EU-LAC Foundation
Fundación EU-LAC

Polos de competitividad

Shared experiences on competitiveness and internationalisation of competitive territories in the EU and LAC countries

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Report of activities April 2014 – June 2015

Index

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1. INTRODUCTION

During the first semester 2014 the EU LAC Foundation launched the POLOS de Competitividad (Competitiveness districts) Project based on the assumption that in spite of a long standing and dense economic relation (based on numerous agreements, programmes, investments, trade, etc.), both regions are losing ground on the global scene in terms of competitiveness and need to get closer in order to catch up. This had been expressed in the Santiago Declarations (Political and Business) and was expressed or recouped several elements of the EU-CELAC Action Plan 2013-2015, in particular chapter 8. it has since been reaffirmed forcefully on occasion of the 2015 EU-CELAC summits in Brussels. It is also clearly demonstrated in the study on SMES done and published by CEPAL and the EU-LAC Foundation in June 2015.

The project therefore aims to contribute to understand and bring into light what the conditions would be for better integration of bi-regional value chains by focusing on specific territories, at sub national level, in a first sample of countries in Latin America and the Caribbean, and in the EU. The choice of the subnational level was made on the assumption that this is the level where competitiveness concretely happens, this is where companies are located and value chains are form, in a local business environment, from which they then expand into the international or global level. Territories were chosen based on the Foundation's already on-going MIALC[1] project in LAC; and based on the set of contacts of the Lombardy Region (Strategic Partner of the Foundation for these themes). Additional contacts were developed as time went on through different channels (EC DGs, contacts/partners of participants, etc.), direct visits. The principle was to bringing together actors, practitioners, of competitiveness and internationalization of territories to get a feed back on their experience and to engage in a joint reflection on how to move on in the set direction of further bi-regional economic integration. Further to favouring exchange of best practices the project proposes to try to design "models" of universal nature that could help spread these good practices to other territories and by doing so to accelerate the process of inclusion of new actors based on the best of practices and an already up and running network of organizations.

Because of its "pilot" nature, because it does not have a fixed end and foresees to involve more actors, the project has evolved over the more than a year it has been running and is likely to keep on evolving, although some stable elements are starting to emerge.

The initial coordination team was organised by the EU-LAC Foundation with the Lombardy Region and its EUPOLIS agency, while two experts, one for the EU and one for LAC, were recruited through a tender procedure. Several coordination meetings were held in Milan in order to further define the project and its developments.

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[1] MIALC covers, Argentina, Chile, Brazil, Uruguay, Peru, Ecuador, Colombia, Costa Rica and México.. Dominican Republic was added after a year, binging a Caribbean example to the project.

From its inception the notion of clusters appeared as a central topic and was quite debated. It rapidly seemed, and the following steps confirmed it, that clusters are mostly an instrument of territorial development, that this instrument is currently being debated in the EU and other concepts such as Smart Specialization are now having a strong influence on the blend of policies and practices between actors of the competitiveness/innovation triple or quadruple helix (industry/government/R&D/Civil Society). However, because it is a recognised instrument and because several of the participating LAC countries are still at a stage where cluster formation is incipient and much called for, and because it is handy, the concept remained central and became the initial measuring unit in these first steps. For this reason it will be used in this document. It should however not be taken *stricto sensu* for it covers a vast variety of situations in both regions and because it is always intended in the broader sense of an organised sectoral system in a determined territory. As such by reading cluster in this document, one should also consider that this might well refer to a series of clusters in a specific territory.

The first step of the project, as the relevant interlocutors were being identified and accepted to join the activity, was to form a bi-regional Working Group (WG) that now counts on the participation of 10 countries from LAC and several European regions and institutions. A virtual platform, created for that purpose in November 2014, now gathers around 60 clusters profiles and the WG members' reviews about some key issues related to clusters development in their respective countries/regions. Based on these core elements another two important activities were organised :

- a WG Workshop, held in Hamburg on April 30th, and
- the participation of 14 clusters from LAC in the EU-CELAC B2B Milan meeting, on June 12th, thus contributing a third of clusters participation to the event.

2. PURPOSE OF THIS DOCUMENT

As stated before, POLOS is a work in progress and is planned to expand over time. This document therefore seeks to gather and systematize the main ideas that have been exchanged in the first months of this process, which remains open to new contributions. Therefore it tries to reflect the discussions progress, rather than attempting to close the debate or developing a final document for the WG.

This document's main purposes are:

a) to highlight some topics of the competitive clusters development and internationalisation in both regions, that could help to identify possible policies aimed to foster bi-regional collaboration between them;

b) from the purpose above, to propose the general guidelines for a Work Plan of the WG Polos project. This is the purpose of the last section of this document.

This report was developed on the basis of interviews with experts linked to competitive clusters from EU and LAC, which are members of the WG (the full list can be seen in Annex 2). It also takes as inputs the remarks sustained during the Workshop held in Hamburg on April 30th, as well as the participation experience of the LAC clusters in the B2B Milan meeting (June 12th).

The interviews tried to identify, at the national and regional level, topics directly related to competitiveness and internationalization of competitive districts/clusters. Internationalization of competitive districts/clusters has been considered especially in a bi-regional (Europe/Latin-America and the Caribbean) perspective.

For this reason, the interviews have been organized in the following three sections:

- Section 1 – Cluster/district competitiveness
- Section 2 – Cluster/district Internationalisation
- Section 3 - Policies to foster cluster/district internationalisation

In Europe we carried out 8 interviews corresponding to the following regions: Hamburg (Germany), Catalunya and Galicia (Spain), Emilia-Romagna, Lombardia and Toscana (Italy), Flanders (Belgium) and Latvia.

