

Assessing the potential for the development of automotive clusters in the Republic of Uzbekistan

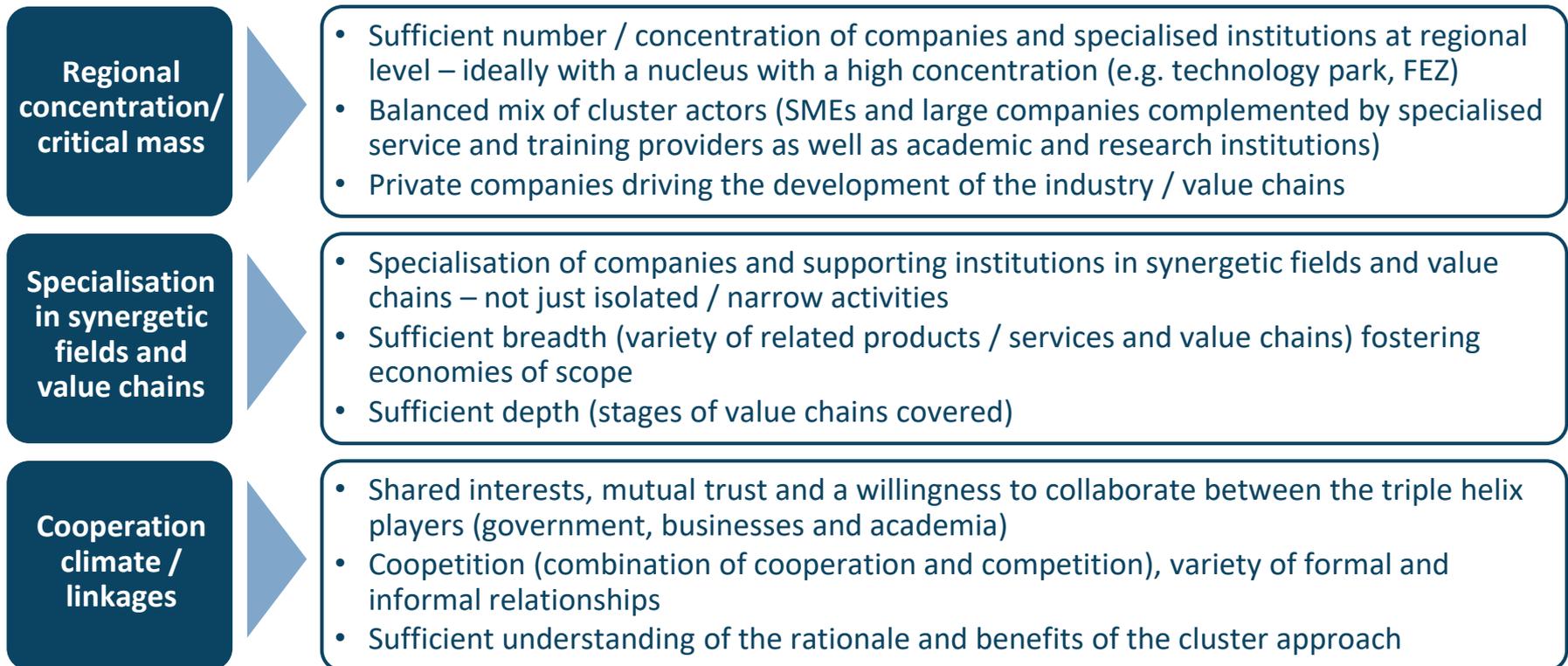
Presentation of key findings and recommendations

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1. Rationale of cluster approach and necessary preconditions

Various countries have successfully leveraged clusters to foster industrial development. However, there is also evidence showing that not every concentration of companies can be developed into a cluster. Certain preconditions have to be met:



Source: Own research and illustration

2. Assessment – regional concentration

Regarding the first precondition, a sufficient concentration of companies and specialised institutions can only be found in the Andijan Region. However, the strong role of large (state-owned) companies is limiting the cluster potential

- Sufficient concentration – in quantitative terms – only in the Andijan Region
 - About 200 companies and 30,000 employees in automotive value chains
 - Presence of renowned research institution (Andijan Institute of Machinery)
 - Newly established automotive hub could form a nucleus in the medium term
 - Concentration not sufficient in the Tashkent and Jizzakh Region
- However, necessary preconditions – in qualitative terms – only partly met in the Andijan Region
 - Large fully state-owned companies or partly state-owned joint ventures playing a very strong role in relevant value chains
 - According to international experience, cluster development should be primarily driven by private companies – and in particular SMEs

