

Summary

SCENARIOS FOR THE SPATIAL AND REGIONAL DEVELOPMENT OF AUSTRIA IN THE EUROPEAN CONTEXT

Task

The objective of the project “Scenarios for the spatial and regional development of Austria in the European context” is to develop spatial development scenarios for Austria for the period until 2030 to serve as a basis for further work by ÖROK on a new Austrian Spatial Development Concept as well as for the sectoral and spatial development schemes of the Länder, cities and municipalities, and for the expert concepts of the federal government (e.g. sustainability strategy). An external team of experts under the leadership of Helmut Hiess (content, Rosinak & Partner ZT GmbH) and Harald Payer (communication, ÖAR Regionalberatung GmbH) was charged with the implementation of the project: the task of project control was the responsibility of an ÖROK Working Group.

The following conclusions are the results of the discussions at four workshops and a two-day conference with an expert public. However, the strategic challenges proposed are the opinion of the authors.

Looking forward – The selection of the methods

There are different methods for looking at potential future developments. The principal criteria applied to the selection of the methods are the degree of complexity of the themes and issues, the availability of information on developments to date, the current situation, and the degree of certainty of future trends.

Development scenarios were used in this project. The starting point was the question:

“What changes is an area, a region, or a location likely to undergo until 2030; what is the assessment of the changes from the perspective of spatial policy goals and how could – and should – spatial policy respond?”

The future options of the “Driving Forces” of spatial development were presented in the form of megatrends, scenarios and wild cards. The scenarios do not represent value categories of “good” or “bad” scenarios,

trend scenarios or target scenarios, but are rather as consistent as possible and at the same time represent the most diverse potential future scenarios. These scenarios are to serve as basis for developing robust strategies for action for the medium to long term.

Megatrends

Megatrends are long-term processes with a broad scope and impacts on all groups of society and all regions. Megatrends have no alternatives and they may only differ by time horizon, reach and intensity. The following megatrends were been identified and selected because of their spatial relevance:

- Ageing of society: the share of people older than 60 years of age increases from 22% (2005) to 34% (2030).
- Increasing social and cultural diversity: diversity of life styles, patchwork families, patchwork careers, multioptional consumer patterns
- Globalisation of markets
- Increasing global energy demand
- Mobile world: increasing mobility of persons, goods and communication
- Digital world: expansion of the internet, telematic revolution
- Climate change: not felt very dramatically until 2030, but irreversible

Scenarios

Four as consistent as possible but nonetheless different scenarios were developed:

(1) Scenario "Overall Growth"

The main Driving Forces of spatial development (economy, population, tourism, mobility and transport) are growing strongly. The increased demand for energy can be covered by improved energy efficiency and alternatives to fossil energy. This sharply reduces the emission of climate-changing gases into the atmosphere. The smooth interaction between the state, market and civil society prevents the widening of disparities. Nonetheless, the pressure on space grows rapidly.

(2) Scenario "Overall Competition"

In this scenario as well, the main Driving Forces of spatial development (economy, population, tourism and transport) are growing strongly. The assumption is that the market will respond in time to scarcities and in this manner make it possible to avoid far-reaching energy and environmental crises. In contrast to the scenario "Overall Growth", the social and thus spatial disparities widen extremely. The pressure on space increases enormously in the growth zones, while other regions are confronted with out-migration and phenomena related to shrinking.

(3) Scenario "Overall Security"

The scenario "Overall Security" is characterized by moderate growth of most Driving Forces of spatial development (economy, population, tourism). In those regions that are advantageous for farming and forestry, the pressure increases due to higher demand for biomass energy. Heavy government regulation, extensive social security systems, restrictive in-migration prevent the growth of social disparities. Energy, climate and environmental policy are steered at the European and national level by tax and technology policy. Energy and fuel prices are high, but are compensated in part by improved energy efficiency. Nonetheless, the mobility costs benefit the agglomerations and the centres.

(4) Scenario "Overall Risk"

In this scenario, the assumption is that the development follows the structure in the scenario "Overall Competition", but that the market does not develop any mechanisms against sudden energy scarcity. Therefore, energy prices rise steeply and there are no fast-acting countermeasures available. The main Driving Forces of spatial development are high energy costs and high mobility costs. More densely built-up areas and a more intense exploitation of natural resources for energy uses (biomass, water, wind, sun) determine spatial development.