In Latin America and the Caribbean we carried out 13 interviews, corresponding to the following countries/regions: Mexico, Costa Rica, Dominican Republic, Colombia, Ecuador, Peru, Chile, Argentina, Uruguay, Brazil (Federal Government), Brazil/Rio Grande do Sul State and Brazil/Pernambuco State.

The interviews' detailed content can be accessed through the virtual platform of the WG Polos project. The following exercise seeks to synthesize and systematize some of the major ideas and experiences presented there, as well as the ideas exchanged during the Workshop held in Hamburg.

Firstly, this report focuses separately on the three sections mentioned above. For comparison purposes, the main issues identified in EU and in LAC are presented separately in each section. Then we propose some conclusions and, finally, we propose a Work Plan for the WG.

First of all it is important to make a preliminary reflexion about the cluster/district meaning. In general terms we must separate the concept of cluster/district as production organization and relationship/interaction among different kinds of actors, from the concept of cluster/district as organized institution that rules or tries to rule, directly or indirectly, the activities of the cluster/district, also by providing governance regulation and services and/or defining policies to support cluster/district firms.

These two concepts point out to different meanings of cluster/district, one focused on effective production issues and specificities, the other one in the formal organization that should represent the cluster/district. This difference, or better, this way of looking to clusters from different perspectives, may be crucial in order to deepen the different paths that may lead to cluster competitiveness.

In other words, the first concept involve the cluster/district as a whole, especially the productive aspects and relationships; the second may refer only to one part of it (sometimes the more competitive or more reactive) or may be mostly focused on institutional aspects such as how to manage and support cluster/district firms competitiveness or such as how to define proper policies for cluster/district firms.

These concepts are relevant especially regarding the effectiveness of policies and actions. The starting point should therefore be to consider the angle of the deepening of the production organization, to which is related cluster/district competitiveness.

From this perspective, policies could also focus on building formal clusters institutions that lead to a better governance of the cluster/district production organization to reach higher levels of competitiveness.

In this context, the key elements of cluster/district competitiveness may be better and more precisely highlighted and, at the same time, policies can be drafted to better respond to firms' needs.

3. CLUSTER COMPETITIVENESS

European side

European experts of the WG highlight **some lessons learnt from the development of the competitive districts/clusters.**

Governance. Many experts underline the importance of clusters as very effective "governance tool" for policy-makers. They point that the cluster structure may facilitate communication between public institutions and firms in order to define proper policies/actions oriented to foster competitiveness and, more generally, "to understand and solve problems". The presence of a cluster allows a better understanding of production/firm competitiveness issues and the possibility to look for and define joint solution responding to firms' needs.

Production_organization. Clusters are models of production organization that allow to better face and react to markets changes and competition. The interaction and cooperation among firms help define solutions (often informal) that lead to increase competitiveness in the companies involved. To achieve these positive effects, four points are particularly key:

- the presence of leader firms that lead cluster evolution,
- the ability of firms to work together in teams,
- the circulation of knowledge along the value chain and also,
- across different sectors (so called cross-sectorial fertilization).

The dynamics of competition and cooperation within the clusters favour innovation of firms, because synergies and cooperation among different players (firms, research institution, public institutions), within an enabling environment, foster innovation of firms involved in each cluster. In particular, clusters make it possible to define middle-long term actions/policies and to develop intangible assets (joint information on markets and technology, development of a higher technical culture, etc.) that favour firms competitiveness on the basis of research and innovation activities/results developed and available locally.

Clusters also favour interaction (also informal) among firms that leads to innovation all along the cluster value chain. In particular, getting to work under the form of a local network leads firms to increase their specialisation. This phenomenon, step by step, changes the rules of competition inside the cluster: that is to say, less price competition and increasing product competition and differentiation. Providers themselves become more specialised. Relationships become more formalised in order to recognise specific know-how and to activate co-design mechanisms.

About the **main competitive advantages and disadvantages of the competitive clusters,** experts give a wide set of factors. In fact, as many pointed out, there are a lot of sectorial specificities and diversities that influence these factors, especially when in the regions there are a lot of clusters operating in different sectors. In general terms we can point out some common advantage factors:

- specialization, skilled human resources and flexibility;
- capacity of innovation (technological production/services level);
- capacity of response to market needs and changing rules;
- availability of specific services/policies to support firms[2];
- quality of production and design.

As disadvantage factors, we can point out the following:

- lack of resources (human and financial);
- still problems to make firms cooperation more effective;
- impact of public policies (especially dissemination among firms – e.g. technological transfer -)

Concerning the **major challenges that EU clusters will face** in the next 5 and 10 years, experts agree that clusters must be prepared to face increasing market competition and must be ready to look for new market opportunities[3]. For this reason, changes are necessary, such as diversifying production/services, increasing innovative contents[4], improving policies response to clusters competitiveness needs, taking advantages of cross-fertilization among different sectors and/or technologies.

Currently European policies are especially focusing their attention on some key elements for cluster/district competitiveness:

- cross sector innovation, that is to say the potential offered by combing specificity of different productive sector, e.g. using specific technologies in different sectors, not only in a specific one;
- cross fertilisation, that is to say mutual exchange between dissimilar concepts, cultures or classifications, that enhances understanding or produces something beneficial;
- absorptive capacity, that is to say the ability of a firm to recognize the value of new, external information, to assimilate it, and to apply it to commercial ends is critical to its innovative capabilities.

Latin America and Caribbean side

About the **main lessons learnt from the development of the competitive districts/clusters**, it is worth stressing two kinds of considerations:

- *Policies and restrictions for clusters development*

Some countries like Brazil, Argentina, Chile, Uruguay and Colombia, launched a decade ago national programs to support clusters, and others like Mexico or Dominican Republic did the same more recently.

