What are clusters?

«CEI WORKSHOP ON CLUSTERS»
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OUTLINE

1. Presentation of the Local Economic and Development (LEED) Programme of the OECD
2. LEED work on clusters:
   – Some milestones
   – What are clusters and why do they occur?
   – Examples
   – Mapping exercise
   – Diverse Themes
   – Development Trends
3. Policy recommendations on clusters

Local Economic and Employment Programme (LEED)

- Identifies, analyses and disseminates innovative ideas on entrepreneurship and employment creation
- Action Programme based on voluntary contributions - 25 member countries with several countries in the process of joining
- Open to international organisations (European Commission, CEI/ EBRD, Inter-American Development Bank, World Bank)
- Open to OECD non-member countries (Slovenia, Romania, Lithuania, Latvia)
- LEED Partners Club: OECD link with civil society – more than 100 Partner organisations worldwide
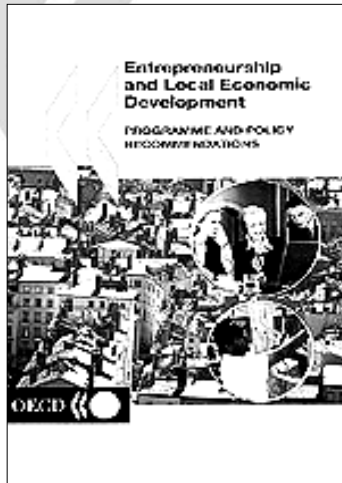- LEED Flash, www.oecd.org/els/leed

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LEED Themes

- Decentralisation of Employment Policies
- Entrepreneurship (Women entrepreneurship)
- Globalisation and Local Authorities
- Local Partnerships
- Social Innovations
- Outreach
- Policy Evaluation

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LEED: Just Published Spring 2003

Entrepreneurship and Local Economic Development
PROGRAMME AND POLICY RECOMMENDATIONS

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The Non-profit Sector in a Changing Economy

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LEED Publications

- *Local Partnerships for Better Governance* (October 2001)
- *Devolution and Globalisation: Implications for Local Decision-makers* (October 2001)
- *Corporate Social Responsibility: Partners for Progress* (September 2001)
- *Best Practices in Local Development: Territorial Economy* (August 2001)
- *Putting the Young in Business* (May 2001)
- *Social Enterprises* (November 1999)
- *Business Incubation: International Case Studies* (September 1999)
- *Fostering Entrepreneurship* (October 1998)

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LEED and Clusters – Some Milestones

- 1995: LEED conference on enterprise clusters and local development
- Italian Club of Industrial Districts joins LEED Partners Club and spurs development of French "Club of Industrial Districts" based on Italian model
- 1997: Publication "Networks of Enterprises and Local Development"
- 1998: Publication "Fostering Entrepreneurship"
- 1999: Publication "Good Practice in Business Incubation"
- 1999: LEED-Marche mission to Mexico's shoemaking clusters. Since then, 175 Mexican-Italian joint ventures
- Start of Co-operation with CEI

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- 2000: Bologna Conference, Italy: Clusters and networks stimulate innovative and competitive SMEs
- 2001: First Cluster Congress in Paris in collaboration with DATAR
- 2001: Conference "Innovation Clusters and Interregional Competition", Kiel, Germany
- 2001-2002: LEED/ CEI/ EBRD Project "Clusters in Transition Economies" Forthcoming LEED Publication on clusters
- 2003-2004 SME Ministerial in preparation (Istanbul 2004), Budapest workshop
- 2003 Opening of the LEED Trento Centre for Central and Eastern Europe
- 2004 new Cluster workshops and studies

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What are clusters?

1. Definition

- "Clustering" is the tendency of vertically and/ or horizontally integrated firms in related lines of business to concentrate geographically.

2. Economic Focus

- Competitiveness for SMEs in a globalised economy
- Competitive peer pressure to innovate
- Co-operation and competition
- Specialised labour force/ concentration of industry-specific skills engaged in learning

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Clusters as tools for local and regional economic development

- Create favourable **political, legal and economic framework conditions** benefiting SMEs in general

- Cluster policies as example of **pro-active industrial policy** with shared responsibilities among actors

- the **agglomeration** of firms and their suppliers can confer competitive advantage to the enterprises involved.

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Why do clusters occur ?

The economic drivers of cluster formation in particular industries can include:

- proximity to markets. Despite low-cost international transportation, being near to markets can be important in cluster development (products that are not easy to transport, that require continuous interaction with customers)
- supplies of specialised labour. The existence of specialised pools of labour, such as occur around many universities;
- the presence of input and equipment suppliers. A high frequency of exchanges between co-located capital goods producers and users
- the availability of specific natural resources;

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- economies of scale in production. Such economies may allow only a small number of efficient-scale plants in a given market;
- the availability of infrastructure. Some types of infrastructure may also be quite specific, such as with certain transport or tourist facilities, further encouraging agglomeration;
- low transaction costs. When firms and their suppliers operate near to each other, and the frequency of interaction is high, the costs of negotiation and contract enforcement may be reduced.
- superior access to information.

