



VBN InnoReg

RIS analysis report – Seinäjoki / South Ostrobothnia

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**PROJECT PART-FINANCED
BY THE EUROPEAN UNION**

1 Description of the region

The region of South Ostrobothnia in Finland can be characterised as a non-urban region dominated by rural but, in Finland's circumstances, relatively densely populated areas. The number of small (or even micro) enterprises, per number of inhabitants, is one of the highest in the whole country. Most of the small firms are specialised in traditional branches of business processing wood, metal or food. The level of education, considering university degrees, is one of the lowest in the whole country. Since late 80s region has been active in developing new kinds of development projects, services and even organisations aiming at accelerate economic development.

South Ostrobothnia in a nutshell

Population (31.3.2007) 193 572	26 municipalities, 6 sub-regional units.
Aerial, km ² : 13 997	People / land-km ² : 14,4
Location: West Finland, ca. 350 km north of Helsinki	Education structure 2002 (population over 15 years) <ul style="list-style-type: none"> - Graduated 56% - Middle level 38% - High-level 19%
Structure of Employment (2002) <ul style="list-style-type: none"> - Primary production 11% - Processing 29% - Services 58% 	Enterprises (2003) <ul style="list-style-type: none"> - Amount 10 636 - Enterprises/ 1000 people: 55

(Source: Regional Council of South Ostrobothnia)

Employment and Economic Development Centre of South Ostrobothnia has scanned region's strong industries and describes them as clusters:

Strong industries in South Ostrobothnia

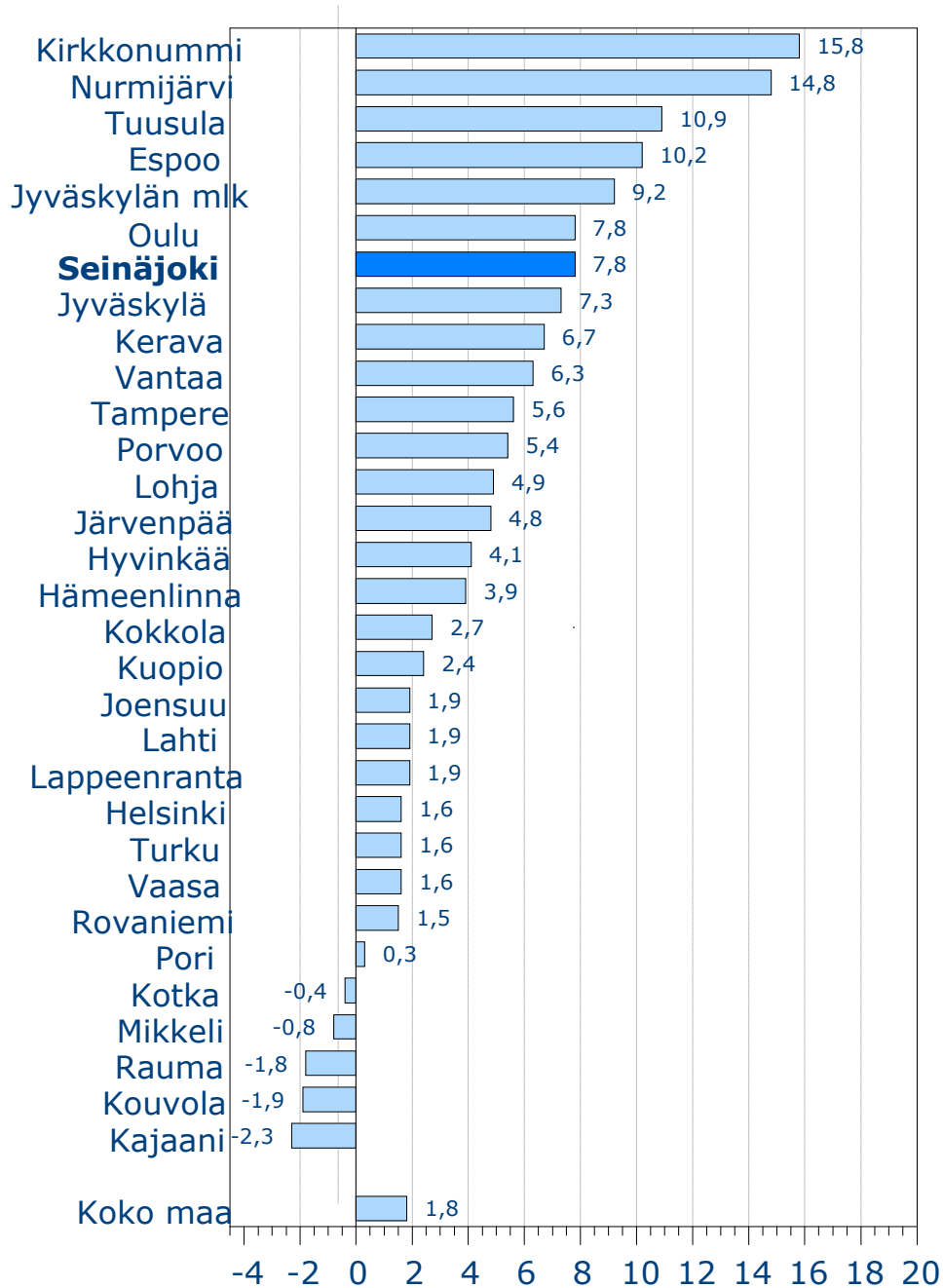
Food Cluster (2004 except employees 2003)	Metal Cluster (2004 except employees 2003)	Wood Cluster (all values estimated 2004)
Enterprises 130 Employees 3 228 Turnover 967 mil. EUR Export 126 mil. EUR Farms 8 131 Average farm size 30 ha Total revenue 450 mil. EUR	Enterprises 610 Employees 6 250 Turnover 1 016 mil. EUR Export 320 mil. EUR	Enterprises 950 Employees 6 000 Turnover 730 mil. EUR Export 125 mil. EUR

