 1990s, CONAPI was substituted by the new governmental institution INPYME, which offered a more market-friendly support to SMEs. The number of SMEs increased up to the present 150 micro and small enterprises. Nowadays, this cluster produces mainly for the local market, although production for national and international markets has been starting in recent years (e.g. Costa Rica, U.S.).

Under the “collective efficiency approach”, a few elements can be observed about these two clusters. In Sarchí, two “joint actions” are being implemented, one of which refers to a long-standing sales cooperative, which is having growing success; the other refers to a new municipal production committee, that in cooperation with the local

department of the Health Ministry, studies new ways to promote local production (e.g. through the attraction of tourists to the local rainy forest reserve) as well as the relocation of enterprises in industrial areas that prevent pollution problems to the population (i.e. dust and noise).

Informal exchanges are very common among producers: 70% of them are used to lend each other machinery, inputs, workers, in an atmosphere of mutual support. These relations ease daily operations and help reducing overall transaction costs.

In Masaya the situation is more difficult with respect to cooperation. Only 30% of the entrepreneurs experience an informal type of cooperation and no business association exists. These negative data can be explained with the recent history of Nicaragua. The military conflicts from the 1970s up to the early 1990s motivates a certain distrust among people. Moreover, the cooperative system that was developed by the socialist government in the 1980s, fall in crisis with market liberalization in the early 1990s. The associated producers started a struggle to capture some assets; some gained their share, but others did not. This whole story left a bad feeling among many producers in the country and make harder to develop joint actions now.

Nonetheless, something seems to be changing. Growing efforts to organize public meetings among economic, social and political agents can be noticed within the municipality. These efforts have been leading to the creation of a municipal production committee, that involves representatives of the SMEs as well as local NGOs, international agencies (i.e. UNIDO) and the local authority (i.e. the Mayor). This committee is supposed to support the requests of the producers for more adequate services to local production (e.g. market promotion).

Considering the external economies, Sarchí seems to be benefiting from a variety of spillovers, in terms of clients flow to the locality (which led the producers to start a recent wave of investments in retails shops), abundance of labor and flow of innovations and information (e.g. visible in the widespread use of newer materials). In general, withdrawing from standard analyses of performance, Sarchí looks like a dynamic cluster in which local producers try to capture all the possible spillovers from other's activities.

In Masaya, labor is abundant. This depends on the national recognition of this locality as the leading cluster in Nicaragua for furniture production. This manufacturing

activity has the capacity to create growing employment conditions. The flow of clients has also been increasing in the past five-seven years, according to the growing stability of the country. This created higher commercial opportunities for producers. In contrast, the entrepreneurs consider the flow of innovations and information quite poor. They often complain about the local tendency to imitate each other quickly, which pushes them to be more secretive. Our interpretation suggests that innovations in these clusters are not qualitatively outstanding. All furniture makers manage similar technology, materials, components and often clients. This situation seems to explain why it becomes less relevant to capture these (incremental) innovations in the locality. In contrast, the recent upraising of this cluster explains the attention that is paid to labor and clients/traders.

In social terms, the spirit of “self-realization” is expressed by the tendency to form new enterprises. In a much wider measure than in Forlí, the present SMEs in both Sarchí and Masaya have spun-off a large number of micro and small firms over their lifetime. These aspects are consistent with a strong local socio-economic dynamism, which can be based upon two main reasons: on the one hand, the need to create new income opportunities in rather poor countries (it would be more the case of Masaya than Sarchí); on the other, the desire workers manifest to set up their own business, manage independently their own daily activity and succeed as entrepreneurs (table 3).

The recent birth of this cluster promotes firm creation and spin-off, because know-how is accumulating and a large number of people (e.g. workers, young people) want to experiment their abilities to succeed in the main local specialization. They feel that there is a large market to join and that clients visit constantly the locality. Thus, they worry less about the costs of setting up an enterprise, since they will do it at the lowest cost by buying some basic machinery and/or contracting out the stages of production that are costly to be made in-house.

In the case of Sarchí, this strong tendency to firm creation is also rooted in the more stable political and economic environment of the country, which reduces risks and eases the calculation of returns to investments. In both Sarchí and Masaya, this tendency is also linked to the recognized leadership they acquired in their own countries as the leading furniture clusters.

Innovation is another important indicator of the push to “self-realisation” in clusters. Of course, this type of innovation does not refer to original inventions, but rather to the adoption and/or imitation of international benchmarking practices related to this specific sector (Romjin, 2002; Parrilli, 2002). The following table indicates the innovation efforts realized by the producers, which means their investments in product, process and market innovations, independently from the cost of these efforts, which often depends on the availability and cost of financial resources in the local market.

