

## Clustering craftwork activities: An approach to promote regional development in a peripheral region of Portugal

Maria Manuela Natário \*, Ascensão Braga \*\*, Constantino Rei \*\*\*

**ABSTRACT:** Portugal's globalization and integration had positive repercussions at the economic and social development level, but simultaneously it evidenced regional asymmetries, demanding new explanatory models to lessen existent disparities. Recent paradigms value the endogenous characteristics of the territory that appear decisive of the country's development, including the idea that regions and local agents should identify new kinds of production organization and relationships, thus enhancing clusters. Given that, in the Beira Interior Norte, craftwork activities assume a relative economic and social importance, the purpose of the present paper is to verify whether this sector acquires the cluster classification in the region and continuously characterized this classification while potential cluster promote and develop economic and social factors.

**JEL Classification:** R11, R12.

**Keywords:** regional development, clusters, craftwork activities.

## Clustering actividades artesanales: Un enfoque para promover el desarrollo regional en una región periférica de Portugal

**RESUMEN:** La globalización y la integración de Portugal ha tenido repercusiones positivas en el nivel del desarrollo económico y social pero también han evidenciado las asimetrías regionales, exigiendo nuevos modelos explicativos para disminuir las disparidades existentes. Los paradigmas recientes valoran las características endógenas del territorio como factores decisivos de su desarrollo. Las regiones y sus agentes locales deben identificar nuevas tipologías de organización y de relación de la producción, de entre las que se destacan los clústers. Teniendo en cuenta

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\* Instituto Politécnico da Guarda, Escola Superior de Tecnologia e Gestão. Unidade Técnico-Científica de Gestão e Economia. UDI/IPG- Unidade de Investigação para o Desenvolvimento do Interior. Av. Dr. Francisco Sá Carneiro, 50, 6300 - 559 Guarda - Portugal. Teléfono +351 271220 120 - Fax +351 271220150 ([m.natario@ipg.pt](mailto:m.natario@ipg.pt)).

\*\* [sbraga@ipg.pt](mailto:sbraga@ipg.pt).

\*\*\* [cmrei@ipg.pt](mailto:cmrei@ipg.pt).

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que en la región de la Beira Interior Norte portuguesa las actividades de artesanía poseen una importancia económica y social, este artículo tiene como propósito presentar su caracterización y verificar si este sector puede adquirir la calificación de clúster en esa región.

**Clasificación JEL:** R11, R12.

**Palabras clave:** desarrollo regional, *clusters*, actividades de artesanía.

## 1. Introduction

The increasing globalization and integration has resulted in positive repercussions at the economic and social levels of development; however, regional asymmetries have also been observed. These inequalities suggest the need to find new explanatory models to attenuate existing disparities. In this explanation, recent paradigms valorize the role of space and the endogenous characteristics of the territory, which emerge as determinants in regional development.

The limitations of the classic location theories (Von Thünen, 1826; Weber, 1909; Christaller, 1933; Marshall, 1890; Perroux, 1955; Myrdal, 1957), led to new approaches, which valorize the endogenous territorial characteristics as determinant factors in development. Within the paradigm of endogenous regional development, and in the context of the increasing globalization of economies, regions face the dual paradox of seeking competitive advantages. Specifically, thinking locally and acting globally. In this sense, regions must have a stake in local specificities (information, knowledge, relationships, motivation, culture, values, habits, and customs) and valorize the underutilized endogenous resources, thus reusing competitive advantages inherited and constructed to survive in the context of increased competition within the territories.

In the search for competitive advantages, regions and their local actors must identify ways to re-structure the spatial organization of production in order to improve performance and social relationships. Clusters are often showcases of best practice in manufacturing and can be used to stimulate upgrading for domestic firms (Altenburg & Meyer-Stamer, 1999) and local craftwork activities. However, it would be difficult for regions with low population densities to generate the necessary critical mass concentration of business to attract services and receive the classification of a cluster (Rosenfeld, 1997).

Concerning peripheral regions of Portugal, namely Beira Interior Norte, a region characterized by a fragile economical environment, an aging population, and low population density, craftwork activities take a major social and economical importance. Therefore, this paper aims to verify if this sector can obtain the classification of cluster that may be promoted and developed, thus, valorizing the endogenous resources and generating wealth to promote competitiveness and development in the region.

This present paper is structured as follows, a brief literature review regarding the theories of regional development, emphasizing the importance and role of clusters; methodology; main findings and discussion of the results; and final considerations and limitations of the current work and suggestion of avenues for future research.

## 2. Literature Review

Since the seventies, researchers have been assisting many changes in the organisation of production systems. «Increased competition due to globalisation and technological change has forced firms to abandon the traditional Fordist model» (Alfonso-Gil & Vázquez-Barquero, 2010: 337). In addition, the lack of a functional vision for development and the incapability of traditional models to explain changes in spatial hierarchies have led to a territorialist approach of endogenous development. In this approach, the territory becomes a strategic factor for regional development.

The development of the region is the result of participation, in its various dimensions, of the population (cultural, social, historical, technical, economical, sectorial), the valorization of natural resources, and, according to a dynamic and innovative approach, supported by a flexible economy, on the small scale autarky (Aydalot, 1985). Therefore, endogenous development is a process involving the expansion of the region's ability to add value to production in order to absorb and retain locally generated economic surplus as well as attract surpluses generated in other regions (Malinvaud, 1993).

