Cluster Policies and Cluster Strategies: Implications of the ISRN Cluster Study

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Emerging Themes in Cluster Analysis

• Path Dependence
  – How do clusters originate?
  – Intended versus unintended consequences

• Industrial structure
  – Clusters vary significantly across industrial sectors

• Knowledge and learning in clusters
  – International knowledge flows vs local learning dynamics
  – Institutional learning → civic capital

• Implications of spatial levels for cluster analysis
  – ‘nested scales’
  – moves in multiple dimensions across scales

• Different policies
  – appropriate at different stages of the cluster life cycle
ISRN’s Cluster Life Cycle

Cluster Activity

<table>
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<tr>
<th>Latent</th>
<th>Developing</th>
<th>Established</th>
<th>Transformational</th>
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<tbody>
<tr>
<td>• HQP</td>
<td>• Incubators</td>
<td>• New companies&lt;br&gt;• Expanding markets&lt;br&gt;• Movement of HQP among firms&lt;br&gt;• Private to IPO&lt;br&gt;• International standards&lt;br&gt;• Experts&lt;br&gt;• Private R&amp;D investment</td>
<td>• Shrinking margins&lt;br&gt;• Instability&lt;br&gt;• Reinvention or/br&gt;• Government intervention</td>
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<tr>
<td>• Infrastructure&lt;br&gt;• Gov’t R&amp;D funding&lt;br&gt;• Champions&lt;br&gt;• Linkages</td>
<td>• Innovation assistance&lt;br&gt;• Angel &amp; VC investment&lt;br&gt;• Champions&lt;br&gt;• Linkages</td>
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Time
Policy Implications

• Importance of social factors and institution building

• Linkages between elements of the system
  – Especially research infrastructure and clusters

• National policies impact at the local level

• Growing role of networks and clusters
  – Talent as a key attractor
  – Combination of educational resources and quality of life factors

• Critical role of strategic planning and regional foresight and the local and community level
  – Coordinate federal agencies at local level
Policy Support for Cluster Strategies

• Problem of ‘missed opportunities’
  – Federal/provincial investments in research centres and programs
    • Lack of direct linkages to cluster strategies and policies
  – Lack of integration of science and industrial parks with cluster strategies
  – Lack of coordination of regional with national innovation systems

• Need for ‘policy alignment’
  – Clusters as ‘focusing device’
Policies to Support Cluster Development

- Three key types of policy:
  - Involve key actors in process of cluster development
  - Facilitate the development of collective services to support cluster firms
  - Promote more effective use of localized research and development infrastructure
    - Local training programs and institutes
Cluster Policies and Tools: Cluster Formation

- Limited interaction between actors in cluster
  - Establish sites for dialogue
  - Broker and network agencies and schemes

- Information failure
  - Cluster analysis and competence audit
  - Sponsor strategic studies
  - Conduct benchmarking

- Lack of cluster identity and awareness
  - Create cluster brand
  - Have national and regional authorities assist with cluster promotion
Role of Collaborative Institutions

• Formal and information organizations that:
  – Facilitate exchange of information and technology
  – Foster cooperation and coordination

• Enhance civic capital by:
  – Creating relationships and establishing trust
  – Creating collective institutions
  – Identifying common strengths and developing common agenda

• Strategic planning exercises draw upon civic capital created by these institutions
  – Generate trust by engaging key social partners in ‘talk’
  – Builds set of shared understandings and expectations
Strategic Planning at the Community Level

• Innovation-based strategic planning
  - Promotes innovative ideas in all aspects of local economy
  - Facilitate relationship-building

• Strategic assessment of local/regional assets
  - Workforce skills
  - Knowledge assets and R&D
  - Creative elements
  - Infrastructure
  - Quality of place
  - Entrepreneurial networks and clusters

• Key Role of Civic Leadership
  - Brings civic interests together to collaborate
  - Creates broad buy-in across all sectors of community
Drivers of Cluster Initiative Success

• Setting
  – Strong business environment
  – Trust in government
  – Strong regional government
  – Cluster strength

• Objectives
  – Broad range of objectives
  – Objectives selected based on cluster’s specific needs

• Process
  – CI Facilitator with cluster insight
  – CI has clear strategy and measurable goals
  – No negative effect of government financing
  – Negative effect of limiting participation

» Source: TCI Greenbook, 2003
Magic Bullets?

- Business led
  - sustain leadership
  - Identify champions
- Clustering is a process not a goal
- Promote networking and interaction
  - Build common vision
- Focus on achievable steps
  - Revise, refocus
- Align institutions and resources
  - Across three levels of government
  - Clusters focus federal/state initiatives
  - Clusters lead workforce development
  - Educational institutions target critical areas