2. Assessment – specialisation and cooperation climate

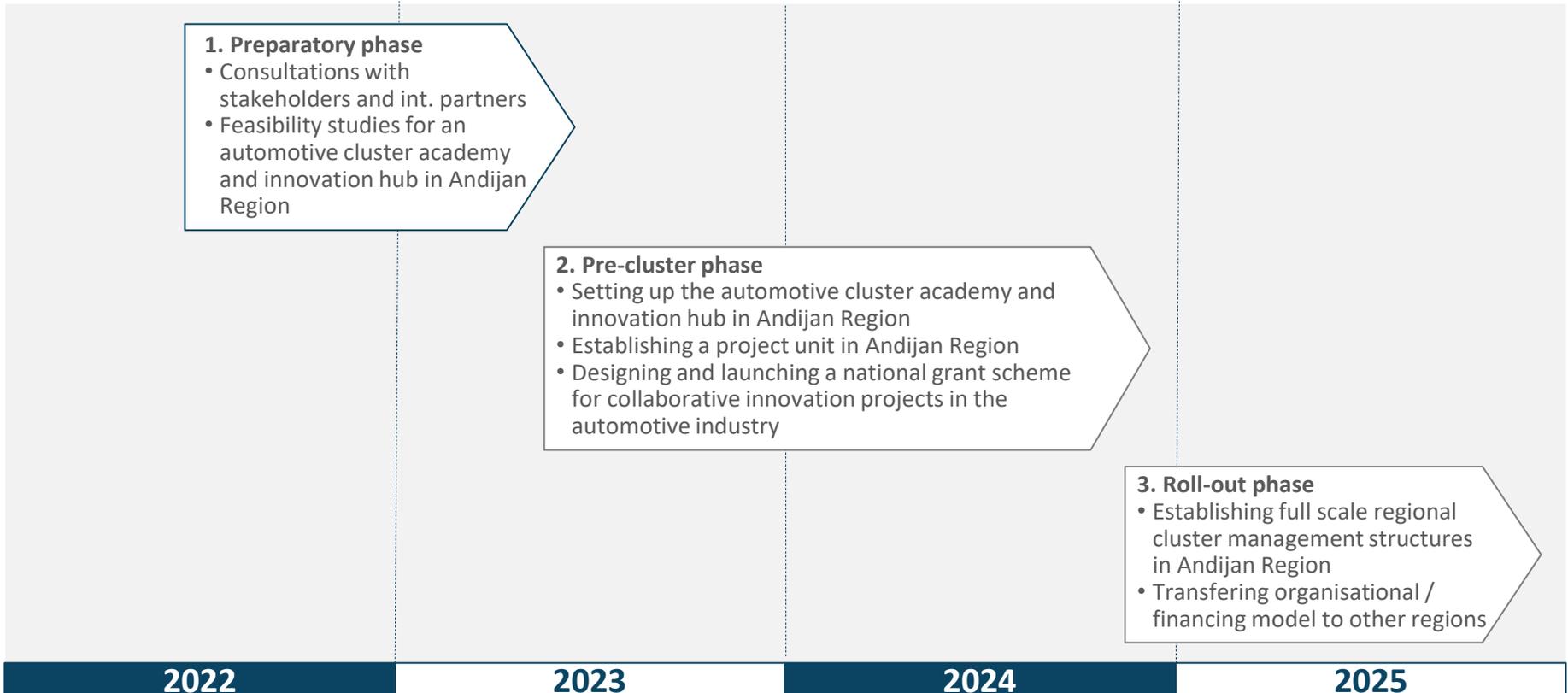
Criteria related to the specialisation pattern are also fulfilled only in the Andijan Region. Across all regions, the current level of cooperation is considered to be too low and stakeholders lack the necessary awareness of the cluster approach

- Necessary breadth and depth of automotive industry in the Andijan Region to generate synergies and foster economies of scope
- Rather dispersed structure of the automotive industry in the Jizzakh and Tashkent Regions not conducive for the development of clusters
- While companies share an interest in collaborative skills development and innovation activities, in general, there is lack of “coopetition”
 - Lack of both cooperation and competition in the automotive industry in Uzbekistan
 - In particular in the Andijan and Tashkent Region, most relevant value chains controlled by fully or partly state-owned companies
 - Collaboration mostly on a commercial basis
 - Overall, linkages and level of trust between the triple helix players still rather weak