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[2] For instance, clusters allow economies of scale in specific activities (e.g. market researches and market trends, knowledge of economic trends, financing, sector knowledge – also sector evolution -, best practises, innovation).

[3] In this direction, deepening and widening cluster internationalization activities is crucial.

[4] Also by increasing market/business orientation of research/innovation activities.

But some others are now in the formulation process of this type of strategies (Peru) or, like Ecuador and Costa Rica, have not fully progressed in this direction yet.

Anyway, in every country there are initiatives that, if not focussing directly on enhancing clusters in all their dimensions, are associated with the objective of improving articulation between firms or promoting specific aspects, such as technical and trade capacity building, innovation and technological transfer.

Regarding policies impact, based on the average conclusions drawn from the chosen clusters, the main benefits for companies that are in a cluster are: the development of a cooperation culture, the improvement of competitiveness and the tackling of flaws in their productive processes. The organization and institutionalization of productive districts allowed them to foster growth, entrepreneurial and technological development and value added.

In some countries (Argentina, Brazil...), many clusters developed spontaneously and not based on initiatives of government agencies. But public policies (when they have been successful) have allowed increased interactions between actors, business and technological development and the strengthening of institutions.

In the other hand, in Peru as well as in Dominican Republic, although some firms agglomerations can clearly be identified in some territories, there is no experience of clusters that have arisen spontaneously, mainly due to the lack of cooperation and trust between firms located in these agglomerations.

About this, the Mexican expert says: “To select a few clusters with high potential to grow based in the local advantages platform in the region... is a path dependent phenomenon. This clusters selection must be a result from a business global environment. You cannot invent a cluster in a specific region. It is compulsory to have the elements needed to its development, mainly the human resources”.

However, all LAC experts agree that - generally –firms are reluctant to cooperate. “In most LAC countries, enterprises are quite unwilling to join forces with other firms in the same sector. Competition is always seen as an internal and sectorial threat, meaning that firms consider their main competition are companies with equal and similar commercial activities. This is especially true with SMEs” (Dominican Rep.).

What most often pushes firms to cooperate is to try and solve common problems such as raw material supply, gaining scale for exportation, joint foreign missions, productivity and costs improvements, quality improvement, training. Cooperation for joint innovation, commercialization and insertion in international market is less common.

The innovation efforts are generally carried out in-house (intra companies), and at the most between individual firms and research institutions. Only in a few cases there are joint technology development (e.g., equipments in the case of Pós-Colheita Panambi and Condor cluster, Brazil, or agricultural machinery in Argentina).

We can observe smaller joint efforts in actions linked to commercialization and to insertion in markets.

There is still a long way to go before a consolidated vision of their cluster exists between the companies.

Regarding governance, the building and strengthening of institutions is a complex and key process for the development and sustainability of productive agglomerations. If governance fails to consolidate, there is a risk that once the funding is over the cluster collapses.

The limited depth of the public-private articulation, specially trust, have strongly limited the efficiency and effectiveness of the promotion politics on the clusters. In other words, the public-private governance is key. However, all experts highlight the difficulty to build this governance. “Building and strengthening institutions are a complex process. This is the key to clusters’ development and sustainability, otherwise when financial support ends clusters are likely to disintegrate”, says the Argentinian expert.

The experience of cluster development in Pernambuco, inter alia, shows that it is crucial to consolidate representative and proactive governance, promoting:

• collective action and social capital accumulation

• high-level business training

• developing appropriate infrastructure and logistics

• collecting of various financial resources.

In the other hand, it is sometimes stressed that when public policies are sector focussed, they hamper integrated territorial management approaches (Chile).

Regarding this issue, many experts emphasize that it is essential to strengthen initiatives that foster the development of clusters at regional level. The excessive centralization of the political-administrative system and the limited competences and means of the sub-national instances limit their financial autonomy to define their own relevant promotion instruments. Further than national strategies, cluster development calls for effective and specific regional policies. Also, it is important to incorporate impact evaluations of the promoting interventions.

Finally, many LAC clusters have a limited strategic vision about their business. It is important that the clusters incorporate a long-term vision, of competitive intelligence, to progress and take advantage of strategic opportunities. Policies must help the clusters to identify new opportunities for growth based on a better understanding of international trends and opportunities in their areas of activity.

- *Good practices and sustainability:*

Regarding the management and development of cluster policies, “financial and technical support can help, but it does not assure sustainability of the newly developed clusters after funds run out... Establishing a common interest for the enterprises inside the cluster is a key factor... Advantages of the economy of scale do not seem to be enough in some cases” (Dominican Rep.). The Mexican expert gives a hint: “One of the main actions to have success in the clusters implementation process is related with the talent (human capital) formation”.

The development of entrepreneurship capacities is essential to strengthen competitiveness. But often this requires overcoming cultural and institutional barriers that have a national scope.

Many clusters in LAC have low innovation capacity, low productive specialization and little incorporation of value added. The Mexican expert emphasizes “... the importance of integrating the whole steps of the productive chain in the cluster. The productive chain has to be able to be in control of the commercialization part, the contact with the consumers”.

The clusters that have achieved higher technological development capacities are, generally, those of manufacturing activities or technological services and that are structured around one or more big leader companies.

The need to have a good cluster manager, as well as a “leader” amongst the business organizations is highlighted, mainly in the first step of the process. The role of the cluster manager or coordinator is very important - requiring technical and professional commitment - as well as being able to count on a structure with enough self-management capacities. But the role of the manager should always be very clear and not be independent from the representative institutions of the cluster governance. Sometimes policies have a tendency to confuse clusters with clusters managers (Brasil/Pernambuco).