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What can enterprises in clusters share?

Joint:
- Product and market information
- product design
- marketing
- training, recruitment services, human ressources, skills upgrading
- purchasing (lower prices for raw material and supplies)
- transportation and delivery
- quality control
- testing facilities
- equipment and infrastructures
- financing (credit guarantees at collective level), sponsorships

achieve what enterprise alone can' t achieve

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Clustering Activities in OECD Countries

- Clusters have been identified in almost all OECD countries, often as the most dynamic parts of their respective economies

- Leaders in the field (based on publicised clusters)*:
  – By cluster number: UK (168 clusters), USA (153 clusters), France (96 clusters), Italy (72 Italy clusters)
  – By share of employment (in decreasing order): Canada, US, UK, Italy, Denmark, Germany, France

- Clusters in the European Union

  - Claas van der Linde, The Demography of Clusters - Findings from the Cluster Meta-Study, in: "Innovation Clusters and Interregional Competition", forthcoming 2003 (Publication derived from joint LEED – Kiel Institute of World Economics conference, 2001)

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Cluster Promotion: National/ Regional Some Examples

● UK:

– National –> Innovative Clusters Fund (2000), a £50m initiative over two years executed by Regional Development Agencies under the auspices of the Department of Trade and Industry (www.dti.gov.uk) to finance cluster formation and development

– Regional –> Scotland (among others): Specialised supporting institutions such as Scottish Enterprise (LEED Partner, www.scottish-enterprise.com) determine individual cluster needs in partnership with all industry stakeholders. Identification of industry concerns trigger private sector initiatives, as well as public interventions

=> Mix of national and regional initiatives encouraging public-private partnerships

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Cluster Promotion: National/ Regional Some Examples

Italy

● Home of industrial districts, the Italian Law recognised them 50 years after growth

● Firms made independent choices to collaborate

● Strong interpersonal skills

● Examples: Montebelluna shoes; Carara marble; Castelgofredo tights; San Daniele food; Maniago cutlery; Manzano chairs, Amaro high tech in a mountain region, Belluno eyewear; Calabria. Growing cluster agro tourism (project Alliance)

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Cluster Promotion: National/ Regional Some Examples

France

● Call for tenders by DATAR (governmental agency in charge of territorial development in France) in 2000 to identify «local productive systems» and in 2001 to launch trans national partnerships among clusters

● Examples: video game cluster in Lyon region (40% all French companies in the industry and 70% of all employment in the sector; Metaladour cluster of metallurgy 22,000 employees, 56 enterprises, they organise together trade fairs communication campaigns, Internet sites; Nogentech (Champagne Ardennes region) association of 65 enterprises gathering 1500 employees etc.

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Cluster Promotion: National/ Regional Some Examples

Finland (EU survey 2003)

● Research in early 90 to identify clusters
● 10 national clusters 1/3 total employment
● Dozen of regional clusters
● Results from research: what are the most important areas of cluster promotion?
  – Provide links with research programmes and knowledge infrastructures (education)
  – Have a shared vision, a public discussion on competitiveness
  – Support specific technology centres
  – Support labour mobility
  – AVOID DIRECT SUBSIDIES

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Cluster Promotion: National/ Regional Some Examples (continued)

- Denmark:
  - Danish Agency for Industry and Trade (www.efs.dk): Cluster mapping (1992-1994; 1999-2000) revealing 12 mega scale clusters and 29 small scale clusters
  - Insights were gained on the nature of each cluster, the critical challenges they face and their particular framework conditions. On the basis of dialogue with companies and research institutions in the different clusters further policy initiatives are formulated (Board of Referees, Expert Panel, Dialogue Groups)
  - Cluster trend analysis and benchmarking; attempts to foster cross-border cluster co-operation with Sweden
  - => Valuable tool for focusing research, as well as industrial policy in Denmark

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Cluster Promotion: National/ Regional Some Examples

Norway (EU survey 2003)

- 1998-2002 Regional innovation systems an experimental programme to stimulate cooperation among firms and research institutes
- 6 national clusters and 62 regional clusters (the sector must include at least 200 jobs and at least 10 firms and a location quotient equal or bigger than 3.0
- Results from research: what are the most important areas of cluster promotion?
  - -Networking and collaboration
  - -Training and education
  - - Knowledge and infrastructure
  - - Support a competitive environment
  - - Identify clusters to be supported by cities and regions

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Cluster Promotion: National/ Regional Some Examples

Spain (EU survey 2003)

- Regional policies and not national example of a very high interventionist region Aragon working at the restructuring the local context

- Results from research: what are the most important areas of cluster promotion?

