Mazovia

Background information

Peer Review 5-6 November 2013
1. **MAZOVIA – GENERAL INFORMATION**

<table>
<thead>
<tr>
<th>Mazovia vs. Poland</th>
<th>total</th>
<th>% Poland</th>
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<tbody>
<tr>
<td>Area (in km$^2$)</td>
<td>35 558</td>
<td>11.4</td>
</tr>
<tr>
<td>Population (in thousands)</td>
<td>528,6</td>
<td>13.7</td>
</tr>
<tr>
<td>Unemployment (in thousands)</td>
<td>246,7</td>
<td>12.4</td>
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<td>GDP per capita (PLN)</td>
<td>60 359</td>
<td>162.7 (of the average)</td>
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Mazovia is located in the central-eastern part of Poland, and occupies 35,558 km$^2$, that represents 11.4 percent of the total area of Poland. It borders with six regions: Lodzkie and Kujawsko-Pomorskie to the West, Warmia and Mazury to the North, Podlaskie and Lubelskie to the East and Swietokrzyskie to the South. It is the most populated and largest region in Poland. Economic performance is well above the average of Poland. The region is characterized by significant intra-regional disparities from the point of view of the social, economic and innovation potential.

Even though Mazovia is very competitive in comparison with other regions in Poland, it is no longer as competitive on the international level. The region was classified as moderate innovator in the EU. This means it does not belong to the followers or the leaders of innovation that play important roles in the world’s economy.

Human resources belong to the assets of Polish economy. On the other hand, country’s weaknesses include insufficient protection of intellectual property rights and protection of entrepreneurial innovation. Although the percentage of scientists and engineers is in Mazovia relatively high, the number of applications for a European patent to the European Patent Office is alarmingly low (Eurostat statistics).

Without doubt, Mazovia exceeds other Polish regions taking into account innovative processes, R&D activities, economic and scientific development. This is mainly due to the fact that Warsaw is the capital of Poland and therefore the location of the majority of central institutions, including the ones responsible for creating and conducting policies for innovation, research and development and education at the country level.

<table>
<thead>
<tr>
<th>Mazovia – basic information</th>
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<tbody>
<tr>
<td>Capital city</td>
</tr>
<tr>
<td>Cities over 45 000</td>
</tr>
<tr>
<td>Number of companies</td>
</tr>
<tr>
<td>Universities</td>
</tr>
<tr>
<td>% of people with high school&amp;university education</td>
</tr>
<tr>
<td>Agricultural areas</td>
</tr>
<tr>
<td>Households with access to Internet</td>
</tr>
</tbody>
</table>

A strategy for Smart Specialisation should be aimed at establishing relations between the R&D sector and the industry. It is based on the “entrepreneurial discovery” process – the strategy and priorities are identified by decision-making bodies in cooperation with local stakeholders. This way a compromise between the ideas of local authorities and real needs of companies and citizens can be reached. This is a very active process, implicating the idea of “open government”. Also it looks beyond the region’s boundaries, matching the resources of the region with its assets (knowledge, value chains) available on regional, national and international level. Its goal is to increase the competitiveness of the region.
To the greatest advantages of Mazovia belongs the highest GDP per capita in the country. Unfortunately its distribution is rather unfavorable for the peripheries. The fact that Warsaw is the capital of Poland makes the traditional differences between centre and peripheries even more outstanding. This economic polarization accounts for considerable problems in some parts of the region, especially in the forms of unemployment, brain drain and dwindling competitive advantage against other regions. Nevertheless, Mazovia is still the most competitive region in Poland. Also it was classified moderate innovator in the EU, owing to the fact that a considerable number of companies in the region belong to the most resource-efficient in the country.

On the other hand their operations are not evenly distributed. Each of the six subregions confirms the economic diversification and polarization of Mazovia. In the Ciechanow and Plock area as well as the Ostroleka and Siedlce area the dominant sectors are agriculture and construction. Agriculture, industry and construction characterize Radom. Warsaw concentrates on services, whereas Warsaw East on industry and agriculture and Warsaw West on industry and services.

