



Congreso Latinoamericano de Clusters (6° CLAC) MAY 2011

Building up Clusters in developing countries. Argentina' Examples

Alejandro Naclerio

Program Director: Local Systems of Production - Promotion of Clusters and
Production Networks with Impact on Regional Development

Ministry of Industry Argentina



Presentation Plan

1. Brief Overview of Argentina.
2. Cluster Policy. Theoretical background.
3. Case Study. Promoting clusters and Local Production Systems in Argentina.



- **Federation:** 23 provinces and an autonomous city
- **Area:** 2.780.400 km² (2nd largest country in South America)
- **Population:** 40.134.425 (estimated 2009)

■ Economic Indicators

- **GDP 2010:** USD 422,1 billion
- **GDP per capita:** USD 10.553
- **Exports (2010):** USD 68,5 billion
- **Imports (2010):** USD 56,4 billion
- **Treasury Reserves (2011):** USD 52 billion
- **Unemployment Rate (2010):** 7,3 %
- **Poverty Rate (2011):** 12,0 %

INDUSTRIAL POLICY

Two different contexts

- 1) During the 90´ s Argentina followed the liberal guidelines recommended by the Washington Consensus. Industrial policy had no place under this perspective.
- 2) After the 1998-2002´ economic crisis, macroeconomic conditions improved significantly. This positive reaction opened a window of opportunity to carry out state led policies -such as industrial policies- to spur both productive sector and regional development. The promotion of CLUSTERS stands out among these policies.



II

Cluster Strategies and Support Policies for Local Systems of Production

Theoretical Background

Cluster Bibliography

- Marshall, A. (1917), *Industry and Trade*, London, Macmillan.
- OECD (2007). "Competitive Regional Clusters. National Policy Approaches", *OECD Reviews of Regional Innovation*.
- Pitelis, C., Sugden, R. y Wilson, J-R, (2006) Eds., Cluster and Globalisation. *The Development of Urban and Regional Economies*, Edward Elgar, Cheltenham, UK, Northampton, MA, USA
- Porter, M. (1998). "Clusters and the new economics of competition", *Harvard Business Review*

Firm and Evolutionary theory

- Chandler, A. (1992), "Organisation, capabilities and the economic history of the industrial enterprise", *Journal of Economic Perspectives*, Vol. 6 pp. 79-100.
- Nelson, R. y Winter S. (1982), *An Evolutionary Theory of Economic Change*, Harvard University Press. Cambridge, Harvard.

Innovation Theory and National Innovation System Focus

- Dosi, G., Freeman, C., Nelson, R., Silverberg, G. y Soete, L. (Eds.) (1988), *Technical Change and Economic Theory*, Pinter, London, New York
- Kline, S. y Rosenberg, N. (1986). "An overview of innovation", en Landau R. y Rosenberg N. (Eds.), *The Positive Sum Strategy: Harnessing Technology for Economic Growth*, National Academic Press, Washington DC.
- Lundvall, B-Å. (Ed.), (1992). *National System of Innovation: Towards a Theory of Innovation and Interactive Learning*, Pinter, London, New York.

Cluster Policy

- Cluster policies are institutional interventions to foster the geographical concentration of productive actors.
- The main goal is to promote regional development and productive strengthening by the means of:
 - Boosting positive synergies among enterprises
 - Enhancing the connection between regional production, public investment and institutions
 - Increasing social capital
 - Achieving a sustainable and balanced growth among regions

Local System of Production

- A Local System of Production (LSP) is a group of firms and institutions located in the same area. These firms belong to the same economic sector or value chain and decide to develop joint strategies and actions to achieve a common goal.
- LSPs operate in a specific geographical, historical, institutional, and political context. The creation of productive, social and technological capabilities are closely linked to such context.

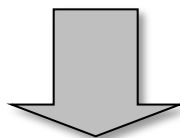


- Firms are a social actor producing and learning in a system including national and local institutions. These institutions are connectors.
- Firms are both consumers and producers of knowledge. Knowledge \neq Information (Evolutionary theory).
- The conversion of information into knowledge requires substantial **effort**. It is a technological learning process that requires previous social and productive capabilities (absorptive capacities).
Innovation effort \neq Incorporation of technology
- Firms provide their knowledge to the knowledge social base, thereby reinforcing the National Innovation System.