«This approach considers development as a territorial process (not a functional process) that is methodologically based on case studies (not on cross-section analysis) and that considers that development policies are more efficient when carried out by the local actors (and not by the central administrations)» (Vázquez-Barquero, 2006: 4). In opposition to the traditional approach the endogenous development is based on the territory and local specific activities. The space ceasing to be a neutral element and becomes a fundamental strategic variable in the development.

In this process, it is important to understand how the regions generate endogenous mechanisms to create wealth produced by their specific resources. In response, researchers developed different models or perspectives associated with the profile and structure of the local production system (Courlet & Pequer, 1992), with emphasis on industrial districts (Becattini, 1979), flexible specialization (Piore & Sabel, 1984), new industrial spaces (Scott, 1988), innovative milieu (Aydalot, 1986; Lecoq, 1991; Maillat, 1996), learning regions (Florida, 1995) and clusters (Porter, 1998a).

In effect, an example of this is the literature promoting industrial clusters (Iammarino & McCann, 2006). Using the paradigm of endogenous regional development, the analysis of clusters encompasses a different and wider approach. Specifically, regions and local actors attempt to identify ways of organizing production in order to improve their methods of production and relationships to promote competitive advantages.

Porter (1998a) defines the concept of a cluster as a concentration of inter-linked enterprises and institutions (governmental, non-governmental, higher education, professional, business, and commercial associations, etc.) in a particular field. Although the cluster concept of Porter can be seen as chaotic, due to the ambiguity of its definition, clusters have become a worldwide fad, a sort of academic and policy fashion statement (Martin & Sunley, 2003). Simultaneously, the concept has become associated with the drives of national or regional growth and a key policy tool for promoting development and competitiveness. Effectively, clusters can be seen as a chance for regional development (Stachowicz & Bojar, 2008) since they play an important role in innovative process and are an essential part of the regional innovation system (Stachowicz & Kordel, 2006). Clusters exist because of advances in knowledge generated by firms working in an innovative atmosphere (Alfonso-Gil & Vazquez-Barquero, 2010). For example, Norton (2001) noted that the global leadership of the USA derives from the dynamic clusters of innovative entrepreneurialism.

As Vázquez-Barquero (2006:20) suggested, clusters and the local productive systems are efficient forms of spatial organization of production that have spontaneously emerged as a result of a firm's strategy to changes in market competition. Clusters are in constant transformation, continually adapting and responding to the challenges of innovation, changes in the business environment, and through productive restructuring.

In addition, clusters can be defined as production networks and strongly interdependent enterprises connected to each other in a chain of increased worth, which integrate alliances with enterprises and universities, research institutes, producer services with emphasis on knowledge, interface agents (such as brokers and consultants) and clients (Roelandt *et al.*, 2000). Thus what makes clusters attractive for policymakers are the opportunities for collective efficiency (Schmitz, 1995a) emanating from positive external economies, low transaction costs, and joint actions (Altenburg & Meyer-Stamer, 1999).

Moreover, clusters are one typology of Collective Efficiency Strategies under QREN (Quadro de Referência Estratégica Nacional for Portugal 2007-2013). These typologies are coherent and integrated set of initiatives strategically justified in an action program, aimed at innovation skills and upgrading clusters of companies with an area of national, regional, or local expression. These actions must occur structurally in order to promote the emergence of an agglomeration among economies through the cooperation and networking of such companies and other relevant local actors to develop the sectors to which companies belong and their territories. Finally, these clusters aim for economic enhancement of territories based on endogenous resources of each region and can serve as a tool for regeneration and development of peripheral regions.

According to Porter (1998b), clusters influence competitiveness within and between territories as the enterprises increase productivity and direct innovative activities and stimulate the creation of new business by expanding and strengthening the cluster itself. The clusters gains support through the mobilization between agents of a region, through private and public-private cooperation/interaction and the synergistic effects

and external economies resulting from this cooperation. Clusters offer a constructive way of changing the nature of the dialogue between the public and private sectors.

This interpretation argues that spatial organization of production is a key force of the development process, as demonstrated by the growing importance of a firm's networks in the regions and cities that lead the economic transformation processes (Vázquez-Barquero, 2006: 4). Adding to this development is the fact that clusters often create positive externalities which help managerial and technical learning (Altenburg & Meyer-Stamer, 1999).

Clusters can also benefit peripheral regions and rural economies. According to Isbasoiu (2007), for these areas, the promotion of clusters, as a feasible development option, offers some benefits. On one hand, clustered firms tend to have higher productivity and are able to pay higher wages. On the other hand, clusters may increase employment and income spillovers from businesses than would other forms of economic development. Consequently, clusters will thus provide better job opportunities and employment creation, wealth and income creation and greater levels of economic growth overall when compared to regions without clusters (Bernat, 1999; Isbasoiu, 2007). Thus, this spatial organization of production leads to income increases and improves the quality of life of residents.

In addition, as new firms emerge and develop in a local community, they demand raw materials, equipment, land, and human resources. These needs are translated into expenditures in the local community and the community's ability to respond to new business demands results in more jobs and income. The financial and technological benefits to firms also translate into community or social benefits (Isbasoiu, 2007).