(Source: Employment and Economic Development Centre of South Ostrobothnia)

South Ostrobothnia is a conspicuously agrarian and SME dominated non-urban region in Finland. These characteristics are emphasized when compared to the most industrial European regions. Further challenges in development work are brought out by the scattered structure and small-sized

Seinäjoki is the capital city of the region of South Ostrobothnia with a population of 36 894 (31.3.2007). In recent years Seinäjoki has developed rapidly and is currently among the fastest growing city regions in Finland.

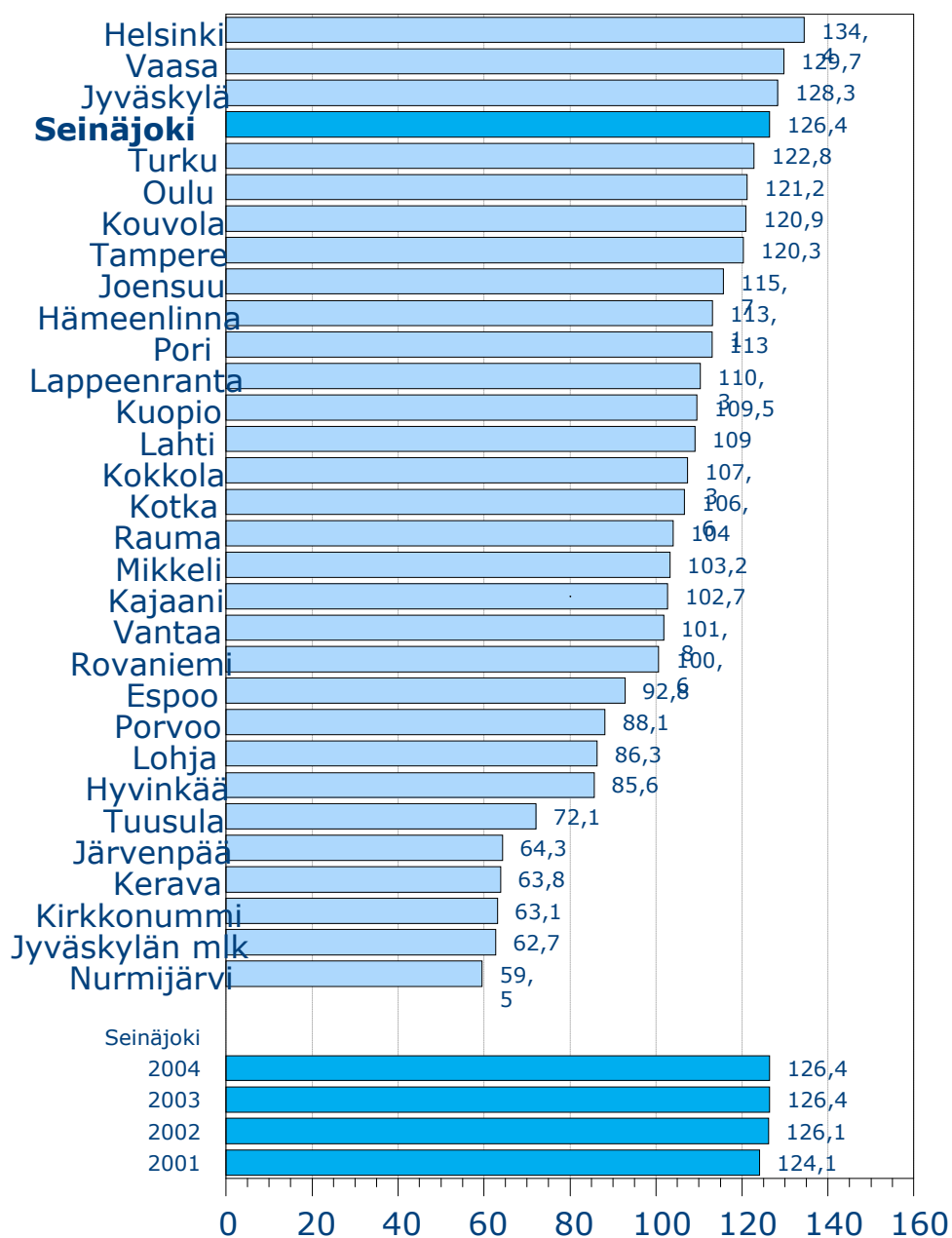
Growth of population, change (%)



(Source: National Statistics / SeutuNet, 28.3.2007)

Seinäjoki is also among the top cities in the country in terms of job equity with a rate of 126%.