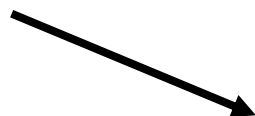
- Most of the firms, specially (SMEs), lack the resources to produce knowledge by their-selves and apply it to the production process.
- Firms engaged in joint projects (Groups of Organized Firms) are able to improve their performance sharing their knowledge, increasing their scale operation, redesigning their organization, reinforcing their competitiveness, etc.
- As a result, the collective benefit is greater than the benefit of each enterprise taken individually.
“The whole is greater than the sum of its parts”



Innovation efforts = Technological learning



Productive Strengthening + Regional Development



Local Systems of Production



III

A case study on governmental promotion
of firm's cooperation :
Local System of Production



- In 2006, the Ministry of Industry of Argentina launched the Program *Local Systems of Production- Promotion of Clusters and Productive Networks with Impact on Regional Development*.
- The goal of this Program is to foster regional development through the formation and spreading out of ***Local Systems of Production***.
- To achieve this goal the program pursues strengthening production fabric by fostering firms cooperation also in connection with the national and local governments, universities and research institutions from both the private and public sector.
- More specifically, the program provides technical and economic assistance to SMEs to establish or strengthening a partnership for a joint productive project.



The Program has two components or lines of action:

- Fostering new Partnerships among Firms
- Non-Refundable Grants for Pre-existent Groups of Firms

1. Fostering New Partnerships among Firms

- The program provides technical support to the applicant group (including at least five firms -SMEs-) to formulate a one-year work plan and fill out the required application forms.
- Once the project is approved, the group must appoint a Coordinator who will be the link between the Group and the State. The Coordinator organizes and reports the progress of the work plan based on a pre-established time table. The program provides the salary of the coordinator.
- Under this component, groups that have previously received technical support by the State can receive funding to undertake joint investments.









2. Non-Refundable Grants for Pre-existent Groups of Firms

- This component provides funding for investment to pre-existent solid groups of firms.
- These investments are usually related to:
 - Fixed investment: Machinery, Equipment for training purposes, among others
 - Innovation (Products, Process, and Design)
 - Investments in soft technology (Cluster corporative image, Consultancy, Certifications, Organizational restructuring, Management, Marketing, Logistic, etc.)



Regional and Sectorial Distribution of Clusters



-  Primary Sector
-  Tourism
-  Wood and Furniture
-  Craftwork
-  Metallurgical industry
-  TICs & Design

Regional and Sectorial Distribution of Projects

Province	Number of Projects
Buenos Aires	17
Catamarca	2
Chaco	4
Chubut	2
Córdoba	3
Corrientes	3
Entre Ríos	9
Jujuy	7
La Pampa	5
Mendoza	10
Misiones	9
Neuquén	3
Río Negro	4
Salta	6
San Juan	1
Santa Fe	15
Santiago del Estero	2
Tucumán	4
Total	106

Economic Sector	Number of Projects
Agribusiness and primary sector	44
Handicrafts and design	7
Cultural industries	1
Wood and furniture	11
Metal-mechanic	13
Mining	1
Software and information services	13
Textil	2
Turism	14
Total	106



Having supported more than 100 projects by the Program, most significant results are:

- Creation and consolidation of groups of Firms.
- Enhancing of systemic competitiveness due to the learning processes and joint development of technology.
- Improvements in qualifications of human resources and promotion of permanent training.
- Improvements in capabilities, productive scale, and organization of production by the groups of partner firms that made investments with Non-Refundable Grants.



- Increasing value added due to the integration of activities previously done by individual firms.
- Development of new products based on previous market research jointly developed.
- Boosting marketing activities.
- Several groups have obtained quality certifications such as ISO, Euregap, Globalgap, GAP, GMP, etc.



In conclusion, we can say that industrial policy of promoting collective action through strengthening clusters and fostering the linkages with local and national institutions leads to an increase of local capacities and technological development.



sepyme

Secretaría PyMEyDR
MINISTERIO DE INDUSTRIA



Ministerio de Industria
Presidencia de la Nación

Thank You

anacle@industria.gob.ar