Clusters have a diversified set of channels and clients, linked to producers of complementary goods and related enterprises, which are limited by existing linkages and complementarities between local enterprises and institutions (Porter, 1998a). Aside from promoting competition, clusters are likely to promote cooperation (mostly upright) since it requires companies and local institutions to utilize alternative methods of organizing the chain of values (Leitão, 2006). The cluster approach may have different analytical levels (Roelandt *et al.*, 2000; PROINOV, 2002; Leitão, 2006; etc.) as shown in table 1:

**Table 1.** Levels of cluster analysis

<i>Level of analysis</i>	<i>Concept of cluster</i>	<i>Meaning of the analysis</i>
<b>National level (macro)</b>	Group of related industries in the structured economy.	Specialization standards in regional/national economy; Necessity for innovation and improvement of products and processes in mega-clusters.
<b>Industry level or branch (middle)</b>	Inter and intra-related industries in the different stages of production chain of the same final product.	Analysis of Swot and benchmark of industries; Explore the need of innovation.

<i>Level of analysis</i>	<i>Concept of cluster</i>	<i>Meaning of the analysis</i>
<b>Enterprise Level (micro)</b>	Specialized suppliers around a company or a small group of companies (inter-company relations).	Development of strategic business. Analysis and management of the chain. Development of collaborated innovation projects.

Source: Roelandt *et al.* (2000:11).

Based on this information and according to PROINOV (2002), it is possible to distinguish four cluster types, which allow monitoring of different objectives in terms of innovation policies (see table 2).

**Table 2.** Cluster types and Usefulness to the Integrated Innovation Policy

<i>Cluster types</i>	<i>Cluster concept</i>
<b>Micro cluster or local cluster</b>	A geographically close group of inter-related companies and institutions with common elements and complementarities, operating in a particular field of activity (within the same sector or eventually in the same segment of a sector); these companies simultaneously compete between themselves in the product (or services) market and cooperate with each other, increasing the competitiveness of the group; the case of «Italian industrial districts» would fall in this category, as the focus of the companies in a reduced scope of activities or segments of activities is a key characteristic.
<b>Industrial clusters or simply cluster</b>	It's a group of inter-related companies of specialized suppliers, service providers, companies belonging to related enterprises and associated institutions (from universities to centers of quality certifications and commercial associations) which develop their activity in different fields resorting to distinct but complementary technologies, generating and materializing benefits to each other through innovation, favoring an overall increased competitiveness between the parties involved.
<b>Regional cluster</b>	It's essential for an industrial cluster to act primarily within a given regional area (sub-national) where the activity can be continued partly or fully in other regions of the same country; at this point, the importance of the geographical proximity in the dynamics of interaction between the actors and their roles in the overall level of competitiveness and innovation become more relevant.
<b>Mega cluster</b>	It's a set of distinct activities, whose goods and services fulfill the demand in the same functional area as the final demand, resorting to basic complementary competences capable of exploring interlinked advantages and network vocalization with other entities and itself, namely those which allow the accumulation of immaterial resources for the group of involved enterprises.

Source: PROINOV (2002:14).

In defining a cluster, different authors emphasize different factors and dimensions; however, the following elements are present in the majority of definitions, geographical concentration (spatial), sectoral concentration, cooperation versus com-

petition, specialization and interdependency. In effect, both the relations of cooperation between companies and competitors and competition between these entities are important for effective clusters. The interactions and interdependencies established between the actors of a cluster create synergies and contribute to the economic growth of companies as well as territorial development. Therefore, the following are essential components of an industrial cluster (PROINOV, 2002):

- **Relationships in a supply chain:** These include activities strongly linked by direct or indirect relationships of supplying such as intermediary goods and services, components and subsystems, equipment goods and specialized software, services of support and contractual employment of research services.
- **Relationships of affinity:** These relationships are activities strongly connected by direct or indirect relationships in the exploration of similar technologies to meet distinct goals. The exploration of common distribution circuits and brand synergies and the advantage of the same type of competencies demand a high accumulation of non-codified information.
- **Institutions of a supporting chain:** These include non-merchant institutions that provide support to the development of the cluster, namely educational institutions such as professional technological courses, secondary education, polytechnic institutes, college or university departments, as well as Professional Training, Research, Quality Certification, Regulators, etc.

An industrial cluster whose economic agents benefit from the industry's geographical proximity is designated as a regional cluster (PROINOV, 2002). The principal articulations in a regional cluster occur within a given regional area (sub-national), thus making it possible to partly or fully repeat these actions in other regions within the same country. Therefore, the following elements are emphasized to promote development of regional clusters (Rosenfeld, 1997; PROINOV, 2002):

- Knowledge gathered throughout generations. This includes gathering of knowledge, which results from a traditional and historical accumulation, for example *learning-by-doing*.
- The involvement and creation of synergies to enhance the cohesion of the local community.
- Historical accidents of a given region, which led to the geographical concentration of related activities and the mechanisms or «active channels» of learning and interactions, which were developed between the economic agents.
- Consolidation of technological centers and institutions of professional training (institutional involvement) thus reinforcing technological capabilities of industrial enterprises and attract new companies to a region.

According to Enright (1996) and PROINOV (2002), three typologies emerge within regional clusters:

- **Active clusters**, which are geographic concentrations of related companies that achieve greater levels of production through interaction and interdependency than they would by operating in isolation.



- **Latent clusters**, where geographical concentration and interdependency exist; however the clusters are still far from reaching their potential (in most cases because of a weak interaction between economic agents).
- **Potential clusters**, which retain certain elements from clusters, but lack important attributes and prerequisites to obtain the full advantages from geographic concentrations.

