ADB Urban Day 2010 Livable and Sustainable Cities in Asia and the Pacific



Competitive Cluster Development: Experiences from Latin America

Presentation by Marco Kamiya*

*Prepared in cooperation with Gregorio Arevalo, Gabriel Casaburi, Martin Chrisney, Carlo Pietrobelli, and Claudia Stevenson Capital Markets and Financial Institutions / Competitiveness and Private Sector Development

Inter-American Development Bank

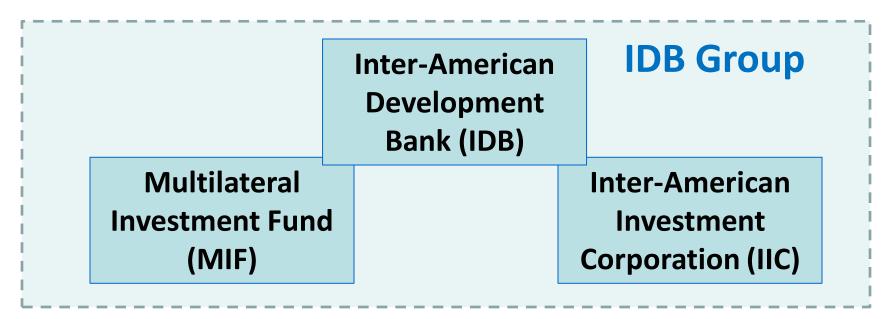
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Presentation Structure

- IDB approach to Cluster Projects
- 2. Financial Scheme and Institutional Arrangements
- 3. Clusters projects from Incubation to Expansion
- 4. IDB Projects in LAC
- 5. Questions, Lessons and Challenges



IDB Group: Competitiveness, Cluster and SMEs



- IDB (Sovereign Guaranteed -SG): Competitiveness Loan Operations, Cluster projects, Multisectoral Loans
- IIC (Mostly NSG): Direct loans, equity, guarantees. Financing for SMEs.
- MIF (Matching Grants): SMEs and public and private entities.



What is a Cluster? IDB Working Definition

 At IDB for operational purposes "Cluster" is defined by its features, as Productive Agglomeration focused on local links to generate and strengthen competitive advantages.

Elements:

- A Cluster is based on a <u>territory</u>,
- A Cluster is a set of <u>institutions</u> for productive development.
- A Cluster is a <u>coordination</u> entity



IDB Cluster Projects in LAC

IDB works in cluster development through Loan operations, matching grants and co-financing (MIF), and credit to private sector (IIC).

More than 15 loan operations in the last decade totaling US\$250 million.

Characteristics:

- National or subnational/territorial approach.
- Financial and non financial support to enterprises
- Clusters are part of general programs for SMEs
- Goal is to strengthen export oriented productive sector
- Integral programs for specific production chains
- Institutional Development is a main component



Cities in Asia and Latin America

Cities in ASIA

Cities*	Population	Area
Tianjin, China	12 mill	12,000 km²
Melbourne, Australia	4 mill	9000 km²
Chiang Mai, Thailand	1 mill	3000 km ²
Bangalore, India	6 mill	700 km ²
Manila, Philippines	11 mill	600 km ²

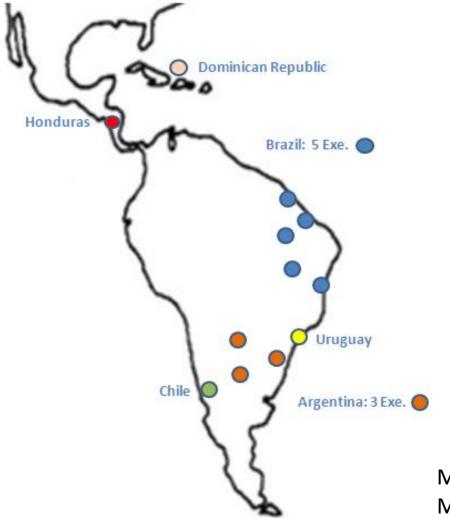
Cities in LAC

(where IDB Cluster projects are located)

