Leveraging Clusters for Industrial Development in Moldova
Preconditions, Potentials and Key Steps to Introduce a Cluster-oriented Approach
- Summary of results -

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Structure

1. Introduction to clusters / cluster development programmes
2. Preconditions for cluster development
3. Potentials for cluster development in Moldova
4. Roadmap for introducing a cluster-oriented approach
5. Way forward
Introduction – Definition of Clusters

Clusters are geographical concentrations of interconnected companies and institutions focusing on related value chains.

Clusters are characterized by:
- Shared interests and a willingness to cooperate
- Variety of relationships (formal and informal)
- Co-existence of cooperation and competition
- Specialized infrastructure
- Awareness beyond region
Introduction – Origins of Clusters

The origins of clusters differ, but successful clusters are mostly rooted in specific assets and conditions in a region:

- Anchor companies attracting suppliers or service providers
- R&D institutions with specific technological competencies
- Universities generating spin-offs
- Natural resources, climatic conditions
- Industrial tradition, specific knowledge / skills
- Specific infrastructure (e.g. ICT, logistics)

Not all agglomerations can be developed into clusters!

Most attempts by governments to create clusters from scratch have failed.
Introduction – Objectives of the Cluster Approach

Clusters offer promising opportunities to companies, academia and the government providing a good basis for collaborative efforts.

Key objectives include:

- Strengthening competitiveness and innovation
- Attracting investment and fostering internationalisation
- Skills development
- Supporting structural transformation
Dimensions & Features of Cluster Development Programmes

1. Regional cluster management structures (driven by regional actors, esp. private sector)

- General Assembly
- Clusterboard
- Advisory Board
- Working Group
- Working Group
- Working Group

Services and activities usually cover:
- Information, matchmaking & cooperation platforms
- Business development and internationalization
- Development and upgrading of skills base
- Innovation support
- Cluster marketing

2. Coordination at the national / cross-cluster level (driven by triple helix stakeholders)

- Public relations & marketing for the entire cluster programme
- Facilitating knowledge transfer, capacity building & initiating cross-cluster projects
- Supporting internationalization of regional clusters
- Monitoring and evaluations & providing policy advice

3. Aligning related policy areas and instruments (intra-governmental coordination)

- Investment promotion
- Investment incentives
- Export promotion
- Innovation support
- Entrepreneurial development
- Education and training
- Industrial infrastructure
Preconditions for Cluster Development

**Cluster-specific preconditions**

**Internationalization:**
- Potential to attract foreign investment
- Potential to increase and diversify exports

**Innovation and upgrading:**
- Potential for (collaborative) innovation activities
- Potential to upgrade value chain and generate spill-over effects in related industries

**Employment and skills development:**
- Employment creation potential
- Potential for collaborative upgrading activities

**Critical mass and cooperation climate:**
- Sufficient geographic concentration and balanced mix
- Ability to attract at least 25 members
- Proven willingness to cooperate

**Framework conditions**

- Coordinated intragovernmental approach & policy integration
- Strong linkages between government, academia and business
- Understanding of the cluster rationale, benefits, limitations & roles of different actors
- Sufficient public funding throughout the start-up phase
Cluster Potential in Moldova

As of yet, there is no institutionalized cluster meeting the criteria and requirements that have been laid out. Based on preliminary research and interviews, the following areas appear to exhibit cluster potential:

- **Automotive** with a focus on the FEZ in Balti
- **IT** with a focus on Chisinau
- **Wine** with a focus on the wine regions
- **Light industries** with a decentralized focus
- **Fruit and vegetable processing** with a focus on Edinet Industrial Park

In addition, a number of (emerging) “micro-clusters” have been identified, building on collaborative R&D and innovation projects:

- e.g. in the fields of **nanotechnology & new materials, applications of renewable energy technology in agriculture**
Cluster Potential in Moldova

While the majority of identified areas don’t meet the necessary criteria, the IT and automotive industry appear to fulfil the basic requirements:

- Internationalization (e.g. strong investment attraction and export performance)
- Employment and skills development (e.g. track record of creating jobs)
- Innovation and upgrading (e.g. first collaborative measures established)
- Critical mass and cooperation climate (e.g. regional concentration)

Additional research is necessary to determine structural characteristics of the industries and the innovation and cooperation potential

Challenges in the framework conditions pose obstacles for cluster development:

- Linkages between government, business and academia
- Understanding of the cluster approach
- Intragovernmental coordination
- Legal framework
- Financial sustainability of cluster management
Roadmap for Introducing a Cluster-Oriented Approach