**Table 5: “Innovative” Producers in the past two years (%)**

|                         | SARCHI,<br>Costa Rica | MASAYA,<br>Nicaragua | FORLI,<br>Italy |
|-------------------------|-----------------------|----------------------|-----------------|
| Product innovation      | 69.7                  | 53.3                 | 78.1            |
| Process innovation      | 54.5                  | 43.3                 | 50              |
| Market innovation       | 39.4                  | 50                   | 62.5            |
| Average innovation rate | 54.5                  | 48.9                 | 63.6            |

Source: Author’s interviews, July-November, 2002.

In Sarchí there are signals of firms undertaking innovation in terms of industrial specialization (e.g. specific products), technology investments (e.g. new techniques and materials) and market orientation (e.g. “green” certificates for inputs of production).

In Masaya, 49% of the producers innovate. In this case, it mainly means adopting better production and market practices. It is very common for producers to imitate newer products observed in the market, by adding some personal aspects that introduce some kind of product differentiation. Of course, this differentiation is neither so evident to ordinary consumers nor it permits the producer to avoid price competition. In marketing, innovation refers mainly to the search of new clients, possibly foreign traders, for which producers increasingly participate to international fairs. A higher international interest for local production is evident, as the growing number of exporting producers in the past five-six years expresses.

The simplicity of the innovative effort in Masaya (at a lesser extent in Sarchí) depends mostly on the severely restrained access to credit for investments. Annual

interest rates in Central America are still higher than 20%, and high guarantees are also required, which reduce sharply the possibility to apply for investment credit.

In terms of social cohesion, there are more extra-economic spaces (e.g. sport, religious groups, ecology, school) than in Forlí. A significant 55% of producers participate in these activities, that spur local social cohesion (less in Masaya). This indication supports the hypothesis that these clusters are well endowed with elements that can spur joint actions and collective planning for development. The length of the work relationships within these clusters are relevant too.

**Table 6: Length of Work Relations with Suppliers, Clients and Workers**

|        |                 | Suppliers | Workers | Clients |
|--------|-----------------|-----------|---------|---------|
|        | Number          | 4         | 8       | 42      |
| Sarchí | Mode (years)    | 4         | 3.9     | 4       |
|        | Average (years) | 4         | 3.9     | 3.7     |
|        | Number          | 6.3       | 8       | 39      |
| Masaya | Mode (years)    | 3         | 3.5     | 2.8     |
|        | Average (years) | 3.4       | 3.5     | 3.1     |

Source: author's survey, July-November 2002.

Sarchí and Masaya show shorter-term relations than Forlí, but still reach significant values (respectively 4 years and 3-3.5 years in average). This lower result depends on the shorter life of these clusters and of most enterprises (13 years in Masaya and 16 in Sarchí against 21 in Forlí). In the case of Masaya it also depends on the civil conflicts of the 1970s and 1980s and the tensions following liberalization in the 1990s.

In terms of policy-inducement, public policy has not been supportive until now. In the case of Costa Rica, the first national policy for SME promotion was approved in 2002 only. The related law is now going through a process of institutionalization and implementation, with the creation of appropriate guarantee funds, technological funds, among other instruments<sup>4</sup>. Up to now, all industrial and development policies have been

<sup>4</sup> Presentation of the Minister of Economy, Vilma Villalobos, during the Central American School in Industrial Development and SME Policy, held in San José, 4<sup>th</sup> of August 2003.

directed to sector development (e.g. high-tech sectors) and export, independently from the existence of clusters and SMEs (Aguilar et al., 1998).

At the local level, the most significant public policy impact in Sarchí is in terms of new costs. In fact, the local office of the Health Ministry requires an improvement of the working conditions to control emissions from workshops, while the municipal authority worries about the payment of production licenses. These pressures push the producers to relocating in appropriate industrial areas outside the town. Individual investments are taking place, while municipal and state support have not yet materialized. The talks about it held within the production committee represent a step towards the institutional consolidation of furniture production in Sarchí.

In Nicaragua, a law for SMEs is discussed from the mid 1990s, but the coalition of forces (i.e. four associations of SMEs and international agencies such as UNIDO and the German GTZ) has not been able to convince the Congress to approve the law. In recent years, a growing number of international agencies and local NGOs have started to support SME and cluster development. Notwithstanding, they do not share a uniform approach, which is why they do not produce strong results (Parrilli, 2003).