However, as with the region in the current study (*Beira Interior Norte - BIN*), difficulties exist for regions of low population density, in their capabilities of generating the necessary critical mass of business concentration in order to attract services and receive the classification of a cluster (Rosenfeld, 1997). Despite this difficulty, it is possible to find dense linkages based on trust, cooperation, and communication, which underlie the concept of a cluster (Enright, 1996). Therefore, according to Rosenfeld (1997), the typical forms of clusters in regions of low population density include:

- Small concentrations of companies, which may constitute a collective identity and operate as a system by developing few forms of specialized resources.
- Satellites of clusters, which are gatherings of similar or related companies with similar needs for specialized services, which can be found in a regional urban cluster.
- Clusters which trespass the geographic borders of the region, including rural areas. These clusters require careful management to cross long distances in order to obtain the benefits of interaction and collaboration.
- Regions that encompass different enterprises but continue to maintain enough connections, interactions, necessities, and common interests to justify their classification and treatment as clusters.

Considering the fragilities of the peripheral regions in terms of economic performance associated with both the reduction and aging of the residing populations and the relative removal these territories face the central regions in regards to markets and services, it is important that each territory identifies their clusters (active, latent or potential) within their local specificities and potential endogenous resources to promote their development and competitiveness.

Even territories do not attain this classification or do not fulfill the required requisites and attributes, it is important that they at least identify ways of organizing production which come close to the so-called clusters, in order to promote and stimulate them, thus valorizing endogenous resources, creating wealth, and encouraging competitiveness and development in the region where the territory is located. In doing so, these researchers can verify whether craftwork activities in BIN have acquired this classification and later characterize it as a potential cluster to be promoted and developed.

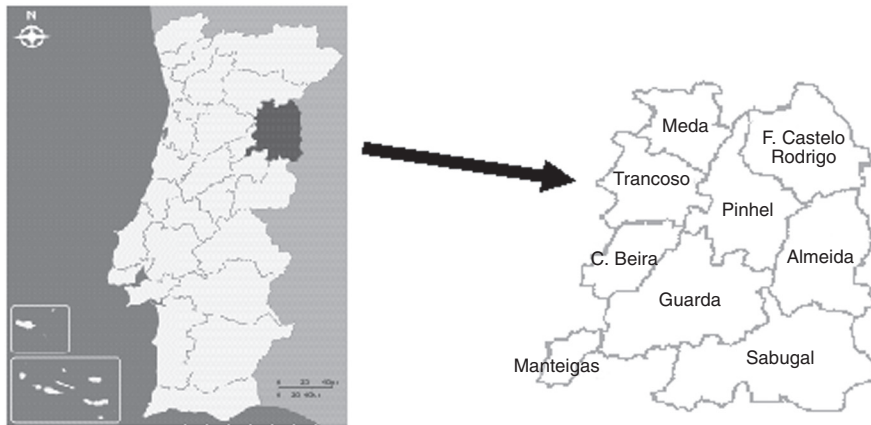
### 3. Methodology

Beira Interior Norte is a territory in the central region of Portugal, which borders Spain (Salamanca province), and presents a privileged geo-strategic position in the



multimodal Portugal-Spain/Europe connections. Beira Interior Norte (Map 1) administratively integrates nine municipalities in the Guarda district, Almeida, Celorico da Beira, Figueira de Castelo Rodrigo, Guarda, Manteigas Meda, Pinhel, Sabugal, and Trancoso, with a total surface area of approximately 4,063 Km<sup>2</sup> and 109,051 inhabitants. The population density of BIN, in 2007, was low, varying between 13.1 and 62.1 inhabitants/Km<sup>2</sup> with an average of 27.1 habitants/Km<sup>2</sup> (INE, 2008).

**Map 1.** Beira Interior Norte and municipalities



Source: <http://es.wikilingue.com> and CCDRC.

This region presents severe structural weaknesses related to depopulation, weaknesses in urban systems, demographic aging, and fragility of the economic and social fabric. However, this region is rich in water-resources (Côa, Mondego and Zêzere rivers as well as their tributaries), protected areas for landscape and hunting (Parque Natural da Serra da Estrela, Reserva Natural da Serra da Malcata), natural and vegetal resources (with raw materials for medicine, chemistry, cosmetics, and the agri-food industry), constructed heritage (dolmens, stone carvings in Vale do Côa, bridges, roads, medieval castles, pillories, solars, mansions, etc.), and gastronomy and craftwork (wickerwork, cutlery, ceramics, tapestry, etc.).

Faced with the reality of BIN and with craftwork assuming relative economic and social importance in this region, the aim of this work was to verify whether this sector earns the classification of cluster in this region as well as characterize this region in the sense of identifying its weaknesses and suggesting strategies that can ensure the region's self-sustained development. In order to achieve this goal, a quantitative and qualitative methodology was used, supported by documentary sources, statistics, and surveys. During the first phase, information from the Program for the Promotion of Craftworks and Micro Artisan Companies was requested and resorted to the data of the 2007 Yearbook of the Central Region, in order to calculate the Location Quotient for verifying the existence or nonexistence of a cluster in craftwork activities within

BIN. In a second phase, this researcher used surveys to attempt developing a characterization of this region.

The Location Quotient was developed by Florence (1948) and is an acceptable indicator for identifying clusters in a region (Delgado & Godinho, 2002) because this indicator identifies the concentration of workers in a particular sector in a given region related to the nation as a whole. However, this quotient presents some limitations. First, the location quotient is a descriptive approach using only two variables in two different territorial unities. Second, it is not a dynamic indicator and it does not reflect critical characteristics of a particular cluster as indicated by Ketels (2004), namely, proximity (the firms need to share common resources and to allow positive spillovers); linkages (their activities need to share a common goal); active interactions between the firms inside the cluster; critical mass (a significant number of participants has a major impact on the companies' performance).