About the **dynamics of competition and cooperation within the LAC clusters**, they are characterized, overall, by a low specialization and consequently by a limited division of labour within the district. Furthermore, the Mexican expert says: “In the actual global environment, the local cluster implementation/integration and strengthening must require a very careful balance between local/regional/national and international chain/members/stakeholders participating. For example: in some local clusters can be more competitive to select some raw materials, machinery, technology or even services which can be more competitive if are imported from other regions national or internationally”.

About the **main competitive advantages and disadvantages** of the competitive clusters, while there are many differences between countries and clusters, the following items can be highlighted:

- *Advantages*:
  - Many of the LAC clusters are based on the processing of natural resources. In some of the cases of agribusiness, the seasonal window to sell products to the Northern Hemisphere allows to gain access to foreign markets.
  - Only in a few cases, quality and the observance of international standards are competitive advantages.
  - Professional human resources with a relative low cost.
  - LAC received large amounts of foreign direct investment in recent years, driving the growth and modernization of some clusters.

- *Disadvantages*:

- Small-scale and technological backwardness of companies.
- Lack of innovation and cooperation culture in the business community.
- Lack of quality, standardization and international certification.
- Difficult access to adequate funding (lack of development banks).
- Lack of institutional capabilities in national and (mainly) sub-national public sector affects the effective implementation of articulated programs.
- Difficulties in addressing collective action in areas such as innovation, sales and marketing.
- Lack of coordination between academia and the productive sector.
- Human Resources: mismatch between the training offer and the demand of the productive sector.
- Lack of logistics and infrastructure.

Concerning the **major challenges that clusters will face in the next years**, experts mentioned the following:

- Moving towards activities with more knowledge and value added; developing the production process of the final products inside the cluster.
- Improving the technological and business innovation capabilities and coordination with knowledge institutions linked to the activities of the clusters, aiming to improve provision of specialized working force and technology.
- Building social capital and consolidate governance. Strengthening of the institutional environment to create trust and cooperation among the actors involved, in order to assure sustainability.
- Design and implementation of Strategic Planning.
- Strengthen regional policies for clusters development, and coordination with national policies.
- Promoting the value of the cluster in national and international markets.
- More virtuous relationship between districts and territories.
- Developing appropriate financial mechanisms to meet the demands of the clusters, overcoming the dependence on public funding.

As regards the latter, the management of associative financial support is different from those tools aimed to individual firm promotion. Specific promotion financial support -flexible and long-term– is required, because of the heterogeneity and complexity of clusters.

4. CLUSTER INTERNATIONALISATION

European side

All the European regions participating in the Polos de Competitividad project have internationalization activities, especially within Europe but also towards extra European countries. The typologies of internationalization are different according to sectors and cluster structure/organization, and can involve individual firms, groups of firms or the cluster as a whole. There is a wide interest about Latin-American markets, but Internationalization activities towards LAC are generally carried out by individual firms or restricted groups of firms.

A cluster internationalization strategy is not formally present in a majority of regions. The experts recognize that most of clusters have their international strategy, but it often remains informal and defined by individual leader firms. In some cases (as in Galicia) there is a regional international strategy based on regional clusters profiles and their opinions/feed-backs.

Experts point out that, as already mentioned in the previous section, there are a lot of sectorial specificities and diversities that influence **factors that foster clusters internationalization activities**; especially when in the regions there are a lot of clusters operating in different sectors.

Strictly related to cluster/districts competitiveness, experts highlight the key role of innovation in fostering and favouring internationalization activities of cluster/district.

Another key factor is represented by the efforts to reinforce and better develop the characteristics of the specific cluster/district competences and production. Improving the value of the production is the basic step to increase internationalization activities of the cluster/district. This may involve directly the firms but requires, especially to involve majority of cluster/district firms, the intervention of institutional actors, both private and public. In fact, some problems may arise regarding firms relationships: institutional intervention may address especially to favour cooperation among firms oriented to develop activities towards wider markets as the international ones.

Finally, thinking/developing internationalization strategies/activities require individualizing and defining precise market target according to the specific characteristics of cluster/district production and its potential.

Specifically, experts recognize that the following factors may foster clusters internationalization:

- access to markets (and research of new market opportunities) and presence of information about them;
- reputation;
- institutional support and incentives (financing) for the firms;
- cluster internal dynamics (such as presence of leader firms, product specialization, innovative content of production, technology level);
- presence of skilled human resources;
- trust and cooperative relationships among cluster firms;
- capacity to develop contacts;
- potential complementarities with external productions,
- cultural issues.

On the other side, experts note some **factors that do not foster clusters internationalization activities**:

- lack of international experience;
- lack of information about market opportunities;
- lack of resources (financial and skilled human) and management vision;
- small firm size;
- lack of contacts (also information about potential partners);
- lack of a trustful environmental that allows to develop contacts;
- weakness of institutional support.

In this context, deeper support from public institutions is needed in order to expand internationalization activities. Reinforcing competitive edges and solving problems and disadvantages always require public policies and support. Cluster international growth requires services that only institutions can provide if the purpose is to involve the cluster as a whole. The individual firms (or groups of firms) may have their international strategies, but if the objective is to involve most or the whole firms of a cluster, it requires institutional facilitation, that is to say actions and policies.

Regarding this the experts pointed out that in their region there are public **institution that support cluster internationalization**, but their role depends on regional and sectorial specificities and characteristics.

Finally, experts identified some **potential clusters interest/aim toward internationalization activities with LAC countries**. Generally, LAC countries are seen as new market opportunities for regional clusters. Making this potential interest effective requires contextualization to sectors specificities. The main steps for this would be:

- To have detailed information about market opportunities according to sector profiles of regional cluster;
- To develop scouting missions;
- To build contacts and trust with potential counterparts;
- To analyze sectorial complementarities.

Opening direct contacts between counterparts in Europe and in LAC can develop such potential interest and lead it to concrete collaboration at cluster level, firm level or group of firms level.