Wild Cards

The wild cards are used to designate exceptional events and extreme developments that have a very strong effect on the overall system of space being investigated. As space is a very "slow-moving/docile" system, those wild cards are mainly of relevance that develop their own long-term effects (e.g. low energy costs due to a technology wild card, high energy costs due to sustained scarcity). The effects of such wild cards are covered largely by the scenarios. By contrast, a global economic crisis in which swift countermeasures are taken is of less significance for spatial development over the long term.

Spatial developments of high relevance and probability

Those spatial developments are considered to be of special relevance that may be expected in at least three of the four scenarios with a high degree of probability. Similar spatial developments have different causes depending on the scenario.

(1) Scarcity of land in agglomerations and regional centres

because of rising demand for settlement area. Driving Forces: population growth, immigration, economic structural changes, high energy and mobility prices, high land and real estate prices

(2) Scarcity of land in rural areas

because of increasing demand for natural resources: biomass for food, biomass for energy, mineral resources. Driving Forces: population and economic growth, energy prices, consumer demand

(3) Intensive competition among larger areas and regions as business locations

for headquarters, know-how, workplaces, tourists, purchasing power, and basic services

Driving Forces: tax system, financial equalization system, globalisation, liberalisation, deregulation, population and economic development

(4) Expansion of tourism into higher regions with sure snow in winter and high alpine regions in summer

Driving Forces: Climate change and competition over tourism business

(5) Strong out-migration, population decline and ageing outside of agglomerations and central areas

Driving Forces: population development, economic structure, mobility costs, life style

(6) Most rural villages are residential and commuter sites; land is cultivated by a few farmers

Driving Forces: low employment in agriculture, industry and commerce

(7) New border-crossing functional spatial unities develop – central areas expand their catchment areas – peripheral areas become integrated into central areas

Driving Forces: EC domestic market, euro as a common currency, enlargement of Schengen area

Spatial developments of high relevance, but high uncertainty

Besides the spatial developments with a high probability, there are major uncertainties with sometimes contrary consequences or at least major quantitative differences.

(1) More car-oriented mobility and longer trips versus shorter trips by public transport and bike

2005–2030: + 50% to - 25% passenger car-km/year;

Driving Forces: mobility costs

(2) Increase or decrease of tourism in areas other than the well-funded tourist centres

2005–2030: + 40% to - 20% overnight stays

Driving Forces: income development, mobility costs

(3) Comprehensive or selective development of hydro-power, wind power and solar power

Driving forces: Energy prices, climate change

(4) Development and distribution of young population and immigrants

2005–2030: + 8% to - 33% persons younger than 20 years

Decrease of young people in rural areas

Driving forces: Birth rates, migration, economic development

(5) Development and distribution of workforce

2005–2030: + 27% to - 8% of employed persons. Decrease, especially in rural areas

Driving forces: Economic development

(6) Demand and distribution of settlement area

2005–2030: + 5% to + 28% settlement area, + 25,000 to + 75,000 new flats/year (2005: + 50,000 flats). High demand in agglomerations and central areas as well as their catchment areas: 10 to 30 km depending on mobility costs

Driving Forces: Population development, mobility costs, economic development, land and real estate prices

(7) Greenland or wooded areas?

2005–2030: - 20% to - 6% greenland, + 2% to + 9% wooded area

Driving Forces: Liberalization of farming trade, technology development in the use of biomass

Threats and opportunities

The following threats and opportunities that may be derived from the scenarios pose a special challenge for spatial development. Many of the threats and opportunities are generally not new. However, a strong need to take action can be derived from the scenarios. Without steering measures it will not be possible to fully exploit the opportunities and the threats may aggravate already existing problems.

Seven threats

(1) Urban sprawl, car-oriented settlement structures and high external costs (infrastructure, environment, congestion)

Driving Forces: Low mobility costs, high land and real estate prices in the centres

(2) Increasing spatial disparities between urban and rural areas, strong and weak locations

Driving Forces: The period of improvement of accessibility by car comes to an end (motorisation + road infrastructure + cheap oil prices), high-speed railways, airports, cheap telecommunication, knowledge-based economy favour agglomerations

(3) Suboptimal site development with high external costs (traffic and transport, landscape, environment)

Driving Forces: Competition among locations because of tax system and revenue equalization

(4) Overexploitation of natural resources, rollback of nature protection, loss of biodiversity, utilisation conflicts

Driving forces: Energy prices, climate change, population growth, tourism

(5) Ethnic-religious and social segregation, no-go areas and gated communities

Driving Forces: In-migration from outside of Europe, high land and real estate prices, high rents

(6) Increasing instability of industrial sites

Driving Forces: Global competition, wage and price differentials, energy costs, consequential climate costs,

(7) Decline of basic services, loss of quality of service especially in small villages and in the reach of pedestrian mobility

Driving Forces: Economies of scale, out-migration, consumption patterns, mobility costs

Seven opportunities

(1) Austria as the European hub

Expansion of the European economic core area between Berlin, Hamburg, London, Paris, Milan (the so-called PENTAGON) into Eastern and Southeast Europe.