<table>
<thead>
<tr>
<th>Employment structure</th>
<th>Agriculture, forestry, fishing</th>
<th>Industry</th>
<th>- incl. production</th>
<th>Construction</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>2,30%</td>
<td>9,70%</td>
<td>9,10%</td>
<td>11,90%</td>
<td>6,20%</td>
</tr>
<tr>
<td>Mazovia</td>
<td>1,80%</td>
<td>8,80%</td>
<td>8,20%</td>
<td>10,10%</td>
<td>9,30%</td>
</tr>
</tbody>
</table>

Substantial diversities of the region are also expressed in the structure of employment. Although agriculture seems to be least popular among employees, Mazovia is an important producer of agricultural goods, especially fruit and milk products. What stands out is the services sector, which determines the role of Warsaw as a services centre.

2. **The Priorities of RIS for Mazovia**

The Regional Innovation Strategy for Mazovia 2007-2015 acts as the basis for the new updated strategy for the 2014-2020 period. It was thoroughly revised and restructured under five basic assumptions:

1) Innovation-driven development should stimulate wealth and technological growth of the region. Unwelcome effect would be further cleft between centre and peripheries. That is why an open innovation approach should be adopted, facilitating diffusion of innovation.

2) Warsaw has the greatest innovation potential but the subregions are equally important.

3) The emphasis should be placed on innovation processes rather than on institutions. Cooperation and networking are extremely important.

4) Warsaw should play a significant role in the economy of Central and Eastern Europe and Mazovia should be competitive internationally.

5) Developed countries are the main source of innovation. That is why Mazovia should consider active participation in different forms of international cooperation initiatives.

As a result, the following RIS priorities were established:

Each strategic goal concentrates on different area of economic development. Combined, they create a complex strategy, based on today's reality but open to future impacts.
Following the ideas of open government and stakeholders’ participation the above goals were subject to public discussion and they represent the needs and possibilities of the region.

An ideal strategy for Smart Specialisation should be implemented within the existing complex and multilayered system of innovation and development. Mazovia has not built it yet. The implementation of the updated Regional Innovation Strategy should lead to the creation of such a system. Only after the framework has been established, can the Strategy for Smart Specialisation be part of the innovation strategy document.

3. **THE PROCESS OF RIS UPDATE AND IDENTIFICATION OF SMART SPECIALISATION AREAS IN MAZOVIA**

The update of RIS for Mazovia implicates the necessity of identification of Smart Specialisation areas. The process in general is coordinated by The Office of the Marshal of the Mazowieckie Voivodeship in Warsaw, Department of Regional Development and European Funds. Draft documents are prepared in accordance with the advisory board – the Mazovia Innovation Council, consisting of entrepreneurs, scientists, representatives of business support institutions and public administration.

The concept of Smart Specialisation can have different interpretations, depending on its future role in the regional innovation policy as well as different forms. That is why identification of the areas of smart specialisation requires a complex and long-term process involving numerous actors.

Mazovia started working on the Strategy for Smart Specialisation in the middle of 2012 along with the preparation of documents for the new financial perspective 2014-2020. The general assumption is that the regional innovation system should take into account specific regional conditions, react to its needs and challenges. Even though it bears similarity to the national one and complies with the EC directions (e.g. key enabling technologies), the Strategy for Smart Specialisation of Mazovia and the update of the Regional Innovation Strategy for Mazovia are unique concepts that express regional conditions and aspirations.

According to the European Commission regional policies should be better linked with the objectives of the Europe 2020 strategy. In addition, an ex-ante evaluation of the activities in the areas of supporting innovations and fostering competitiveness for the 2014-2020 period is required. This implicates a thorough analysis of the region and calls for a new strategic document for the 2014-2020 period.

The current Regional Innovation Strategy for Mazovia was issued in 2008 and was rather general, without addressing specific subjects. It concentrated on creating suitable environment for entrepreneurship and innovation and building of networks. This document was supposed to be valid till 2015 and it is too early to assess its impact on the region’s economy at the moment.