The main source of data used in this study resulted from a survey of craftwork producers<sup>1</sup>. One hundred and twenty-two surveys were conducted, representing 44% of all craftwork producers who were identified and visited, in most cases *in situ*. Thus, the sample consisted of 122 artisans in BIN.

#### 4. Results

To identify the existence of concentrated craftwork in the region relative to the national whole, these researchers applied the concept of the location quotient. Based on the available information from Program for the Promotion of Craftworks and Micro Artisan Companies and the National Statistics Institute, the following variables were used, number of workers in UPAs (Artisan Production Units) in BIN and the country and employment, based on thousands of individuals employed in 2005, which resulted in the following indicator:

$$LQ_{\text{BIN, Ccraftworks}} = \frac{\frac{\text{Numberof Workers in UPAsin BIN}}{\text{Numberof Workers in UPAsin Country}}}{\frac{\text{Employment (thousandsof individuals) in BIN}}{\text{Employment (thousandsof individuals) in Country}}} \quad [1]$$

This quotient can identify a concentration of workers in the Artisan Production Units in BIN relative to the national territory. The analysis revealed the following results.

$$LQ_{\text{BIN, Ccraftworks}} = 1,22 \quad [2]$$

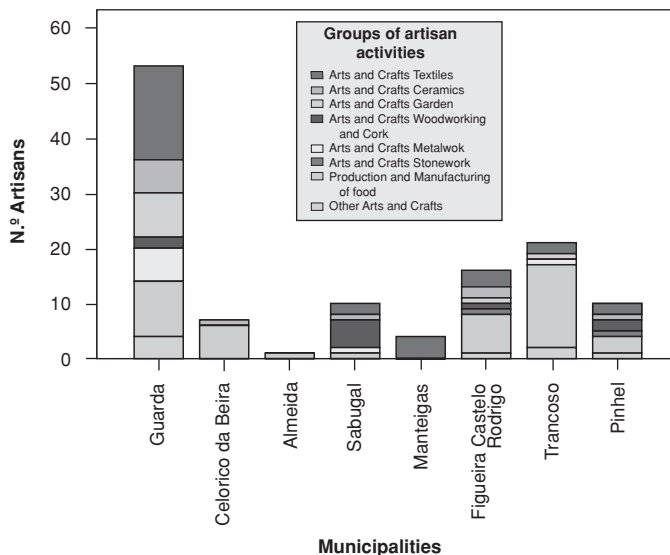
<sup>1</sup> In the scope of the project CTBIN-SAL2-SP3.P56/03 - *Directório Transfronteiriço Produtores Biológicos e Artesanais* (meaning «Transborder Directory of Artisan and Organic Producers») done in 2007/2008.

Based on the data analysis, the relative importance of BIN’s craftwork activities is superior to the importance of the country. In other words, artisan activities are more concentrated at BIN than throughout the country, which may signal the emergence of a cluster in BIN. Additionally, the official sources used do not account for informal employment which is typical in this line of work. On the other hand, traditional clusters, among others, were already identified in BIN, specifically, the agricultural cluster, in regional and craftwork products (Leitão, 2006). Nevertheless, it is necessary to verify other requisites (relations and interactions between companies and institutions, etc.) in order to effectively identify the existence of a cluster.

Considering the results of the LQ indicator, despite its limitations, the classification by Leitão (2006) and the reality of BIN suggests that there may be an eventual cluster of this type of activity, which this researcher will later characterize.

The main groups of artisan activities<sup>2</sup> identified in BIN included, production of food (35%), arts and craftwork textiles (25%), arts and craftworks ceramics (9%), arts and craftworks garden (8%), arts and craftworks woodworking and cork (8%), arts and craftworks metalwork (6%), arts and craftworks stonework (2%), and other arts and craftworks, which encompass diverse types of artisan craftworks (porcelain, plaster, tins, decorative products, canvas, etc.) which represented 7% of all artisans (see Figure 1).

**Figure 1.** Groups of Craftwork activities by Municipalities (2008)

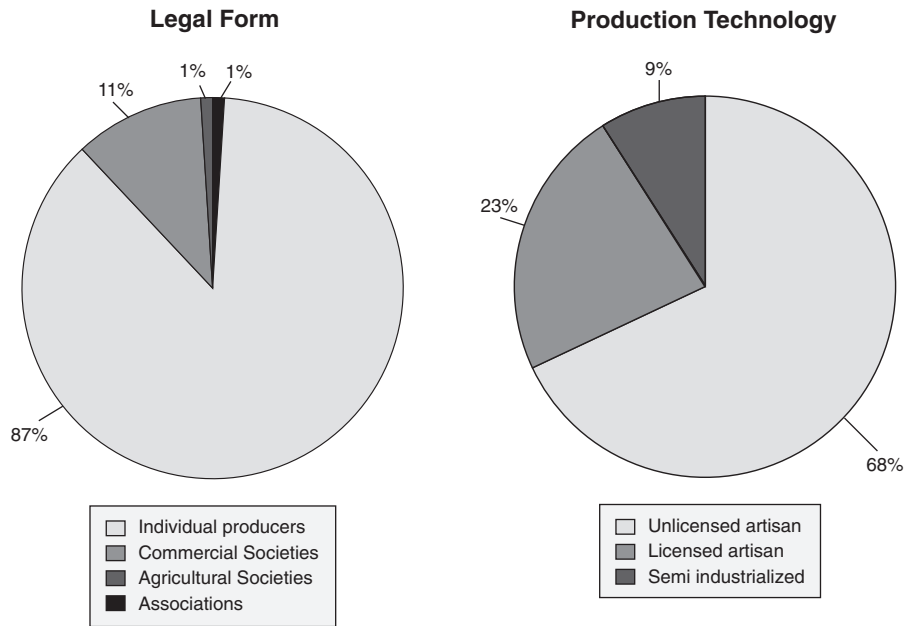


Source: Own elaboration.