Cities*	Population	Area
Mendoza, Argentina	< 1 mill	54 km²
Sao Paulo, Brazil	11 mill	8,000 km ²
Santiago, Chile***	5 mill	15,000 km²
Dominican Republic***	10 mill	50,000 km ²
Minas Gerais, Brazil**	20 mill	600,000 km²

^{*} Metro Area **State of Minas Gerais ***Country

IDB Cluster Development Projects – Loan Operations



Country	IDB Financing (US\$)
Brazil (5)	Total 50 million
Argentina (3)	Total 150 million
Uruguay	9 million
Chile (12 regions)	20 million
Honduras	10 million
Dominican Republic	9.4 million

More than 5 projects finished; More than 7 in the design/pipeline stage.



Advantages of Applying Cluster Projects in LAC

Demand for Cluster Development Projects are increasing:

Because:

- At political level, decentralization is making stronger sub-national states with more control of budget and resources.
- At productive level, larger countries are having a more developed private sector with global competitive firms. See "Multilatinas"

And are flexible:

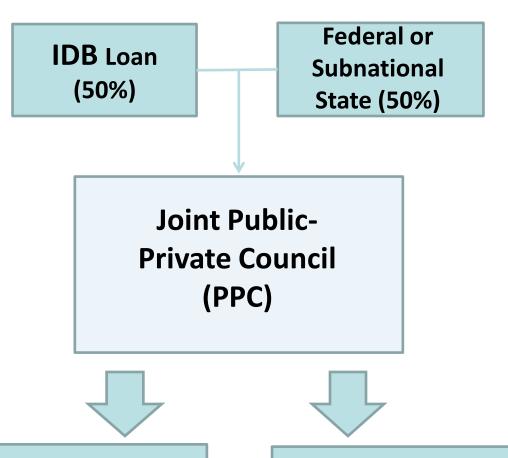
- Cluster projects are good vehicle to strengthen dialogues and develop institutional capacity.
- Easier to combine short term goals with long-term vision.
- Cluster projects can be expanded or reduced based on funding.



IDB Cluster Project – Example of Financing Scheme

Stand Alone cluster project:
IDB Financing: is around US\$10 mill.

Competitiveness
Loan: i.e. > \$100
mill., the Cluster
component is
around 10%.



Basic Cluster related infrastructure

Business Development
Services:
Matching Grants



IDB Cluster Project: Institutional Structure of Operation

Defines Execution and **Executing Public - Private** strategy and administration monitors the Agency **Council (PPC)** of project program Resources Strategy Local Horizontal Club Goods Consulting **Policies** Infrastructure **Clusters Governance** Support Public Agencies | Private **Business** International Research Centers Firms | Development Consulting Universities Services **Studies** Services Needs

Private Firms of Selected Clusters



Typical Stages of an IDB Cluster Project

Designing a Cluster Development Project



<u>Mapping</u>: Selecting clusters sectors, defining criteria for SMEs support, hiring international consultancy studies.

<u>Planning</u>: Creation of Public-Private Council, Mobilization and dialogues, preparation of diagnostics and action plans.

<u>Action</u>: Managing coordination, provision of public goods, horizontal policies, club goods and basic infrastructure.



Examples (Execution): Uruguay – Productive Chains

Year: Since 2005 / IDB: US\$75 million / + 12 clusters

- Objectives: Contribute to sustainable development of agglomerations and productive chains, acting on coordination and market failures.
- <u>Selected Clusters</u>: Processed Food, Software, Audiovisual,
 Garments, Tourism, Music, Handcraft, Shoes, Design, etc.
- Financing: Loan for Programmatic of Competitiveness (US\$75 million) part of this dedicated to this program. Matching Grants for SMEs available.