At the local level, many NGOs and governmental organizations are working with groups of firms in Masaya. Also these institutions tend to work in a fragmented way, each one supporting a group of producers through the delivery of business development services (e.g. training, technical assistance, credit). But they do not seem to worry about pulling together local entrepreneurs in sector and local collective initiatives.

However, there are signals of a growing consciousness of this need. In fact, a few years ago the local authority promoted the restructuring of an old castle to make it a market for craftworks, which has become a point of reference for tourists. More recently, the Mayor and UNIDO have been promoting the creation of the local production committee composed by representatives of producers, international agencies (i.e. UNIDO), governmental institutions (e.g. INPYME, PROSEDE) and local NGOs. It is still early to assess the results of this initiative.

In synthesis, this analysis leaves aside standard indicators of performance, which would make of Sarchí and Masaya two simple “survival clusters”, with little or no capacity to grow. In contrast, it shows elements of interesting dynamism in these

localities. Sarchí cannot be compared to the present cluster of Forlí, since its enterprises are all micro and small enterprises producing for the small national market mainly, but it may be compared to Forlí in its first or second stage of development. It may seem even more dynamic than that kind of cluster. In fact, Sarchí shows several interesting aspects, such as the new wave of investment in retail shops (which occurred in Forlí in the 1980s, when the cluster had already opened the export market) and the various attempts of innovation in the use of materials and techniques more in line with international standards (e.g. green certificates, use of plantations). The policy support also shows significant changes towards a more supportive approach (e.g. the new law for SMEs) at the national level as well as the recent local production committee set up to solve critical issues for local production.

Masaya shows yet an ambivalent condition. Some joint actions are taking place, through the support of international agencies and local NGOs; labor abundance and clients inflow constitute significant external economies; the spirit of entrepreneurship has been growing, while social cohesion still suffers from the long civil conflict of the 1970s and 1980s. Governmental policy is more significant at the local level, but it is rather poor at the national level. On the whole, also Masaya shows new interesting elements of dynamism, which confirm the hypothesis that this supposed “survival cluster” is developing and that “clustering is beautiful” even for these less competitive clusters. Simultaneously, Masaya manifests weaknesses that need to be addressed to create a purposeful environment to push this cluster to higher development levels. This can be done through an eclectic policy approach that pulls together different types of complementary public support actions.

#### 4. Concluding Remarks for Policy-Making

Two types of conclusions can be drawn from this analysis. This study does not try to neglect the substantial competitive differences that appear among SME clusters. Forlí represents a successful cluster, whilst Sarchí and Masaya do not achieve significantly comparable success in terms of competitiveness, production and exports. Nevertheless,



this aspect is not the objective of this work, which rather emphasizes the dynamic aspects of growth in these different contexts. Two main conclusions can be extracted from this analysis. The first conclusion remarks that also the selected “survival clusters” show several elements of dynamism and development. Competitive differences do not represent definitive gaps; they rather represent different stages of development which the clusters are passing through in their trajectory of growth.

The study of these three SME clusters clarifies that development is a complex process that implies upgrading through stages. Each of these clusters is passing through a specific stage. Sarchí and Masaya represent craft-type of agglomerations attempting to shift to industrial production, while Forlí is passing from traditional IDs to new competitive IDs. Other passages are due, which need to be identified in each specific case in order to better plan the policy support and the feasible steps that can be expected from producers and the whole cluster in the short-term.

The common negative perception assumed about the so-called “survival clusters” needs to be re-addressed to allow developing countries to reap more benefits from the presence of this kind of non-yet-competitive SME agglomerations. From an industrial policy perspective, this position stresses that more efforts can be made to identify feasible development steps for these kinds of clusters. This is more likely to motivate all local forces to join together (e.g. entrepreneurs, private and public agencies) and create higher economies of agglomeration, which help them enter competitively in global markets.

The second conclusion addresses the determinants of growth at the cluster level. The evidence seems to confirm the hypothesis that a thorough approach to development includes types of factors extracted from the main bodies of literature on clustering: collective efficiency, social embedded-ness and policy-inducement. This approach can explain the diversified historic development of SME clusters and their present competitiveness and make justice to the complexity of the development process, which takes place on the basis of the dynamic and reciprocal interrelations among these types of factors and their cumulative effect on local production systems.

When only a few of these factors work simultaneously, the outcome is likely to be less than optimal, which is what can be seen in “survival clusters”. Vice-versa, when all

these determinants work simultaneously, the outcome is more likely to be at the top-level; which is what happened with the successful experience of Italian IDs (Parrilli, 2005).

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