<sup>2</sup> According to typology of Decree 1193/2003, of October 13<sup>th</sup>.

Of the several groups of artisan activities, 87% of respondents were individual producers with one to three full-time workers. The Commercial Societies account for 11% of all respondents (employing from 3 to 36 full-time workers) and the Agricultural Societies and Associations revealed an insignificant value (see Figure 2). It must be noted that, for a many of artisans, these activities are not the main source of income as they only perform these activities part-time. It should also be noted that 1/3 of the artisans were retired, specifically in the groups of Woodworking (70%) and Metalwork (57%). However, all were of working age in the arts and craftworks stonework, production and manufacturing of food, and other arts and craftworks groups. These factors, coupled with the non-mandatory licensing for some of these activities<sup>3</sup> may justify the 24% of respondents who were not reported as tax payers.

**Figure 2.** Legal Form and Technology of Production of Craftwork activities (2008)



Source: Own elaboration.

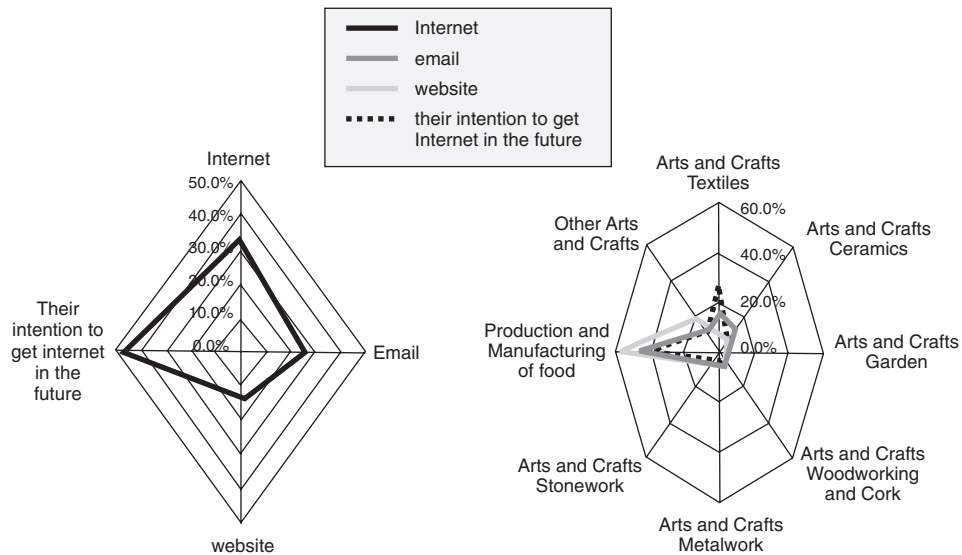
The method of artisan production, using traditional techniques and equipment, is an inherent characteristic in this type of activity. However, roughly 68% of respondents reported using unlicensed artisan production technology and only 23% reported using licensed artisan technology with technological innovation. The remainder (9%) practiced artisan production with the help of some mechanical equipment

<sup>3</sup> Namely textile arts and crafts with 47% and Ceramics arts and crafts with 46%.

(semi-industrialized). Two groups of activities stood out, where only the unlicensed method of artisan production was used, arts and craftworks woodwork and other arts and craftworks (see Figure 2).

Results revealed that new information technologies are also beginning to be a constant presence in artisan activities. In this sense, 34% of the artisans reported using information technology in performing their activities. For example, 13% of respondents had a website and 48% of those without a website expressed their intention in developing one in the future. The areas with less receptivity to these technologies included the groups arts & craftworks woodworking and cork, arts & craftworks textiles and arts & craftworks plant matter (see Figure 3).

**Figure 3.** Use of ICT's in Craftwork activities (2008)



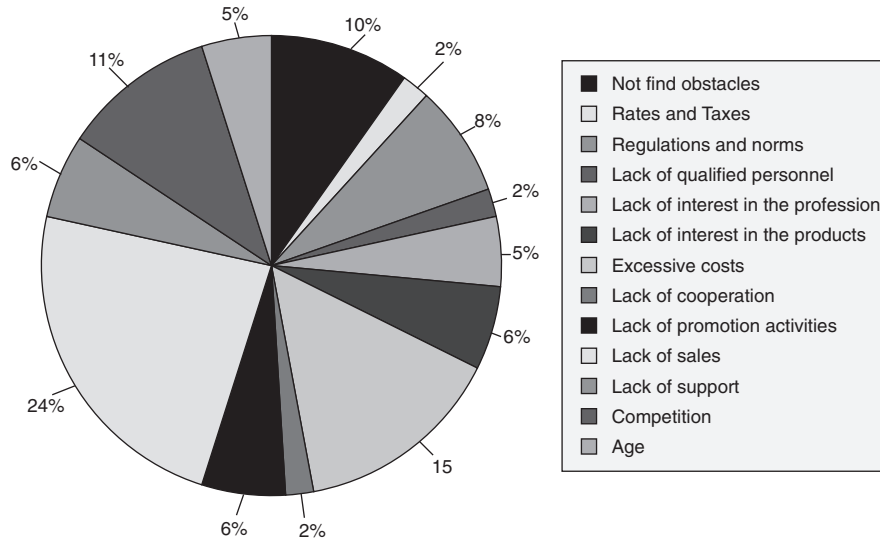
Source: Own elaboration.