Because of the fact that innovation is a very unpredictable phenomenon that adds to the dynamic of the economy it is extremely important to make it possible to closely monitor and verify the policy without changing the whole system. This is the reason why the Strategy for Smart Specialisation was not incorporated into the Regional Innovation Strategy for Mazovia, but is an annex to the general document. This makes the policy more flexible and efficient, because it allows for more frequent changes – revisions of the annex will be held every 2-3 years. If there is a need for an update, the process should be independent from the RIS3 update.

The process of identification of the Smart Specialisation areas in the Mazovia region is based on the guidelines presented in the Guide to Research and Innovation Strategies for Smart Specialisation (RIS3):

- Analysis of the regional context and potential for innovation.
- Production of a shared vision about the future of the region in cooperation with a number of stakeholders.
- Selection of a limited number of priorities for the development of the region.

No chronological order of these activities was imposed, so that they are performed simultaneously as parts of the multidimensional process of RIS update and identification of Smart Specialisation.

Despite the fact that there is an innovation strategy for the region still in action, the authorities decided to reformulate its priorities, so as to make them more up-to-date. The contemporary situation differs from the conditions in 2007 substantially. The decision was also taken to incorporate the eStrategy
into the new RIS for Mazivia and make the development of the information society its fifth priority. This reduces the number of regional strategic documents and helps avoid duplication of legal rules. The strategic vision of Mazovia is consistent with its previous development and innovation programmes: to increase the innovation potential in order to accelerate growth and foster competitiveness of the region.

4. **Actions**

To start with, all the available records, reports and analyses of the socio-economic situation of the region and country were analyzed and initial conclusions were drawn. These led to the identification of the economic potential of Mazovia and barriers to innovation. The diagnosis was based on the research ordered by The Office of the Marshal of the Mazowieckie Voivodeship in Warsaw and conducted by the Mazovia Office of Regional Planning as part of the project “Trends in Development of Mazovia”.

Other documents the strategy correlates with:

- National Strategy of Regional Development
- National Reform Programme to reach the goals of Europe 2020
- Long-term Country Development Strategy – Poland 2030
- Country Development Strategy and draft Strategy of Innovation and Economic Efficiency ‘Dynamic Poland’
- Enterprise Development Programme
- Polish Roadmap of Research Infrastructure
- Industry technology Foresight – InSight2030
- National Strategy for Smart Specialisation

The diagnosis expresses the polarization of the region, The diversification of economic activity in the region lessens the influence of unexpected economy swings, on the other hand it makes it hard to identify a limited number of key industries. Even though the number of companies and research institutes is substantial, the level of social capital is extremely low and hinders networking and cooperation initiatives. There is also no leading scientific discipline that could be characteristic of Mazovia, presumably because of the concentration of academic potential in Warsaw. What is more, despite the fact that many production companies are located in the region, there is no leading branch of industry, and services play the dominant role. The greatest controversy concerns labor market – even though Mazovia is the most developed region in the country, the levels of unemployment and poverty in chosen communities are alarmingly high.

In the next step basic characteristics on Smart Specialisation in the Mazovia region were defined – it should not be a specific industry branch, technology, product or service. An open, holistic approach was adopted – Smart Specialisation is a combination of economic areas, technologies and supporting processes set up in order to use the economic potential to foster entrepreneurship and competitiveness. Its aim is to give directions without providing a limited list of branches or sectors.