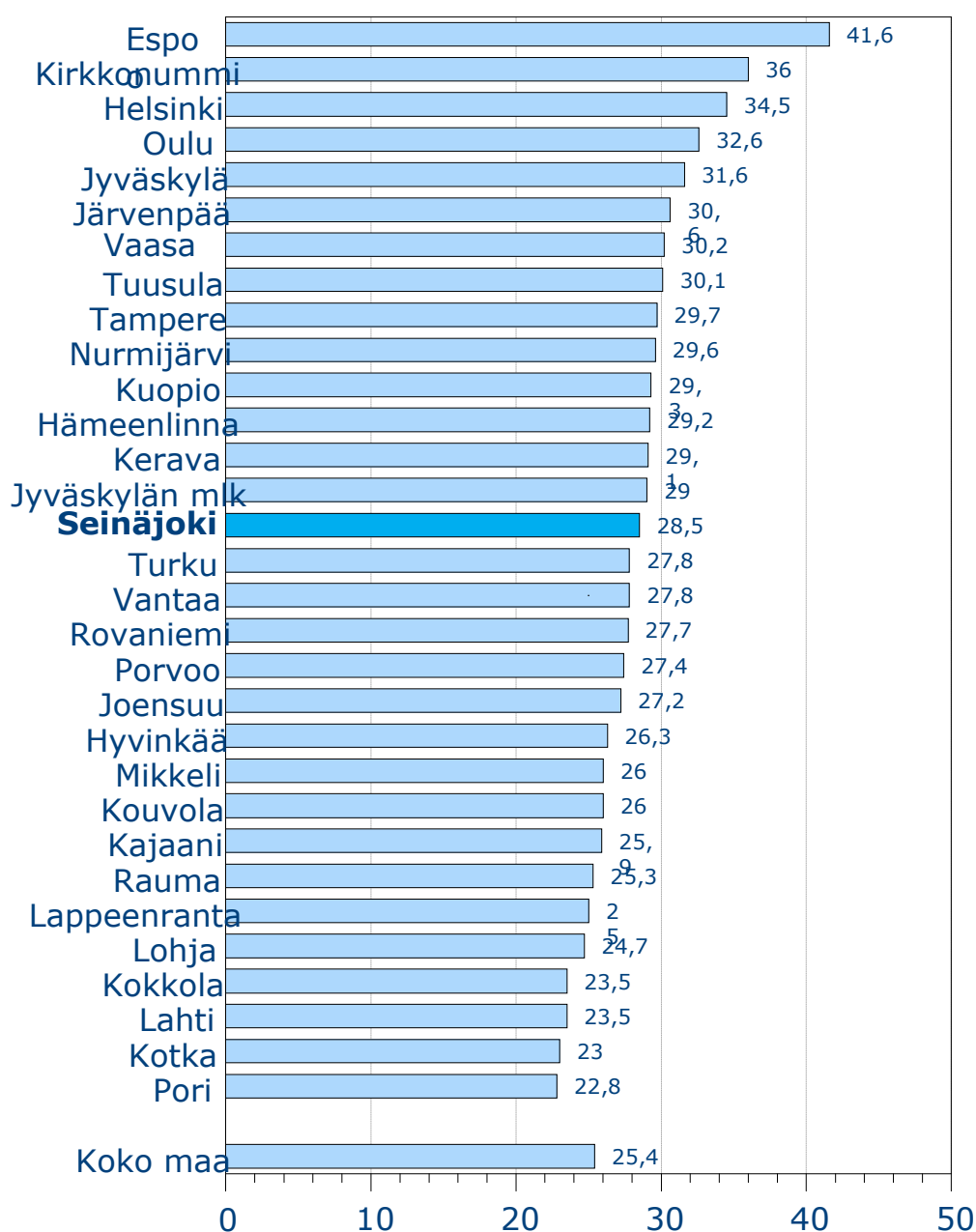
Job equity in %.



(Source: National Statistics / SeutuNet, 21.12.2006)

In contrast to the whole region of South Ostrobothnia, the rate of people with high-level education in Seinäjoki is among the highest in Finland. Seinäjoki Polytechnic is the major high-level education institution in the region with BBA level degrees. Furthermore, despite of the lack of an academic university, Seinäjoki has managed to bring back young people with university degrees from other parts of the country.

People with high-level education in % (cities with 30000 or more population)



(Source: National Statistics / SeutuNet, 8.12.2006)

2 Description of the region's innovation system

There are currently numerous strategies and development programmes in Seinäjoki and in South Ostrobothnia, which more or less take into account the development of regional innovation system. Therefore it is not beneficial to ignore the work done in these initiatives, but to take full benefit on the development processes and build new understanding and action plans accordingly.

The regional innovation system analysis in Seinäjoki region has been done in two-phased process. The first part was mainly accomplished as a desk study. In this process ca. 10 ongoing development programmes were evaluated from the point of view of the regional innovation system and some generic challenges and objectives were identified. The five most prevailing objectives can be summarized as follows:

1. The future development of Seinäjoki Science Park
2. Increasing the influence of RIS in South Ostrobothnia
3. Business-driven development activities in business intelligence and applying technologies
4. Supporting the internationalisation activities within the region
5. Creating comfortable and attractive living conditions in the region

As a generalisation on the above mentioned objectives, the vision for the regional innovation strategy can be stated as follows:

There is a nationally recognised and appreciated regional innovation system in Seinäjoki serving the needs of local companies and creating new business activities in the region.