<u>Latin American and Caribbean side</u>

Most of the LAC clusters are in early stages of consolidation and do not have structured internationalization strategies, with the important exception of some clusters from Mexico. **The most relevant internationalization experiences** are related to individual companies, or company's consortia**.** However, some clusters have significant international activities, e.g.:

a) The cluster of agricultural machinery of Las Parejas (Argentina), organise agro-showrooms, with machinery samples and business rounds, commercials missions and field experimentation in other AL countries and Southafrica, and also has a technical assistance agreement with the Centro Meccano (Italy).

b) The horticultural cluster from Peruvian coast (avocado, fresh asparagus, fresh grape, citrus fruits), is probably the most competitive in this country and achieved a high level of internationalization. This is also the case for the mining related metal-mechanics cluster.

c) Aerospace in Queretaro, Mexico: most of the cluster's production goes to the US to parent companies such as Bombardier, Honeywell, GE, Gulf Stream.

d) In the Dominican Tourism sector, services are marketed internationally by tour operators to tourists around the world.

e) The METALMEC Project, associating Lombardia and Pernambuco (Brasil) regions for the development of the metal-mechanic cluster at Recife (Pernambuco).

f) The Chocolatiers Association of Ecuador participates as a cluster in fairs and events, collective marketing and advertising in the national and foreign market, and exports to more than 30 countries, with a strong presence in the EU.

As well as in these examples, most of the LAC clusters with international activities have some link with European markets and actors.

Usually the **institutions that support the internationalization of clusters in LAC** are not specific but horizontal: typically, Exports and Investment Promotion Agencies and Export Business Chambers. They have no specific instruments for clusters promotion, except for some attempts such as the APLs Program in Brazil.

About the **factors that foster clusters internationalization activities** noted by the LAC experts, the following are particularly significant:

- ✓ Limited local market in many small LAC countries.
- ✓ US dollar and EURO are currently stronger currencies in many LAC countries, improving the profitability of foreign sales.
- ✓ For some Agro-business products, season window is an edge to penetrate foreign markets,
- ✓ In some countries: free commerce agreements, foreign investment and US market proximity.

On the other hand, there are some common **factors that hamper clusters internationalization activities** in LAC, mainly:

- ✓ In many cases, lack of experience and internationalization culture, and lack of management experience to go international.
- ✓ Lack of information about business opportunities and lack of experience.
- ✓ Lack of product standardization and extremely variable quality from producers (especially in the agribusiness sector).
- ✓ Lack of innovation and product differentiation.
- ✓ Small-scale production.

- ✓ Lack of cohesion among enterprises might impede consolidation of shipments and international promotion.

In some countries/clusters we can identify additional problems, e.g.:

- ✓ Mainly in manufacturing sectors: high production costs.
- ✓ Distance to main international markets.
- ✓ Low profitability of export sales.
- ✓ Brazil: big national market act as a des-incentive for exports in some clusters.

According to LAC experts, there are several factors that **could promote cluster internationalization**. Here experts refer mostly to different initiatives at national and local level aimed at improving the competitiveness of enterprises and clusters, but they also mentioned some specific measures explicitly targeting international promotion:

- ✓ Defining internationalization strategies, including trade promotion strategy, and Institutional support for internationalization.
- ✓ Cooperation among companies for higher scales, specialization and complementarities.
- ✓ Knowledge and technology transfer from R&D institutions and from international firms.
- ✓ Increased standardization, quality and improvement of sanitary control system.
- ✓ Improvement of logistics and infrastructure.
- ✓ Level of articulation in the cluster regarding the support institutions and complementary services to promote internationalization.
- ✓ Better access to finance and availability of low-cost financing
- ✓ Reduce productivity gaps of SMEs with respect to larger firms within the cluster.
- ✓ Insertion in global value chains and business alliances with potential international partners, new commercial channels.
- ✓ Links of cluster management with foreign countries, face to face contact with potential partners.
- ✓ Institutional support for internationalization.

Having identified the main drivers and obstacles for internationalization of LAC clusters, it is possible to understand **the logic that is likely to boost the quest for cooperation agreements with EU clusters**. LAC experts refer here primarily to the opportunities it would open to incorporate technology, innovation and knowledge about markets, opening up new prospects for a better insertion in global markets.

5. POLICIES TO FOSTER CLUSTER INTERNATIONALISATION

<u>European side</u>

The European experts recognize the key role of policies in order to foster cluster/district internationalization activities.

Policies in general, not only for internationalisation, should be calibrated to specificity of cluster/district production organization.

In this direction, the relationships among firms are a key factor to be considered, because it defines and affects the effectiveness of the policies. This means to understand the organizational structure of production.

Policies (and its strategy/design) should consider the firm characteristics and relationships. The aims and the activities/actions of polices should change according to them.

For this reason it is important to define and individualize the possible different kinds of firms' production organization.

The prevalence of individual SMES defines horizontal structures in which firms operate individually with different grade of relationships among them: the maximum grade of relationships is reached in the structure of the classic marshallian industrial district. The prevalence of vertical relationships among firms implies the presence of big firms (also only one) that hierarchically and strictly control production organization and outputs.

The mix of horizontal and vertical relationships may define organizational structure in which leader firms (not necessary big firms but also SMES) control the governance and the activities of groups of SMES, creating separated firms "cluster" in the same cluster/district. Horizontal and vertical relationships may involve the entire production phases or may be present in one (or few) single phase of the whole production cycle.

While many experts state that is very difficult to define possible **collaboration schemes with LAC clusters**, they indicate various steps that could help cooperation, a sort of sequence of activities. The main point seems to be the creation of a favourable business environment[5] that facilitates relationships: here, the role of public institution is key in order to generate proper conditions that allow internationalization activities of firms.

