

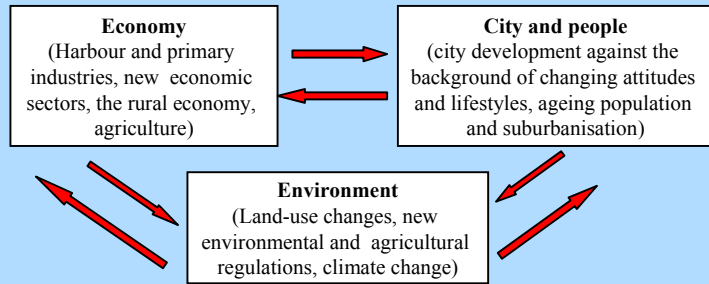
THE REGION

The Lower Elbe region is the region between Geesthacht and the Elbe mouth in the North sea. Ecologically it includes the river basin ecosystems and parts of the coast. Politically parts of the region belong to the *Länder* Schleswig Holstein and Lower Saxony and the city of Hamburg, which plays a decisive role in the development of the region.



RESEARCH QUESTION

The aim is to develop three scenarios for a rapidly changing region, stretching over three decades and covering a broad but plausible range of possibilities. Developments in the three fields of economy, people, and the environment are included and connected. Requirements such as political choices and policies, economic conditions or social preferences in each field are taken into account. Methodologically, different qualitative and quantitative methods are combined. This includes expert consultations, a stakeholder workshop and a quantitative assessment of the impact of each scenario on the three fields.



METHODOLOGY AND RESULTS

Scenarios completed - paper in progress

Workshop to take place in November

Scheduled for 2004

① Development of qualitative scenarios

- Identification of „givens“ - driving forces and core questions for the region within the next 30 years.
- Identification of trends, development options and choices associated to these core questions through expert consultations, an analysis of the region's history, statistical data and comparative analysis of similar cities and regions.
- Progressive development of these options into three scenarios.

② Stakeholder involvement for closer analysis

- One-day stakeholder workshop to investigate future perspectives for the rural area in the context of new requirements and new possibilities through the CAP-reform and new environmental regulations.
- The workshop includes three expert talks and a discussion forum tackling specific questions and issues.
- The aim is to deepen the understanding of the consequences of the new regulations and to develop practical steps in addressing these.

③ Quantitative assessment with indicators

- Sets of indicators for the state of the environment, economy and quality of life (the given list is preliminary).
- The development of each indicator in the three scenarios will be assessed.
- The idea is to select the most important elements determining the development of each indicator and to implement the corresponding interconnections in the Stella modelling environment with varying weights given to each element. The latter is seen as a good approach to deal effectively with a large, complex and not always predictable system composed of very different fields.

1st Scenario: The Water City

- Hamburg withdraws subsidies to the harbour, harbour collapses.
- New city quarter develops in former harbour area with high priority on green and water.
- New economic sectors.
- Demand for local organic produce but lack of Germany-wide consensus and policy-support.
- Weak cooperation in the region.

The approach of stakeholder involvement encourages the practical relevance of the study. Unpredictable elements and knowledge that is not available in literature, such as political motivations and social trends, can be better assessed.

Indicators for the state of the economy include per capita income, economic growth, unemployment, ratio of highly qualified people for new economic sectors, economic diversity, competitive-ness with rest of Germany/Europe

2nd Scenario: Harbour at all costs

- Hamburg continues harbour expansion but loses market shares due to radical changes in technology and transport patterns.
- Harbour expansion financed through city development. Hamburg fails to become one of the main German players in new economic sectors. Rising unemployment.
- Decline of agricultural sector, high unemployment in rural areas.

3rd Scenario: Collaboration

- Division of labour between harbours: Wilhelmshaven becomes main container-hub, Hamburg becomes hub for data and information and main partner for international relations, in particular with China.
- Medical technology and new media.
- High cooperation in the metropolitan region. Environmental protection becomes new pillar of rural economy.

Indicators for quality of life include comparative income level, education, attractiveness from different land-types in city and surrounding region, housing situation, commuting, internationalness and cultural offers in city.

Indicators for the state of the environment include index of diversity of land, area covered by protected land or biotopes, pollution through agriculture.