3. Conclusions and recommendations

There is clearly a need and potential to improve the industry’s competitiveness. Considering the findings on the preconditions, a phased introduction of a cluster-oriented approach is advisable – as reflected in the proposed road map below:

Road map for introducing a cluster-oriented approach to support the development of the automotive industry



Source: Own research and illustration

3. Recommendations – preparatory phase

The focus of the initial phase is on sensitising key stakeholders and international partners and to develop a common understanding of the way forward. The phase also serves to prepare two pilot projects:

- (1) Automotive cluster academy providing needs-oriented training and degree programmes
- (2) Innovation hub offering the industry-specific hard and soft infrastructure for collaborative innovation projects

Feasibility studies should comprise:

- In-depth assessment of needs
- Review of existing / planned facilities
- Analysis of international experience
- Definition of infrastructure / service portfolio, organisational and financing model

ATEC Training Academy (Portugal)

- Non-profit TVET association based on cooperation between Volkswagen, Siemens, Bosch and Portuguese-German Chamber of Commerce and Industry with assistance from the Portuguese Government
- Presence in 7 Portuguese cities – on or next to major investment sites of the automotive industry
- Provision of tailor-made training programmes (e.g. 2.5 years dual vocational training, 1 year qualification course for graduates without work experience) and advisory services

Manufacturing & Automotive Innovation Hub (Canada)

- Collaborative workspace and laboratory to rapidly solve industry problems with novel technology solutions
- Managed by National Research Council of Canada (NRC), the largest federal R&D organisation
- Open to all levels of the automotive supply chain to test advanced technology onsite the 75,000 square foot hub and collaborate with NRC specialists

3. Recommendations – pre-cluster phase

While implementing the two pilot projects, further formats could be tested in the Andijan Region. Those regional activities should be complemented by a national grant scheme for collaborative innovation and R&D projects

- Design of grant scheme should:
 - Reflect results from stakeholder consultations and international good practice
 - Integrate a competition-based selection mechanism
- Ministry of Economic Development and Poverty Reduction should set up a project unit in the Andijan Region to:
 - Coordinate implementation of the two pilot projects
 - Test further cluster-related dialogue formats and support services

Grant scheme “New vehicle and system technologies” (Germany)

- Provision of non-repayable cash grants for collaborative innovation and R&D projects in the automotive industry
- Competition-based selection mechanism for supporting consortia of two or more business partners or businesses and research institutions
- Main focus on projects contributing to upgrading of value chains in fields of new vehicles and system technologies incl. autonomous driving, low-emission vehicles and production processes
- Aid intensity depending on the project type, the composition of consortia and the size of companies, e.g.
 - Up to 50% per firm for industrial research
 - Increase by up to 20% if SMEs or research institutions are involved

3. Recommendations – roll-out phase

The focus of the final phase is on establishing a full scale regional cluster initiative in the Andijan region. Depending on the results, the developed policy tools could be transferred to other regions

- The project unit should be converted into a regional cluster initiative
 - Assessing whether a membership-based or open model should be used
 - Considering if an existing institution can host the cluster management
 - Strengthening the triple helix approach
 - Ensuring that cluster development is driven by private sector
 - Widening the portfolio of cluster-related services (e.g. trade fair participations, supplier days, twinning, recruitment and maintenance services)

Silesia Automotive Cluster (Poland)

- Cluster initiative with more than 170 members incl. large corporations, SMEs, universities, R&D institutions, technology centres and training providers
- Cluster management hosted by Katowice Special Economic Zone (SEZ)
- Membership fees amounting to approximately EUR 1,000 p.a. for a standard membership and EUR 500 p.a. for SMEs

Cluster Transport, Mobility and Logistics of the Federal States of Berlin and Brandenburg (Germany)

- More than 17,000 companies, universities and R&D institutes benefitting from the services of the cluster management without a formal membership
- Organisational model comprising:
 - Cluster speaker and speakers for each priority area from the business and academic community
 - Cluster management hosted by the development agencies of the Federal State of Berlin and Brandenburg
 - Advisory board

About the German Economic Team



Financed by the Federal Ministry for Economic Affairs and Climate Action, the German Economic Team (GET) advises the governments of Ukraine, Belarus*, Moldova, Kosovo, Armenia, Georgia and Uzbekistan on economic policy matters. Berlin Economics has been commissioned with the implementation of the consultancy.

**Advisory activities in Belarus are currently suspended.*

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