Once such an environment is put in place, firms whether individually or in groups or even the whole cluster will be able to develop possible collaborations. This would also be the case for research centres: the features of potential collaboration will however depend on sector specificity and firms' profiles.

The restrictions and opportunities of such potential collaborations have already been mentioned in previous sections. About <u>opportunities</u>, experts point out:

- new market opportunities,

[5] This means, to create trust among potential partners and facilitate contacts, provide proper information about law, market, etc.

- sectorial complementarities and similar specializations,
- developing of common research/innovation activities,

About restrictions, we can highlight:

- distance,
- communication problems (especially language);
- lack of information (about markets and countries);
- problems to define middle term strategies
- problems to find proper counterparts.

At the moment, at European regional level there are not a lot of existing instruments available to favour collaboration with LAC clusters. There are some initiatives, but not inserted in a wide strategy of internationalization towards LAC.

One crucial element, as already underlined, is the nature of information that should be requested from LAC counterparts in order to identify possible collaborations. Availability of proper information is a key factor to foster internationalization activities, and the experts confirm it.

The range of requested information is quite wide:

- Information about economic trends,
- markets, standards,
- firms' profiles,
- competences needs,
- specific sector information.

Policies/actions/instruments needed to solve the restrictions and to foster collaborations with Latin-American clusters should be oriented towards two main directions:

1) building a trustful environment for business: build contacts with Latin-American counterparts and assure proper follow-up;
2) developing of scouting activities, also focused on specific sectors or markets/countries

The agents involved in such policies/actions/instruments may have different profiles, depending on regional and sectorial specificities.

Latin America and Caribbean side

The **objectives for collaboration with complementary districts/clusters in Europe**, depend on each cluster´s productive sector and their level of maturity.

LAC experts give some examples of the main objectives and opportunities for these potential agreements:

- Increasing demand for cluster products.
- Opening new markets in third countries, shared commercial channels.
- Commercial joint approaches: joint trade fairs and road show, exchange of information on trade requirements and technical assistance.
- Improving quality products to meet international standards.
- Technology and knowledge transfer.
- Production complementary inputs: raw materials, updated technology and capital.
- Complementary business activities between clusters firms.
- Strengthening relationships between cluster's institutions.
- Facilitating the establishment of European companies within the LAC district/cluster.

The **information eventually required from European counterparts in order to identify possible collaborations**, according to LAC experts, includes productive and commercial information but also aspects linked to clusters organization:

- Market opportunities and specific information to access markets (prices, sales volume, regulations, quality standards, restrictions, technical specifications, certifications, etc.).
- Business model and mapping value chain, to know how cooperation could become feasible.
- Success cases, policies and programs implemented and their evaluations.
- Support policies and incentives to promote clusters' sustainability.
- Cluster structure: suppliers and buyers, mapping support institutions.
- Cluster dynamics: how the companies work together inside their clusters.
- Experience with collaboration agreements or contracts.

However, some **prerequisites** seem necessary to go ahead with cooperation agreements.

First, it is important to consider the degree of Institutionalization of the clusters governance. In some cases it could be possible to engage into cluster x cluster or even region x region agreements, while in other cases the agreements would be lead by individual firms.

In any case, it seems necessary that **more direct cluster-cluster or Region-Region relationships** are established. This suggests the need for institutional mechanisms that promote interaction between groups of companies/clusters/districts, not only at national and general level.

For example, some experts mention it could be interesting to organize visits to competitiveness and technological centres in sectorial EU clusters, to understand the way they do internal coordination, innovation, marketing and internationalization strategies and joint actions in order to transfer experience.

Furthermore, there are some **restrictions** that should be overcome to advance towards greater interaction, beginning with cultural issues and languages differences. Experts highlight some aspects such as:

- Gaps in quality of products and technology (in some LAC clusters).
- Lack of knowledge about the international markets, including information about the existing EU clusters and other potential counterparts.
- Weak internationalisation strategy.
- The lack of promotion of this kind of international cooperation programs, this is, the lack of budget to support the advisory and the implementation of the plans.

Actually, several of the above-mentioned problems are both conditions for progress and objectives of possible agreements.

To face these restrictions, it seems necessary to strengthen the cluster support policies in general, and in particular to develop specific tools to promote their internationalisation, mainly in financial, commercial and management training aspects.

The **public and private agents that should be involved in this process, in each country**, according to experts, are: Ministries of Industry and Innovation, business associations, export promotion agencies, Chambers of commerce and Technological Centres involved with clusters.

The **existing instruments available to favour collaboration between complementary districts/clusters of LAC and EU** are typically executed by export and competitiveness promotion Agencies, Chambers of Commerce and possibly the IADB. These mostly consist of support to participate in commercial fairs, trade missions, road shows and technological missions. Firms can apply to public funds to co-finance their participation.

As we can see, in LAC there are no specific institutions to support cluster internationalization activities. The above-mentioned institutions only provide general international support.

While quite a few LAC countries have trade agreements with the EU and these provide an environment that significantly facilitate exchanges, there is a strong need for regional trade promotion institutions that would have the possibility to directly influence the relationships between cluster and strategic programs.

According to the Chilean expert: “...the main instrument would be some special institution to assume direct relations between the EU and LAC Clusters. Such an institution could generate policies and actions to promote this exchange. Here, pre existent institutions, like Euro-Chile Foundation, which has significant experience in the matter, could be considered as strategic allies".

6. SYNTHESIS AND CONCLUSIONS

Up to now, the process developed during the Polos de competitividad project allowed to reach a set of conclusions and to define a group of relevant topics concerning the following areas.

Cluster competitiveness

On the European side, this document highlights the following topics.