Moreover, the strategic challenges in regional innovation system can be summarized in four categories: customer, renewal, resource, and process. The analysis on each category has been done during the formulation process of regional innovation strategy.

CUSTOMER	Recognising the development need of local companies
	Clarifying the services of development organisations
RENEWAL	Internationalisation of the region
	Capabilities of the development personnel in the region
RESOURCE	Successful recruitment of professionals
	Strategic use of land in Seinäjoki Science Park
	Funding of development activities
PROCESS	Governance of the regional innovation system development

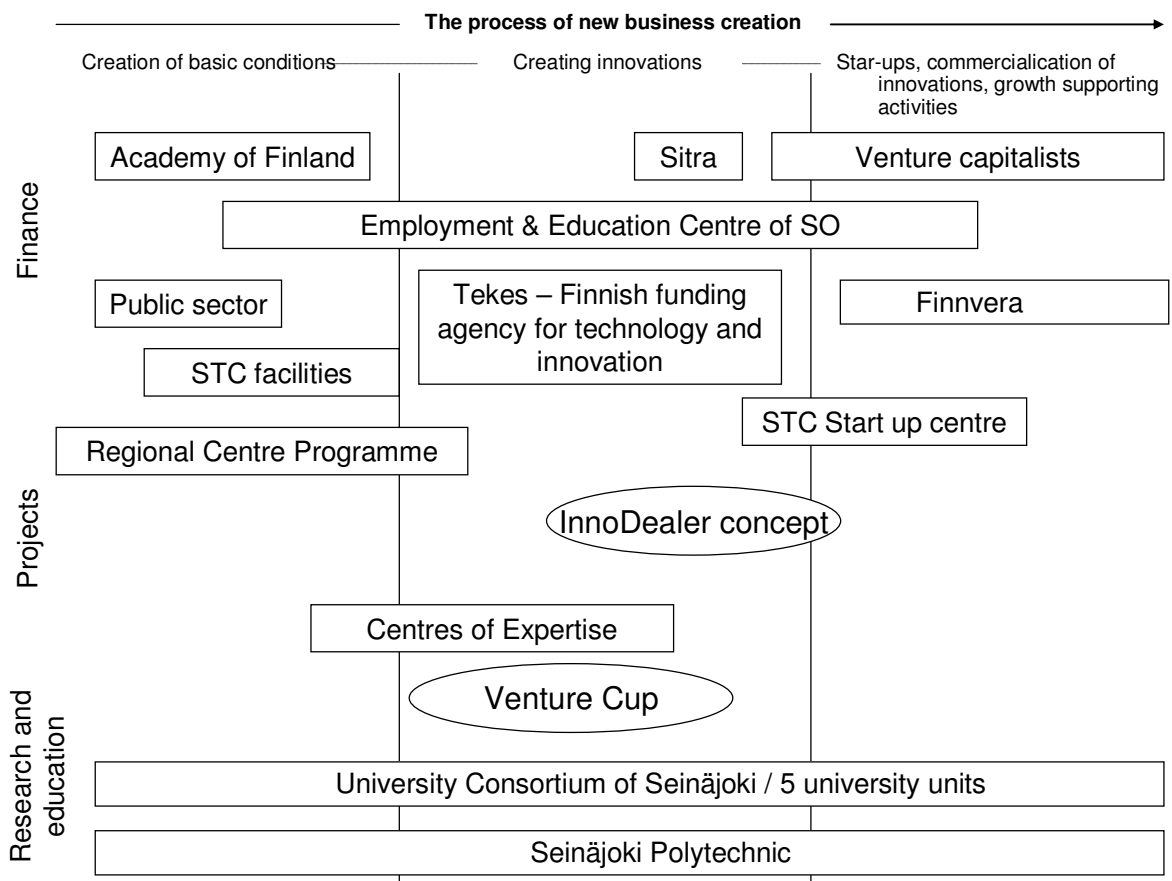
In the second phase of the RIS formulation process, action plans to tackle these challenges were formulated in close cooperation with actors of regional innovation system. New activities are planned and decided on every two years. The first set of activities has been chosen for 2007 and 2008 and here are some general examples:

1. Development of physical infrastructure
2. Strengthening the knowledge creation potential in the region
3. Creating new service models for companies in knowledge transfer

4. Developing the interaction of RIS and surrounding region of South Ostrobothnia
5. New models of public-private –partnership
6. Creating the substance knowledge and business intelligence in key clusters
7. Improving the effectiveness of business networks
8. Application of service businesses in manufacturing industries
9. Developing services supporting the export activities of local businesses
10. Building international partnership networks for regional areas of expertise
11. New funding instrument for the preparation of international projects
12. Exchange programme for professionals

From the point of view of the process of new business creation, the regional innovation system in Seinäjoki can be illustrated as below. This figure is not an attempt to capture the regional innovation system as a whole with all possible actors nor does it take into account the relevant interaction between the actors. The main contribution lies in defining some of the roles of different players in different phases of the new business creation process.

Regional innovation system from the point of view of new business creation process in Seinäjoki region.



cf. Vesalainen et al. 2006

(Source: Regional innovation strategy of Seinäjoki, to be published)

3 Knowledge creation potential in the region

Seinäjäoki and South Ostrobothnia struggled many years with the problem of not having a university of its own in 1970s and 1980s. Therefore the region was forced to find alternative measures to promote academic research and education in the region. As a solution, a nationally innovative cooperation concept, Epanet research network was launched in 2001.

Epanet aims to develop a new kind of research culture and co-operation between universities, research institutes, enterprises and local organizations. The core of the network consist of 16 new, fixed-term research professors (5 years at the first phase), each of whom gathers a group of 3–5 researchers. By the beginning of 2006 the network comprises a community of over 50 researchers, completing the existent development agents in the region. The teams form a new kind of research community combining several disciplines and universities. Their social and professional networks reach the entire Finnish and international scientific world through the partner universities.

In the choice of the fields of research, the emphasis has been laid on applied research and product development in the expanding branches in South Ostrobothnia. Particular support is given to nationally new, interdisciplinary fields of research connecting information technology and the strong industries (metal, food and wood) of the region. Most of the research work to be done is public and non-profit, however some researchers have also worked in special development projects in SMEs.

The administration of the network is rather innovative itself. South Ostrobothnian University Association (Epky) has negotiated with potential providers of funds, written applications and signed contract documents. Epky makes also the contracts with the universities, who appoint the professors and other staff needed to run the projects. The most important sources of funding the network are enterprises in the region. As many as 90 enterprises have donated funds to finance academic research so far. The major part of the funding of Epanet comes from public sources from regional and national level and also from Objective 2 and 3 Programmes of EU. Epky coordinates a “jungle” of over 200 contract documents.

Member universities of the University Consortium of Seinäjoki.

<p>University of Tampere 1981 - Institute for Extension Studies (TYT) - Regional Development Research Unit (SENTE) - Medical school - School of Nursing - Department of Computer Science www.uta.fi</p>	<p>University of Helsinki, 1988 - Institute for rural research and Training - Department of Food Technology www.helsinki.fi</p>	<p>Sibelius Academy, 1991 - Continuing Education Centre - Folk Music Department www.siba.fi</p>
<p>University of Vaasa, 1998 - Seinäjoki Unit - Department of Management - Department of Marketing - Department of Electrical Engineering and Industrial Management www.uwasa.fi</p>	<p>Tampere University of Technology, 2002 - Seinäjoki Unit - Digital Media Institute - Institute of Machine design - Institute of Materials Science - Institute of Structural Engineering - Institute of Production Engineering www.tut.fi</p>	<p>University Consortium of Seinäjoki, 2003 Service unit www.ucs.fi</p>

Epanet research network is currently evolving into phase II with more focus put e.g. on the internationalisation of research activities, further improving the cooperation between SMEs in the region and developing the work done in different research groups. A new, freshened up cooperation contract will be signed at the end of year 2007.