To sum up – no distinctive industry area of Smart Specialisation of Mazovia was recognized at the initial stage, but several important sectors could be named basing on:

- The existing network structures/cluster initiatives
- SWOT analysis in compliance with the methodology of the Ministry of Regional Development
- Export structure
- Analysis of data on the concentration of economic activity
- Rankings of the biggest and the most innovative companies

Organization of consultation meetings was the next step of the process. The first round of meetings was aimed at consultation of the principles of Smart Specialisation and took place between March and June 2012. On the agenda of such meetings was a presentation of the results of the initial analysis and a discussion on the possible reduction or augmentation of the list of the chosen areas and the idea of Smart Specialisation for Mazovia itself. The meetings engaged two sets of participants:

- representatives of industry sectors (agriculture, chemistry, medicine, ICT, energy, clusters),
representatives of local communities in Ciechanow, Ostroleka, Radom, Plock and Siedlce. The meetings led to some important conclusions:

- Electromechanical industry will not be considered as one of the key economic areas in the region, because it is too vast and general. Still, it may serve as a connection between other sectors and link between an innovative idea and the implementation of innovation.
- The list of key technologies in the region was augmented.
- The differentiation between the ICT (technology) and IT (economy) sectors was introduced.

The list of key technologies in the region was augmented.

The outcome of the first consultation round was a draft list of Smart Specialisation areas for Mazovia:

- Safe Food
- Intelligent Management Systems
- Modern Services for Business
- High Quality of Life

In addition, there were other working group meetings organized, including those of the Mazovia Board for Innovation. The Board members (including representatives of universities, research institutions, industry organizations and local authorities) also discussed the proposed areas of Smart Specialisations and their observations were addressed in the draft document.

The analysis of the socio-economic situation of Mazovia followed by the process of identification of Smart Specialisation areas facilitated the update of the Regional Innovation Strategy for Mazovia. The new draft document encompasses the idea of clusters and cluster policy, key enabling technologies and the Digital Agenda for Europe principles. Not only technological innovations are mentioned, but also those in marketing and creative sector as well as new services and processes. What is more, it refers to social innovation and eco-innovation, whose role both in the economy and the everyday life should not be underestimated.

In September 2012 started the second round of meetings concerning the update of the Regional Innovation Strategy for Mazovia, the areas of Smart Specialisation and their influence on social innovation. The goal is to provide complex definitions of the Smart Specialisation areas, allowing for a complete change of the proposed areas at the same time. The second round of meetings is directed at three sets of participants:

- Representatives of local communities in Ciechanow, Ostroleka, Radom, Plock and Siedlce (meetings organized by the Local Offices)
- Representatives of local communities in Ciechanow, Ostroleka, Radom, Plock and Siedlce, with emphasis on SMEs (organized by Regional Institutes ESF)
- Representatives of local communities in Ciechanow, Ostroleka, Radom, Plock and Siedlce, with emphasis on NGOs and social institutions (organized by Regional Institutes ESF)

5. Participation

The complex and multidimensional process of RSI update and identification of Smart Specialisation areas evolved from the concept of stakeholders’ participation on every stage. The forms of participation are as follows: direct (meetings) and indirect (surveys and research). The tools and methods used in research projects included:

- In-depth interviews with the local authority representatives,
- Internet survey (local authorities),
- In-depth interviews with the representatives of regional enterprises,
- Direct interviews and questionnaires for the entrepreneurs,
- Surveys among selected stakeholder groups (including companies, business support institutions, research institutes).

The internet survey can be found on the website of the Office of the Marshal of the Mazowieckie Voivodeship in Warsaw. It consists of open and closed questions and its results will lead to further verification of the areas of Smart Specialisation as well as the principles of the Regional Innovation Strategy for Mazovia.

The meetings in both rounds were open and the invitations were published on the website. In addition, about 30 institutions (local authorities, research institutes, cluster representatives, business support
institutions and companies) were directly contacted before each meeting by post, e-mail or fax. They were selected on the basis of published rankings of the biggest and the most innovative companies in the Mazovia region as well as the feedback from the Local Offices employees operating within the project ‘Mazovia Network of Consulting and Information Offices for Innovation’. The general agenda for a consultation meeting was as follows; welcoming speech, presentation of the effect of the update process so far and discussion. The goal of these meetings was not to present full diagnosis of the region, but to show patterns and plausible areas of development and innovation in order to let the participants draw their own conclusions, give directions, present claims and expectations. They had the chance to go beyond the diagnosis and mention all the issues that were not addressed, in spite of being important for the region. The organization of the meetings proved to be problematic, because of the modest response from the business sector. In effect, they amounted to 30 per cent of the invited and their percentage was even lower among the actual participants. In order to increase the participation quotas the second round of meetings was organized in cooperation with Regional Offices ESF and Mazovia Office of Regional Planning.