- Cluster governance: the presence of relevant institutions is key for cluster competitiveness, as well as their capacity to represent clusters agents and interests. Other governance key factors are represented by the presence of firm leadership and of proper cluster managers.
- Production organization: EU experience points out the key role played by leader firms, cooperation among firms and circulation of information. Also market size and cross-sectoral fertilization explain EU cluster development.
- Competitive advantages/disadvantages: the competitive advantages are basically associated to clusters dynamics such as cooperation among firms, production relationships among firms, presence of proper institutional services, specialization, high quality and support of public and private institutions to "solve" problems. Competitive disadvantages are basically associated to the need of deepening the factors mentioned above, especially the cooperation among firms oriented to increase competitiveness and market share.

On the LAC side, the experiences of cluster development are still relatively new. In fact, clusters do not have the history and the long perspective of EU clusters.

The experiences told by LAC clusters show limited public-private interactions and capacities (institutional, of firms, of research) at the regional level.

The competitive advantages are basically associated to external factors, while the main disadvantages are associated to the lack of development of clustering processes, such as insufficient cooperation among agents, weakness of innovation activities, etc.

If we compare cluster competitiveness in EU and LAC countries, the following topics stand out. First of all, the different stage of clusters maturity defines and explains the majority of competitiveness dissimilarities between clusters of both regions. In EU, competitive advantages depends basically on cluster structure and its historical background; while in LAC the competitive advantages depends on external factors, such as raw materials availability, low costs, complementary productions according to season, etc.).

Further, governance stands out as a competitive factor for cluster. But while it is true for EU cluster, in LAC the cluster governance is still far to be effective.

Cluster internationalization

On the European side, we find a high level of cluster internationalization and a long temporal trajectory in it.

Among the factors that are suitable to increase internationalization activities of the clusters, the typically cluster advantages are: cluster "trademark" in specific productions, dynamic and vigorous presence of a leader firm that involve the other cluster agents, cooperation among agents, innovation capability, capacity to understand market needs and to find new markets.

On the other hand, lack of financing, insufficient information about external markets, and lack of training hamper internationalization of EU clusters.

LAC clusters internationalization activities are less developed and mostly involve individual firms. In addition, specific support policies and institutions dedicate to foster internationalization of clusters are rare: the lack of institutional support strongly limit their potential to go international.

As is the case for competitiveness, factors that could favour internationalization are represented by external factors to the cluster. This is, factors such us the exchange rate, the limited internal market size, seasonally agriculture production, etc.

Furthermore, factors that hamper cluster international activities are associated to the restricted degree of maturity of LAC clusters development, such as reduced production scale, lack of production quality or standards, etc.

Comparing cluster international activities in EU and LAC countries, in first instance EU cluster are highly internationalized, while LAC cluster international activities are limited. Further, LAC clusters should better develop and exploit clustering advantages.

Policies to foster cluster internationalisation

On the European side, experts state that such policies should be directed to support EU firms in favouring their activities in LAC region and more strict relationships with LAC clusters. For this reason policies should favour and support the research of business opportunities and facilitate contacts among agents of different clusters in both regions. Therefore, a key policy is represented by the production of information about markets, AL cluster structure and needs/opportunities.

On the other hand, LAC experts pointed out policies should be oriented to favour technological and product quality upgrades on clusters. The policies should be also addressed to implement governance models according to EU experience, in order to build the proper conditions to foster internationalization activities with EU clusters. Bringing information about EU clusters in terms of productions features and demands should be another objective of policies.

Comparing cluster policies to foster internationalization, we can observe the EU clusters need support policies in order to increase their presence in LAC countries (and for this reason they require support to have information, to map market opportunities and to have trustable contacts with AL clusters). While

LAC clusters, beyond needing support to access international markets, they need policies support for technological upgrade, to build or/and improve their internal governance and to learn from EU experiences.

As final remark, in LAC countries a big problem is represented by the lack of a sustained strategic vision on the development of cluster/districts that integrates public policies agendas. As a result, some countries have no policies that involve directly clusters/district, in others its policies are weak / fragmented and in others such initiatives are only spasmodic or ephemeral.

This problem could help to identify one of the possible areas of cooperation between the two regions: the exchange of best practices on policies to promote clusters.

On the other hand, LAC clusters have certain characteristics that differentiate them from their European peers:

- High structural heterogeneity: productivity gap hindering interactions between large and small businesses.
- Low level of specialization and cooperation
- Low innovative performance.
- Limited strategic/international vision about their business.

This analysis can also give some clues about potential areas of cooperation between clusters of both regions: the contribution of technology and design capability and innovation that can be provided by European clusters, as well as their business strategic know-how, could be very useful for LAC clusters.

On the European side, clusters face increasing market competition and must be ready to look for new market opportunities. This implies a need for diversify their production and to seek new business opportunities and agreements to gain international competitiveness, among other challenges. At that level, a deepening of their linkages with LAC clusters can generate interesting opportunities.

Finally, in the next table we summarize the main topics suggested by the working group members concerning competitiveness, internationalization and policies.

In order to facilitate the understanding of the topics discussed, we grouped them into the following 4 thematic blocks: Business environment and policies, Cluster interaction and governance, Industrial Strategy and Market access.