Although 10% of the artisans responded that they did not find obstacles in the development of their business, the main factors identified that constrained business in artisan activities included, lack of sales, excessive costs, and competition (see Figure 4).

Noteworthy is the fact that these activities are becoming more rare and valuable, with unique and original products, and the artisans themselves identified a number of factors that distinguished them from other activities. The main distinguishing factor presented by the artisans was the fact that the method of production used is mainly artisan; followed by the high quality of their products and price relative to the competition. Less relevant factors included promoting and marketing channels used. It should be noted that the strong nature of tradition is rooted in such activities and that,

in many cases, there is a continuity of family tradition with this type of activity. This factor is also related to knowledge of the craft, which results from an accumulation of history and tradition. In other words, learning-by-doing, which nourishes the knowledge accumulated over generations.

**Figure 4.** Obstacles of craftwork activities (2008)



Source: Own elaboration.

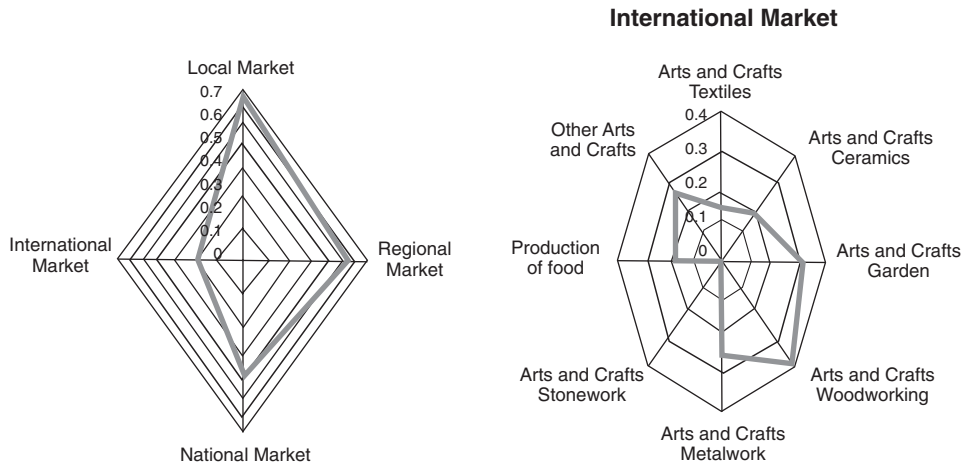
In terms of socio-economic segmentation, the craftwork products were for the general market with only 16% being made for a corner in the market. The main market outlets for the artisan products of BIN are, in geographic terms, the regional and local markets, with approximately 1/3 of producers selling to the domestic market and 20% selling to the international market (textiles —Italy, Netherlands, France, Japan, and Spain—; Woodwork —Europe and America—; Ceramics —Spain, France, Italy, and the Philippines—; and Metalwork —Australia, Angola, and Spain—). In regard to the marketing system, most of respondents (66%) either sold retail directly to the consumer or artisan fairs and markets and 18% sold both retail and wholesale (see Figure 5).

Wholesale products were made using intermediate local and regional storage. For group activities involving textiles, ceramics and other arts and crafts, the main marketing system was used to distribute products to fairs, expositions, and markets. Note that a small number of artisans (5%) reported that they did not make any sales (see Figure 5).

Despite the existence of a wide range of artisan activities in the BIN, only a negligible proportion (16%) were properly certified/registered as craftsmen, with the title of craftsmen, mainly due to matters related to bureaucracy and the high costs which

were not offset because of low profitability. The production and manufacture of food deserves attention for being the group with the highest percentage of certified activity. The majority of artisans (62%) sold products without a brand name and only 12% of those who reported having a brand name were registered.

**Figure 5.** Market of Craftwork Products (2008)

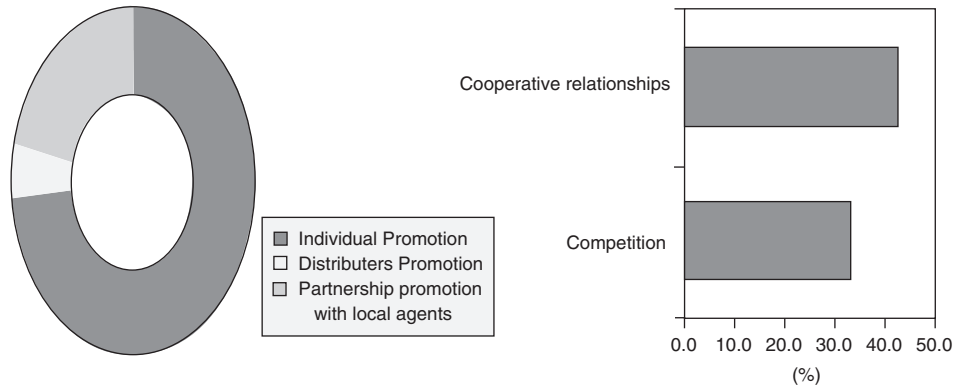


Source: Own elaboration.

Based on this data, today's reality is quite different and it has thus become necessary to examine time, money, and creativity in order to develop effective marketing activities; however, not all agents were aware of this new reality and of today's market demands, as evidences by the roughly 1/3 of artisans reporting that they did not consider marketing relevant. Of the artisans concerned with marketing, most choose to market individually and there were a few who reported advertising their products in partnership with local agents (Town Council, Associations, Core Business, etc.). Nearly 57% reported no marketing and sales infrastructure. The remainder reported having an area designed for displays and sales; however, also noted that these are typically located in their residences or in display areas or culture houses throughout their city (6%).