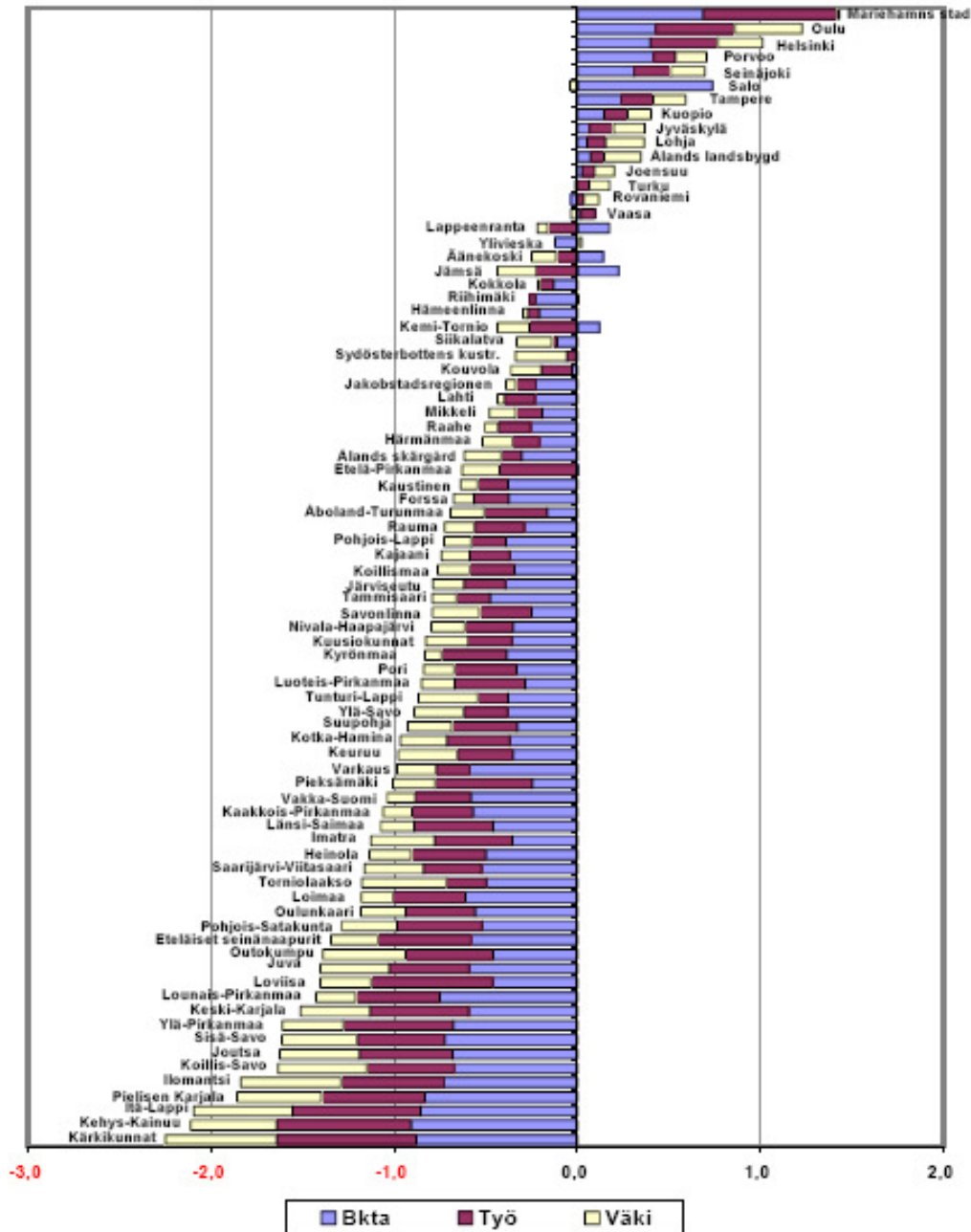
4 Selection of the relevant indicators that assess the influence of RIS on the regional competitiveness

GEP deviation indicator (Gross value added (GVA), Employment and Population). The GEP-deviation indicator is calculated from the three above mentioned components by comparing regional growth percentages to those of the whole country and by adding up the differences in data for the whole country and the regions.