SUMMARY TABLES

Topic	EU	LAC	Comparison/ asymmetries	Opportunities
Business environment and policies	Currently European policies are especially focusing on some key elements for cluster/district competitiveness: - cross sector innovation, - cross fertilisation, - absorptive capacity. In EU clusters the importance of intangible assets (joint information on markets and technology, development of a higher technical culture, etc.), that favour firms competitiveness should be highlighted. Clusters require support to get information, to map market opportunities and to build trustable contacts with LAC clusters Policies should support the activity of EU firms in LAC as well as closer relationships with LAC clusters/districts. Policies should - inter alia - support the identification of business opportunities and facilitate information and contacts among agents of different clusters/districts in both region (need for scouting activities).	Difficult access to adequate funding (lack of development banks). Weak institutional capabilities in national and (mainly) sub-national public sector, including technological and business support services. Lack of coordination between academia and the productive sector. Policies are needed to favour technological and product quality upgrades in clusters.	EU clusters need support policies in order to increase their presence in LAC countries. While LAC clusters, beyond needing support to access international markets, need policies support for technological upgrade, for improving competitiveness and business development and to learn from EU experiences.	Policies oriented to detect complementarity; to foster exchange of information about clusters, markets and opportunities may lead to stimulate collaborations among LAC and EU Clusters The need for technological upgrade of LAC firms/clusters could be an opportunity both for LAC and EU clusters In LAC, policies could be oriented to implement governance models drawing from EU experience, in order to build the proper conditions to foster internationalization based on cooperation with EU clusters.

Topic	EU	LAC	Comparison/ asymmetries	Opportunities
Cluster interaction and governance (association among agents, trust relationships, etc.)	Clusters are very effective “governance tool” for EU policy-makers because they facilitate communication between public institutions and firms in order to define proper policies/actions oriented to foster competitiveness and, more generally, “to understand and solve problems”.	In LAC many efforts are still dedicated to understand how to “create” good and efficient cluster governance. Majority of districts arose spontaneously but they need public	Governance stands out as a competitive factor for clusters/districts. But while it is effective in most EU clusters, it is still lacking in many LAC cluster/districts.	Fostering internal clusters dynamics and cooperation between firms by defining specific governance schemes Interchange of best practice on governance could increase

	The presence of relevant institutions is key for cluster/district competitiveness, as well as their capacity to represent agents and interests of the cluster/district. Leader firms and proper cluster managers are key factors of stable cluster governance. EU clusters favour firms specialization and, therefore, competitiveness and efficiency. Cooperation relationships favour innovation all along the value chain.	policies in order to consolidate their governance, especially trust and collaboration among agents. Experience of cluster development is still relatively new: most LAC clusters do not have the history and the long perspective as EU clusters. Common activities (innovation, internationalization, etc.) and public-private interactions and capacities (institutional, of firms, of research) are still limited. Specialization of LAC clusters is still low resulting in a limited division of work within the cluster/district. The need to have a good cluster manager, as well as a "leader" amongst the business organizations is highlighted, as a key factor for efficient cluster governance.		competitiveness of LAC clusters and collaboration with EU clusters

Topic	EU	LAC	Comparison/ asymmetries	Opportunities
Industrial Strategy and competitive performance	In EU cluster competitiveness we can observe: - The ability of firms to work together in teams and to develop advanced production relationships. - The circulation of knowledge along the value chain and also, across different sectors (so called cross-sectorial fertilization). - Specialization, skilled human resources and flexibility. - The capacity to innovate. - The availability of specific services/policies to support firms (technological production/services level). - The capacity to respond to market needs and changing rules.	Many of the LAC clusters are based on competitive extraction and primary processing of natural resources. Concentration in lower value market segments, Insufficient integration and difficulties to move up into the value chains. Low level of specialization and cooperation, low level of production relationships among firms. Low innovative performance.	The different stage of cluster/district maturity defines and explains most of the competitiveness dissimilarities between the cluster/district of the two continents. In EU competitive advantages are mostly the result of how the cluster is structured and of its historical background, while in LAC the competitive advantages depend on external factors, such as raw materials availability, low costs, complementary productions	Policies and cooperation should be oriented to favour technological and product quality upgrades in LAC clusters, higher specialisation and diversification.

	- The quality of production and design.	Low compliance with technical/quality standards. Small-scale and technological backwardness of companies.	according to season, etc.) In both regions, there is a need to reinforce cooperation among firms in order to increase competitiveness and market share.	

Topic	EU	LAC	Comparison/ asymmetries	Opportunities
International market access	Among the factors that favour the development of internationalization activities of the EU clusters, are: cluster “trademark” in specific productions, dynamic and vigorous presence of a leader firm that involves the other cluster agents, cooperation among agents, innovation capability, capacity to understand market needs and to find new markets. On the other hand, lack of financing, insufficient information about external markets, and lack of training hamper internationalization of EU clusters. For this reason policies should favour and support the identification of business opportunities and facilitate contacts among agents of different clusters in both regions. Therefore, a key policy would be to facilitate the production of information about markets, LAC cluster structure and needs/opportunities.	Limited strategic/international vision and market intelligence. In many LAC clusters, internationalization activities are not very developed and mostly involve individual firms. In addition, specific support policies and institutions dedicated to foster internationalization of clusters are rare: the lack of institutional support strongly limits their potential to go international. Furthermore, factors that hamper cluster international activities are associated to the still limited degree of maturity of LAC clusters development. They include: limited production scale, lack of production quality or standards, etc. Difficulties in organizing collective action in areas such as innovation, sales and marketing. .	EU cluster are rather internationalized, while LAC cluster international activities are limited. In contrast to EU clusters, LAC clusters are not yet making use of clustering advantages to go international. LAC clusters are interested into international markets and are often created for that purpose but they first need policies to support technological upgrade, to build or/and improve their internal governance and to learn from EU experiences.	EU clusters have rather stable organizations and production capacities, as well as some international experience, but their knowledge about LAC markets and opportunities is limited. This call for support policies in order to increase their presence in LAC countries. LAC Clusters are still rather incipient, with some exceptions, and need support to reinforce their structure, update their production capacities and internationalize. Cooperation, and policies to support it are seen as a potential helper to close this gap, to identify new opportunities for growth based on a better understanding of international trends and opportunities in their areas of activity.