    - Financial support for firms
    - Advice and consulting to firms
    - Policies to attract firms from outside

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Cluster Promotion: National/ Regional Some Examples (continued)

- US:
    - National ->: National Governors Association (LEED Partner), "A Governors Guide to Cluster Based Economic Development" providing tools for structuring economic development policies to help make business clusters more innovative and competitive (www.nga.org)
    - Regional->: Individual State programs promoting cluster formation through initial government seed funding with efforts then led and funded by the private sector
    => Clusters more market than policy driven

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Cluster Promotion: National/ Regional
Some Examples (continued)

● New Zealand/ Australia :
 – Series of cluster initiatives undertaken by local governments
   (Wellington, Auckland etc.) assisted by professional cluster
   mediators (www.clusternavigators.com) in NZ
 – Local government initiatives (Adelaide, Cairns etc.)
   encouraging interested parties to envision collective action in
   Australia
 – Clusters Asia-Pacific Organisation (LEED Partner,
   www.capinc.com.au) promoting cluster-based initiatives to
   upgrade industry competitiveness in NZ and AU
 => Bottom-up approach through brainstorming occasionally
    assisted by government funding for consulting and
    facilitation

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Cluster mapping

● Why?
 – Evaluate situation on the ground
 – Benchmark industry performance
 – Trend Analysis
 – Identify market failures
 – Target policy responses
● How?
 – Debate: Wide variety of cluster definitions
 – Consensus: Mix of quantitative (location quotient, input/
   output analysis) and qualitative approaches (questionnaires,
   interviews) to identify inter-firm links

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Cluster Mapping: Current Projects

- Institute for Strategy and Competitiveness, Harvard University: Meta Cluster Project, Global Cluster Competitiveness Monitor 2003
- European Commission: Expert Group on Enterprise Clusters and Networks to map clusters in EU member states, candidate countries and Norway
- OECD LEED/ CEI/ EBRD Clusters in Transition Economies: Mapping of clustering firms in Slovakia, Slovenia, Czech Republic, Poland and Hungary

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How do you identify clusters and potential clusters?

- Importance of a sector in the local and national economy (jobs, income, contribution to GDP etc)
- Inputs and Outputs relations between industries
- Supply and distribution chains
- Sources of business growth (imports and exports)

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Small business issues and clusters

- Financing clusters: a tool for financing small business
- Internationalisation of SME and clusters
- Interregional clusters of enterprises
- SME in less favoured areas (rural areas and difficult urban areas)
- Access to new technologies
- Gender issues and networks of SME
- Diasporas, retaining talents
- Building social capital among entrepreneurs

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Cluster policy recommendations

- Promotion
- Instruments
- Success and failure
- Trends
- Recommendations

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Cluster Promotion

- Almost all OECD countries and many OECD regions have invested in cluster development programmes
- Neither a systematic evaluation, nor an international comparison of cluster policies has been undertaken yet
- Cluster policies take various forms

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Cluster Promotion: Key Instruments

- Improving framework conditions for business activities in general
- Investing in infrastructure
- Encouraging associative activities among the business community
- Fostering links between university/ research institutions and the private sector
- Financing cluster activities through local development agencies (real estate, consulting, training, mentoring…)
- Encouraging linkages among companies, between industries and between firms and supporting institutions
- Offering direct financial support to clustering firms

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Success and Failure of Cluster Promotion

- Worst Practice: Cluster policy as a new version of "picking the winners"
- Best Practice: Encouraging dialogue among business and public authorities to identify synergies and to address market failures
- So far, policies seem to have had only moderate impact on competitive success of clusters (Enright, 2000)
- Factor conditions (human and capital resources, physical and administrative infrastructure, natural resources etc.), as well as a context of rivalry appear as the dominant basis of current cluster competitiveness (van der Linde, 2003)

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Cluster Trends

- Clusters development : just a fashion?
  - No panacea to solve all problems of economic development
  - Backlash against "cluster fad"?
- Cluster reality:
  - Cluster life-cycles in OECD countries
  - No correlation between competitiveness and cluster age! (van der Linde, 2003)
  - Spontaneous cluster formation in new sectors/ old sectors
  - Fostering cluster development: Need for thorough evaluation of cluster developing policies

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Why a policy interest in clusters?

- 1. Productivity and innovation

- 2. Addressing problems of enterprise scale

- 3. Affluent area demonstration effects
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- 4. Enterprise creation

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Policy Recommendations

- Adopt hands-off approach: Clusters cannot be started from scratch by government intervention
- Create framework conditions conducive to enterprise development in general and cluster development in particular (regulation, infrastructure, real estate, barriers to associative activity…)
- Support local public-private partnerships
- Identify and address market failure
- Let the private sector sit in the driving seat of cluster development
- Respect that each cluster has different policy implications
- Foster a culture of evaluation
- Become part of an international cluster learning network

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Some examples of useful international initiatives on cluster development for further information

- **CAP (Clusters Asia Pacific) www.capinc.com.au** provides an overview of industry clusters, recent publications, CAP newsletters since January this year, key events etc. To receive the letter contact: **apd@orac.net.au**

- **French letter on clusters SPL INFO** http://www.districts-industriels.com/newsletter.php To receive this letter contact : splinfo@wanadoo.fr

- **The Competitiveness Institute TCI** is a not-for-profit alliance of cluster practitioners. http://www.competitiveness.org/home.htm

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Thank you

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