Cooperative relationships versus competition are a main attribute to achieving the classification of a cluster. It has been noted that, in the many groups of artisan activities studied, the relationships of cooperation overlap those of competition. Approximately 35% of the artisans felt there was direct competition with other agents, with the group of Stonework standing out as the group that experienced the most competition. In relation to cooperative relationships, approximately 44% stated that there was cooperation with other local agents in this type of activity (with associations belonging to local authorities and to core businesses), pointing out the garden as the group displaying the greatest cooperation (see Figure 6).



**Figure 6.** The Cooperative Relationships versus Competition (2008)

Source: Own elaboration.

## 5. Discussion and Conclusions

In regions of low population density, such as BIN, it is difficult to generate the necessary critical mass of concentrated business and relationships to attain the level of a cluster. Nevertheless, there is a concentration of UPAs with a collection of knowledge resulting from an historical and traditional accumulation with a collective identity and with communities and relationships based on trust and ease of communication and cooperation. This communication and cooperation have developed methods of specialized resources, in other words, a typical form of cluster in regions of low density.

Therefore, artisan activities in BIN can be considered a **potential cluster**, according to the terminology of Enright (1996), which already retains certain elements from clusters, yet still lacks important attributes and prerequisites to obtain the full advantages from a geographic concentration. This potential cluster is characterized by geographic concentration and lower interdependency, but also in with the absence (or reduced density) of the following attributes:

- Cluster support institutions, which include educational institutions and technological centers with courses, research certifications, and regulations directed to these activities.
- Relationships involving articulation and interaction in the exploration of common distribution circuits, marketing synergies, use of skills, and joint learning.
- Involvement of the local community, the creation of synergies, and community cohesion, etc.

For the development of clusters within craftwork activities in this peripheral territory, as Suzuki (2005) refers, the definition of strategies requires consistent development of policies and the support of several public institutions in the areas of

research, management, and financing. However, these efforts must not be limited to public programs of support and development. The establishment of effective linkages between systems of public support and private services of technical nature and management must be key strategic elements used to maximize promotional efforts.

Additionally, artisans in rural areas need to overcome problems inherent in their small size, which characterizes most cases. Their inability to solve their problems of size is a result of their isolation. Specifically, these areas are generally neither able nor predisposed to receive support from the environment negotiating around them, such as banks and institutions, which promote development. The development of a craftwork cluster is one way of achieving collective efficiency. Furthermore, the dynamic characteristics of clusters and the stimulus from networks of artisans generate synergetic effects, thus strengthening the economic dynamism and competitiveness of the BIN municipalities.

The willingness of cooperation from artisans in solving problems, the identification of an agent of cluster development, the implementation of pilot-projects aimed at finding solutions to common operational restrictions between the cluster members (Clara, et al, 2000), are some ways to strengthen the development of this cluster. These agents can be financial institutions, commercial agents, or cooperative and other organisations representing artisans who may act as leaders for the cluster. The involvement of public technical and financial institutions in the implementation and movement of the cluster is crucial for ensuring self-sustained development. Through this process of integration and collaboration, the cluster will become capable of modifying the nature of the dialogue within the public sector (Porter, 1998a). In this context, there are at least five types of initiatives that political authorities should consider to support the growth of the cluster (Rosenfeld, 2007): the establishment of a solid base, construction of networks and relationships, deepening of skills and talents, alignment of innovative investments, and encouragement of entrepreneurship. Individually, the artisan requires a greater range of skills including product design, technical mastery of his craft, business management, and a solid relationship with the market.

The results of the current study suggest that the development and strengthening of artisan clusters require craftsmen to overcome several obstacles, emphasizing the need of working in the areas of quality and design, with the implementation of appropriate marketing and advertising strategies for products, focusing especially on the level of the consumer as well as following a systemic logic. This includes the renewal of products offered as a way to boost commercial relationships between artisans and the market, in turn generating more employment and higher incomes.

The practical implications of this study suggest stimulating the development of artisan clusters, particularly in peripheral areas, because these clusters can promote local development and territorial competitiveness and simultaneously reduce regional asymmetries namely by:

- Providing jobs (creation of direct jobs and induced jobs) and simultaneously retaining the economic activities, which could possibly abandon the territory.

- Supporting territorial sustainable development (based on a strong concern for environmental terms, through the use of local resources) and in terms of social and territorial cohesion.
- Having a strong local anchor, sustained by actors and organizations, which are located in local territories and are seeking rural and local revitalisation.
- Developing partnerships and networks for promotion and cooperation with local actors.
- Affirming innovation in the production (quality and design) and Marketing lines of several products of artisan activities.

In this way, the territory becomes part of a more active and interactive strategy as an agent of integrated development, which values local resources and encompasses social, cultural, technical, and economic aspects, as well as the active participation of the whole population, as advocated in the paradigms of endogenous regional development.

However, the current research presents some limitations that may be considered in future research. First, in order to identify the clusters in a region, these researchers used the Location Quotient; however, we could have considered more sophisticated methods such as a location-specialization matrix. The data sample used for the current study was relatively small and future studies may consider using a larger population size that also contains other regions, allowing for the measure of different effects. These limitations provide researchers a pathway for future research and may be of great interest to the embodiment of indicators on the influence of cooperation networks and regional and local innovative strategies.

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