Pre-cluster phase

- Establishing the analytical base for policy decisions
- Improving the environment for cluster development
- Testing the cluster approach in selected policy areas

Pilot-cluster phase

- Testing cluster management & support structures in one or two pilot clusters
- Establishing a lean coordination unit
- Orienting further policy areas and instruments towards cluster development

Roll-out phase

- Launching a targeted & competition-based cluster development programme
- Widening the scope of tasks of the coordination unit
- Fully integrating cluster development into policy framework

Each time before a new phase is entered, the interim results should be critically reflected in order to decide if the process should be continued or if alternative strategic options offer more promising opportunities.
Roadmap – Pre-Cluster Phase

The focus of the pre-cluster phase should be on:

- **A comprehensive cluster analysis** to ...
  - Validate / specify the findings of the preliminary research on cluster potentials
  - Identify further (emerging) clusters which could be promoted

- **Efforts to improve the environment for cluster development:**
  - Foster triple helix linkages (e.g. collaborative R&D and innovation projects)
  - Strengthen intra-governmental coordination
  - Establish a dialogue / coordinating platform (“cluster / triple helix council”)

- **Initiating a process to orient relevant policy areas and instruments towards cluster development** (e.g. investment promotion, FEZ, industrial parks and incubators)
Roadmap – Pilot-Cluster Phase

Depending upon interim results, the focus of the pilot-cluster phase would be on setting-up cluster management structures for two pilot clusters.

- **Lean organizational model** – consider contracting existing organization (e.g. zone management or association) to host the cluster management

- **Range of services and activities** of the cluster management comprising...
  - Information, matchmaking and cooperation platforms
  - Business development and internationalization
  - Development and upgrading of skills base
  - Start-up and innovation support
  - Cluster marketing

- **Establishing a lean coordination mechanism** (e.g. one senior official of the Ministry of Economy with advice from the cluster / triple helix council)

- **Aligning further relevant policy areas / instruments** towards cluster development
# Roadmap – Pilot-Cluster Phase

Key activities, eligible costs and estimated funding needs for pilot-clusters:

<table>
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<tr>
<th>Timeline</th>
<th>Preparation phase 6 months</th>
<th>Start-up phase 36 months</th>
<th>Growth phase (as needed) 24 months</th>
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| **Key Activities** | • Needs analysis /cluster diagnostics  
• Vision building / action planning  
• Organisational / M&E concept | • Setting up cluster management  
• Implementation of the action plan  
• Delivery of services | • Refining / extending action plan and service portfolio  
• Continued implementation  
• Planning / initiating special cluster projects |
| **Eligible Costs** | • Studies and technical assistance (e.g. specialized service providers) | • Salary of a cluster manager  
• Office Space  
• Costs related to activities such as information and cooperation platforms, trade fair visits, training offers | |
| **Funding per Cluster** | EUR 25,000 | EUR 150,000 | Reduced rate (e.g. EUR 75,000) |
Roadmap – Roll-Out Phase

Depending upon the results of the pilot-cluster phase, the roll-out of a targeted cluster development programme could be initiated.

- **Competition-based cluster programme supporting 5-8 clusters**
- **Combination of a top-down and a strong bottom-up approach** – driven by the actors in the regions and in particular the private sector

- **Role of central government** focusing on:
  - Acquisition of (international) funding for the programme
  - Facilitating a competition based funding procedure, defining eligibility criteria
  - Taking up ideas for business environment reforms identified in the process

- **Widening tasks of coordination unit** (e.g. promotion, cross-cluster projects)
- **Integration of cluster development into policy framework**
Way Forward – Comprehensive Cluster Analysis as First Step

Workshop with stakeholders
- Raise awareness, discuss and refine the proposed roadmap
- Validate and amend the long-list of (emerging) clusters

Survey at regional level
- Identify/rate (emerging) clusters
- Gather information on clusters

Quantitative Assessment
- Focus on concentration indicators
- Sectoral competitiveness analysis

Consolidation of findings & short-list of (emerging) clusters
- Grouping of regional (emerging) clusters from national perspective
- Integrating insights regarding investment and start-up potentials

Expert panel
- Discussing and validating interim results on potentials and conditions
- (Pre-)Selection of clusters based on ranking with decision matrices

Detailed cluster mapping (optional)
- Analysing structural characteristics and cooperation patterns
- Assessing needs and requirements regarding cluster activities
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