Examples (Execution): Uruguay – Productive Chains



WINE - GOURMET



BEEKEPING



CRAMBERRY



PRECIOUS STONES



FOOTWEAR AND LEATHER



DESIGN, ARCHITECTURE, ETC.

MEC - UNAONU



MUSIC / PUBLISHING



PROCESSED FOOD



SOFTWARE



AUDIOVISUAL



GARTMENTS



TOURISM - Montevideo



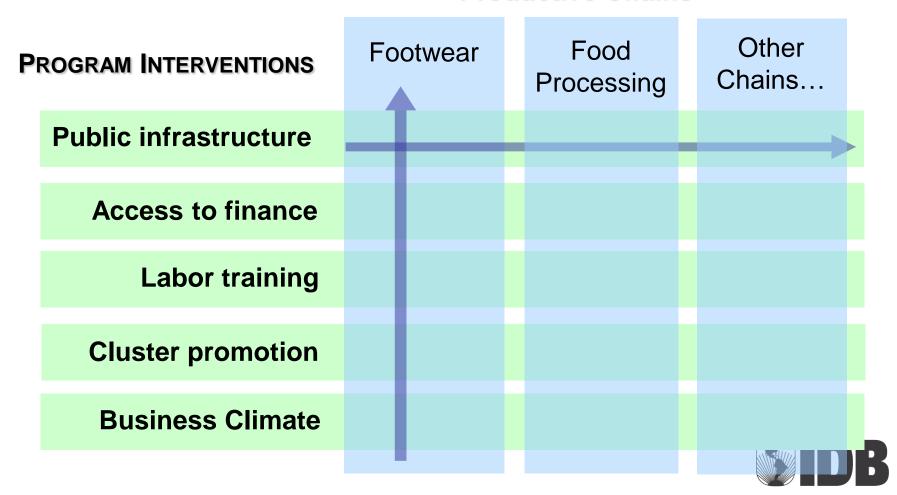
TOURISM - Colonia



Examples (Execution): Uruguay – Productive Chains

Integrating Public Intervention with Private Sector Needs

Productive Chains



Cluster Hybrid Projects

<u>Argentina - San Juan – Cluster and Finance</u>

- Cluster Development with productive support and banking access component (US\$18 million IDB, US\$20 million counterpart).
- Components: Financial support, non-financial support, institutional capacity.

<u>Dominican Republic – Competitiveness Loan with Cluster Component</u>

- Programmatic Policy-Based Loans (PBP) with (US\$10 million)
 cluster development component.
 - Components: Cluster Consolidation, Cluster Expansion, Pilots.



IDB Cluster Project: Tools

Impact evaluation and measurement are key:

- Cluster toolkit (In preparation)
 - Propensity Score Matching (PSM)
 - Other techniques to analyze firm-level data
- PDP Index for Institutions and Programs (Piloting in progress)
 - Institutional Performance
 - Program effectiveness
- Social Network Analysis (i.e. McDermontt-Argentina)
 - Improved interaction and social links
 - Policymaking and strategic links for sustainability



IDB Cluster Project: Examples of Outcomes

- Final Outcome: Increase in competitiveness of territory/country
 - Increase in at least 5% in sales per worker
 - Increase in at least 10% of sales outside territory/ or exports
- Outputs at cluster level

Compared to initial baseline, the average outputs must be:

- 10% Increase of companies introducing new products and processes.
- 100% increase in productive linkages, joint marketing campaigns, joint productive operations
- 20% increase in R&D activities



Cluster and SMEs Projects: Impact

- Increase in sales, employment and competitiveness
 - IDB Cluster projects (see logical framework and Dev. Matrix)
 - Job creation then poverty reduction (IDB MIF 2007)
 - UNIDO Cluster studies (thematic evaluations of intervetions)
 - Cluster projects in East Asia (Sonobe and Otsuka 2008)
- SMEs and Policies at firm level results
 - Gains in productivity through microdata analysis in LAC, programs in 5 countries (World Bank, Hong Tan and Acevedo 2010, and previous studies).
 - SMEs policies Increase productivity. 16 countries focusing on training, quality control, export promotion, credit.
 (IDB, Ibarraran, Maffioli, Stuchi, 2010)