Yet GEP deviation indicator is a generic indicator on general regional development, it is the most suitable 'one-off' indicator reflecting the economic development in the region. Some other indicator might also be suitable, e.g. R&D expenditure, the amount of patents, but the Finnish statistics system is not giving clear enough picture on these activities. The problem is that some of the R&D activities are reported according to the home city of company headquarters, instead of the city, where the work has actually been done. Therefore there are some general difficulties in getting realistic and reliable data on these indicators.

In the future we will continue following the regional development on GEP deviation indicator, although we are aware of the fact that it is a generic indicator on regional development.

GEP deviation indicator 1975-2004.



(Source: <http://www.tilastokeskus.fi/tup/kuntapuntari/btv-indikaattorikuviot.pdf>, 12.4.2007 at 9:50am)

Other indicators are selected from the list provided by the responsible partner in WP1 in VBN InnoReg project. The selection has been agreed on in Tartu meeting. The list is as follows:

1. Human capital

- Higher level education / population (available: South Ostrobothnia; Seinäjoki region; Seinäjoki)
- International mobility of doctoral students (not available, but relevant)

2. Innovation

- Share of enterprises receiving public funding for innovation (available: South Ostrobothnia; Seinäjoki)

3. Private sector

- Net increase in company base (established – out of operation) (available: South Ostrobothnia; Seinäjoki)

5. R&D

- R&D expenditure (both public and private)
- Employment in R&D per 1000 inhabitants (not available, but relevant)

6. Relations

- University / industry research collaboration (what is the actual instrument for measurement?)

8. Attitudes and values

- Appreciation for diverse views and backgrounds (what is the actual instrument for measurement?)

9. Infrastructure

- Integrated accessibility index (not available, but interesting)

10. Economic performance

- GDP per capita (available: South Ostrobothnia; Seinäjoki region; Seinäjoki)

5 Conclusions and development plans

In the near future the challenges regarding the further development in Seinäjoki and in South Ostrobothnia remain in speeding up the development process, maintaining Seinäjoki among the top 10 cities in terms of population growth, growth of jobs and in GNP / capita. Some general objectives can be identified to carry on this process of creating critical mass and knowledge-based business activities in the region:

1. Attracting enthusiastic people with high level education in to the region
2. Creating new jobs in key cluster areas (food processing, machine engineering and smart systems, construction cluster)
3. Further raising the level of cooperation between research institutes and regional SMEs
4. Supporting the export activities of SMEs in the region
5. Creating new forums to improve the interaction between researchers, development agencies, business life, financiers and public sector actors

Seinäjoki and South Ostrobothnia have developed extremely well in the last years despite of the fact of not having an 'own university'. In the future the knowledge creation structure mainly builds on the Epanet research network, which is also developing as a concept at the moment. In times of vivid discussion on a national level on the role of polytechnics, Seinäjoki Polytechnic might also have a stronger role in knowledge creation in the future. At the moment Seinäjoki Polytechnic is the largest high-level education institute with more than 4500 students.

It is also of great importance to link up with the knowledge creation capacity of other research institutes in Finland e.g. VTT Technical research institute of Finland and MTT Agrifood Research Finland as well as knowledge diffusing organisations e.g. Finpro (internationalisation, partnering, supply chains, agents).

At the present stage, the development orientation seems favourable to Seinäjoki and to the region of South Ostrobothnia. In the future the challenge remains in strengthening the cooperation with universities, research institutions, and knowledge brokers as well as finding new ways to encouraging regional SMEs for development activities and growth. In addition new methods and forums to boost the formal and especially informal interaction between business life and research have to be developed.

One example of a new cooperation forum is a regional innovation forum. The idea has been developed on the basis of the national science and technology policy council. The attempt is to bring in representatives from business life, university units, development organisations, and public sector to discuss the results, challenges and objectives of the regional innovation system. This regional innovation forum will be organised for the first time in 2008 and the goal is to reach agreement on development initiatives in the region for the near future.