Austria as the logistics hub

(2) Vibrant central areas with high environmental and security standards

Locational advantages: culture, education, environment, landscape, security in competition for best brains, innovative businesses, internationally networked headquarters

(3) Development of biomass-based value-added supply chains: food, energy, wood

(4) Energy self-sufficient regions: hydro-power, wind power, biomass, solar energy

(5) Production site for energy-efficient products and environmentally technology: railway transport, waterways, clean air, energy efficiency

(6) Tourism destination Austria as winner of climate change: summer resorts and rain

(7) Multi-functionality and small-scale spatial units increase flexibility and adaptation capacities

Strategic challenges

Based on the relevant spatial developments, the threats and opportunities, the authors have derived strategic challenges regarding spatial policies, on the one hand, and the relevant sectoral policies, on the other hand. It was not the task of the project to develop measures or instruments in detail, this step being left

to the responsible institutions and decision-makers. The projected Austrian Spatial Development Concept 2011 will address the strategic challenges as well. Therefore, the strategic challenges are expressed as questions to which solutions have to be found.

Seven strategic challenges for spatial policies

(1) Negative external effects caused by location competition – growing pressure on space from sectoral policies

→ **How can spatial policy and sectoral development planning be combined on a regional level?**

(2) Conflicts of interest in public space and landscape
Exploitation of natural resources, nature protection, natural hazards, tourism, multifunctional utilisation of public space (life style, ethnic and social diversity, traffic, advertising, etc.)

→ **Management of land use as a new strategic task:
How can an agreement on the extent, intensity, restrictions, temporal configurations of utilisation, and activities be reached to avoid new conflicts?**

(3) The return of land supply scarcity – the end of surplus space

Growing large-scale landed property, buyers of "landscape property" from all over the world, big real estate developers in agglomerations

Fragmentation of land ownership due to establishment of condominiums

Disparity in ownership and use. Zoning, requirements and availability hinder location development

→ **How can real estate policy strategies be adjusted?
Which land-use-policy-strategies improve the capability of spatial policies for action?**

(4) The end of improving accessibility by enhancing motorisation, road infrastructure and cheap energy is near. High speed railways, airports favour agglomerations again.

A knowledge-based economy promotes the brain drain from rural to urban areas

→ **Which strategies should be developed for rural areas to stabilise the spatial structure?**

(5) No-go areas and gated communities caused by immigration and deregulated real estate markets

→ **Which anti-segregation instruments are effective?**

(6) Not administration, but function defines regional borders

→ **How to deal with new border-crossing regions with offensive regional policy strategies?**

(7) The organisation of cooperation as key task!

→ **Definition of framework conditions for cooperation as success factor**

→ **Management of cooperation as activity with need for resources**

→ **Development of balancing mechanisms as instruments**

Seven strategic challenges for relevant international and national sectoral policies

(1) **How can social and ecological standards be implemented in global trade regulations?**

(2) **How can mobility be offered to all in rural areas?**

(3) **How can dependence on fossil energy be eliminated step-by-step?**

(4) **How should immigration and integration policies be defined?**

(5) **How can education and research policy support a knowledge-based regional economy?**

(6) **How can social and health policy guarantee the obligation to provide decentralised basic service?**

(7) **How can the utilisation of natural resources, the development of tourism, nature protection and the management of natural hazards be optimally organised across sectors?**

Cooperation is of greatest importance. None of the strategic challenges mentioned will be manageable without cooperation among regions, sectors and institutions.

Monitoring to anticipate long-term future developments

In the two years of project work, we have seen the thematic hypotheses surrounding

→ Climate change

→ Agro-fuel/food prices/hunger

→ Oil price

→ Inflation

→ World financial crises and global economic crises

They prove that nothing is more certain than the fact that future prospects are increasingly uncertain. Therefore, the observation of indicators to perceive changes in the relevant Driving Forces of spatial development could help to develop actions in time. Thus, one of the most important results of the project is the proposal to set up a monitoring system to anticipate long-term future developments embedded in policy discourse among experts.