Cluster Projects: Keys to Success

- Political support from the top (President, Minister of Finance);
- Involvement of the private sector since the initial stages;
- A well defined cluster vision for the short, medium and long term, often carried out by an international expert;
- Institutional capacity of the counterpart with skills and resources is needed with long-term view;
- Keep public managers to secure the implementation and "the memory" of the project;
- Disseminate results and increase support and awareness.



Cluster Projects: FAQ and IDB Approach

- Goal of a competitiveness project: act on poverty and jobs?
 - Productivity is the main goal, acting on poverty and jobs.
- Working with large firms or smaller ones?
 - Large firms are key for SMEs for productive linkages.
- Microenterprises or just SMEs?
 - Raise productivity above program costs may be difficult.
- SMEs programs are always efficient?
 - Intervention should be horizontal and serving formal firms.
- Urban clusters, and what about rural clusters?
 - Intervene in rural zones when is key for a value chain.





Inter-American Development Bank / www.iadb.org

IDB Approach to Private Sector Development

1. Macro Level: Business Environment

- Regulatory framework, institutional and political reform;
- Financial markets strengthening / Long-term financing;
- Doing Business Reform

2. Micro Level: Productive Development Policies

- Cluster and Value Chain Development;
- Institutions for Competitiveness;
- Business Development Services;
- Innovation and Firm-Level Productivity



The Logic of Interventions

Public

Input

Market

Intervention

Horizontal Vertical Roads for certain areas, Business climate, **Cold storage logistics, Educated labor force, Food safety controls** Basic infrastructure, **Exchange rate policy** Sector specific tax quotas, R&D, Subsidies, Sector specific production, Training programs, subsidies Tax exemptions, **High uniform tariff**

Source: IDB 2010 "The Age of Productivity"



Productive Development Policies (PDP): New Framework for Cluster Development

- Promotion of conditions for enterprises performance within a territory;
- Cluster development programs comprise a broad set of elements such as productive agglomerations, value chain, and production network initiatives;
- Institutional dimension integrating public and private sector related with productive capacity in the region;
- Emphasis in generation of "Marshallian externalities" and public goods;
- Intensification of Horizontal PDPs in place such as investment and export promotion, innovation, training, financial and non financial support to SMEs.

Examples (Execution): Brazil - Bahia

Year: Since 2005 / IDB: US\$10 million / + 4 clusters

- Objectives: Integrate local efforts to strengthen Arranjos Produtivos Locais (APL).
- <u>Components</u>: i) Mobilization, ii) Business Development Services,
 iii) Horizontal Interventions, iv) Supervision and Management
- Selected Clusters: mainly petrochemical, P&C for carmaking (Ford plant)
- Financing: BID (US\$10.0 mill), Counterpart (US\$6.7), TOTAL
 US\$16.7



Examples (Starting): Brazil - Minas Gerais

Year: Since 2007 / IDB: US\$10 million / + 10 clusters

- Objectives: Integrate local efforts to strengthen Arranjos Produtivos Locais (APL).
- <u>Components</u>: i) Public-Private institutionality to support competitiveness and PMC (Competitiveness Improvement Plan), ii) Implementation of PMC in selected cluster (APLs), iii), Monitoring, Impact Evaluation and Best Lessons.
- <u>Selected Clusters</u>: Overall PMC items for mainly Electronics and Shoemaking sectors.



Cluster Projects: Challenges Ahead

Business Risks, Results, Impact, Comprehensive approach

- The selection of the clusters to be supported and the activities to be prioritized have an inherent business risk;
- The monitoring and evaluation of these types of projects is complex;
- Integrated programs: business climate, access to finance and infrastructure provide superior framework for the development of private sector but at the same time are more complex to prepare and implement.