6. DEVELOPMENT POTENTIAL

The analysis of the available data, diagnosis and feedback from the consultation meetings and interviews led to the identification of the following development areas:

**Development areas (industry)**
- chemistry,
- medicine,
- agriculture,
- energy,
- IT.

**Key technologies:**
- biotechnology,
- ICT,
- nanotechnologies,
- photonics,
- electronics.

**Service processes:**
- B2B services,
- R&D services.

**High potential sector** – construction.

There is no single industry specialisation area in Mazovia. The region is extremely polarized so that it is divided into two distinctive parts – centre and peripheries. Warsaw is the biggest city in Poland and the capital of the country, therefore it enjoys a special status of being the centre of services. It dominates the region to disadvantage of other cities. These special conditions were also taken into account in the process of identification of Smart Specialisation. As a result, B2B services are perceived horizontally and can be used in various development areas. One of the most important assets of the region is the concentrated academic potential (high number of universities and research institutes). Not only successful research commercialization may lead to gaining an economic advantage, but also it may become the regions’ best commodity.

7. AREAS OF SMART SPECIALISATION

Mazovia is an extremely diversified region. That is why the areas of Smart Specialisation are located on the junction points of the development areas, key technologies and processes.
This is the most optimal solution and reaction to the needs of the community and global trends. Development areas, key technologies and processes are arranged in a network and its hubs are in fact the four Smart Specialisation areas.

**Safe Food**
High quality food products, produced in accordance with the idea of sustainable development. They are safe both for end users and for the environment during the whole production and distribution cycle.

**Intelligent Management Systems**
Advanced and adaptive infrastructural solutions, providing the use of decision support tools, aimed at efficient use of resources and energy.

**Professional Services for Business**
The characteristic feature of the region is the concentration of services in Warsaw. This leads to the facilitation of business processes by providing capital, infrastructure and knowledge resources.

**High Quality of Life**
Economic polarization of the region and low level of social capital are the most crucial obstacles to sustainable development of the region. Therefore it is essential to support the initiatives in the areas of well-being and social activity of the society. The potential of the service sector together with the incentives for social innovation should also be combined to increase accessibility and utility of particular social services, especially in the areas of education, public safety, work and leisure.

The areas of Smart Specialisation listed above have very broad and open definitions. Nevertheless, it is advisable to concentrate primarily on the key development sectors of the region.

Successful networking increases the efficiency of the economy and makes it more competitive. That is why clusters are considered to be the third prioritization level of the regional policy of innovation.

The approach towards clusters in Mazovia is rather flexible and requires specification. Still it emphasizes the meaning of networking, intensified cooperation and interactions between and within clusters, as well as creating new cooperation initiatives. This entails providing support to R&D activities, international expansion of companies, initiatives aimed at increasing the quality of human capital, stimulation of industry cooperation, new enterprises. The number of clusters/cooperation initiatives in the region exceeds forty. The majority of them are still in the early stages of operation. Currently Mazovia provides assistance to clusters under the provisions of e.g. RSI and JESSICA initiative, especially in the areas of cluster creation and development, assistance to cluster coordinators/facilitators, and implementation and commercialization of innovative technologies and products. The new strategy for regional development will include cluster policy solutions as two objectives of the strategic goal 1: ‘Development of industry–university–external environment cooperation initiatives bound to have tangible impact on the economy of the region’ and ‘Network development (including clusters and producer groups)’.

The RIS for Mazovia update process is still in action. This means there are still certain elements that should be revised or even created from scratch. These are the budget, the list of realistic outcome indicators, and the evaluation and monitoring system.