



PHOTO: VINCENT FOLLARD

Governance and planning under scrutiny, for comparison and shared learning

Under the theme »Global Change and Ecosystems« of its Sixth Framework Programme, the European Commission calls for the development of strategies and tools for sustainable urban and peri-urban relations. PLUREL aims to meet this call by developing new strategies and

innovative planning and forecasting tools. Innovation requires close cooperation between practice and research. With this in mind, PLUREL includes a research module of case studies in which seven urban regions and thirteen research institutes, universities and enterprises cooperate.

Six European regions and a Chinese reference

The urban regions of Warsaw (Poland), Montpellier (France, shown on photo), Greater Manchester (United Kingdom), Leipzig (Germany), Koper (Slovenia), Hangzhou (China) and Haaglanden (the Netherlands) represent an amalgam



PHOTO: THOMAS SICK NIELSEN

of spatial development and planning contexts. As can be read elsewhere in this newsletter, Warsaw is a monocentric boomtown in the eastern part of Central Europe, with considerable economic activity, immigration and spontaneous suburbanisation. Montpellier, which is also fast growing, brings in a coastal context and water management concerns (e.g., related to flash floods), just as Haaglanden and Koper do. Haaglanden and Greater Manchester are polycentric regions. Manchester experiences rapid out-migration and is restructuring its peri-urban land use and economy. Out-migration from the urban centre of the Leipzig region has resulted in a surplus of housing and offices, offering room for new housing and development concepts. The Slovenian Koper region consists of an important harbour area with industrial and tourist development. Like Warsaw, the region represents a transition economy. For special reference Hangzhou, a major city and cultural and industrial centre in eastern China, is

a partner in the research. The different planning and administrative culture as well as the size of this region with its seven million inhabitants provide PLUREL with an additional dimension.

The number of case studies involved in PLUREL is limited. The project team rather focuses on in-depth research and close involvement of the regions. Regional stakeholders such as authorities, businesses and civic society are an essential source of knowledge and information for PLUREL. This is also the case for these stakeholders' policies and endeavours to influence developments in the urban fringe. Stakeholders' real-life experience and knowledge of place complements the more generic desk studies of planning, administration, and regional development types carried out by the other research modules. Governance and spatial planning strategies in the seven regions will be compared in order to learn from different experiences. Moreover, they

will provide insight in general patterns and make it possible to identify context specific impacts and developments of, for example, green space in peri-urban areas.

Towards a common impact assessment tool

The European Commission has asked for an instrument to forecast the effects of global trends and policy decisions on peri-urban areas, a so-called Sustainability Impact Assessment Tool (SIAT). This requires the modelling of trends, land use relations and management, and of the effects of policy decisions in different types of regions. This work calls for the integration of stakeholders' knowledge, perceptions and strategies. Putting the scientific knowledge and models to the test is an important objective. A major challenge is to develop – jointly with practitioners – a common language and common concepts, in order to contribute to a wider use of PLUREL knowledge. Could the forecasting tool be used by the European Commission as well as the regions? Can it form a basis for communication and support discussion about desired developments and – with this – policies and investments? This question is raised within Module 3 of the PLUREL project. The motivation of the regions to take up this challenge is essential for developing a common tool for sustainability impact assessment for peri-urban areas.

Focus on stakeholder involvement

During 2007 and 2008, the first two years of case study research, two trajectories run parallel: 1) study of spatial planning and governance strategies and 2) data collection. The first trajectory comprises the identification and analysis of stake-

Research priorities for the PLUREL case study areas.

Issue	Leipzig	Warsaw	Koper	Montpellier	Haaglanden	Manchester	Hangzhou
Land pressure due to housing development (/industrialisation) in the urban fringe		1 st	1 st	1 st	1 st		1 st
High value natur areas in the urban fringe at risk		2 nd	2 nd			1 st	
Agriculture not able to resist pressure		3 rd		2 nd	2 nd	2 nd	2 nd
Traffic pressure	2 nd					3 rd	
Shrinkage	1 st						
Integration tourism	3 ^{rs}			3 rd	3 rd		3 rd
Water management			3 rd				

holders and their interests and strategies. Perceptions, hidden agendas, bottlenecks and impediments in terms of written or unwritten rules of the game will be described. This work will be followed by group discussions within and between the regions, based on a set of criteria for assessment of strategies. These discussions are to expose the regions to other approaches and ways of thinking, revealing common problems and needs. For the researchers these activities will contribute to deepened scientific knowledge and a solid basis for the formulation of enhanced strategies.

The Joint Analytical Framework of Module 3 proposes a first set of criteria for the assessment. Among them is the criterion whether a strategy helps to timely influence the developments in case of urgency. This criterion results from the need to preserve high value nature areas in peri-urban areas that are at risk due to previous conservative regulations that might come to an end. This is the case with the Buffer zone policy («Bufferzonebeleid») in Haaglanden. But also new and unexpected urban pressures in areas with a transition economy, like in Warsaw and Koper, give rise to the need for timely responses that have a wider support. This support comprises yet another criterion: is the strategy able to generate support of the public, of business and other stakeholders, such as neighbouring authorities or water boards? In the Module 3 stakeholder meeting to be held in Koper, these criteria will be developed further to prepare the module's second year's research work.

The second trajectory of case study research feeds into the other modules of PLUREL. It consists of data collection. Statistical data, for example on population, traffic, housing density and incomes are needed, as are spatial data. These provide inputs to the modelling of trends, land use relationships and the impact assessment of the strategies that are undertaken in Module 3.

Regional strategies and tailor-made knowledge

At the end of the second project year, the two trajectories described above will meet when it comes to testing the models and modelling the impacts of the different regional strategies in terms of ecological, economic (costs) and social sustainability. This information is needed for the



PHOTO: JOE RAVETZ

development of regional strategies. But it may also be used to advise policy makers at European or national level on how to contribute to the sustainability of the peri-urban areas of European regions.

The dissemination of tailor-made knowledge to authorities, businesses or civic groups will be done in the year 2010. Dissemination tools will include workshops, brochures and/or a DVD. It is essential that the knowledge gathered through international cooperation is returned to the different regional settings, in local language and accessible forms. It is a clear strength of PLUREL that sufficient time and resources have been allocated for dissemination activities.

Using complexity theory

Aside the modelling exercise by the other research modules, Module 3 contains an alternative approach to studying and representing the reality of land use developments in the peri-urban areas of Europe, namely that of complexity theory. Planning processes in the case study areas will differ from simple to highly complex. Planning situations are not necessarily linear. They can include many uncertainties, sometimes leading to

unpredictable results. Part of Module 3 is to understand the nature of these complex and unpredictable processes by combining complexity and planning theory. Module 3 will make a contribution to transition management, to how to recognise moments of transition, and to support and/or influence these transitions. This knowledge should help planners to anticipate unexpected developments and to manage developments in peri-urban areas in phases of rapid and unexpected transitions.

Board of Stakeholders

To strengthen research-practice cooperation within PLUREL, its management set-up contains a special body, namely the so-called Board of Stakeholders. PLUREL developed this novelty with the intention to give more weight to the concerns of stakeholders from the regions it collaborates with. The Board has an official and advisory role to the project's scientific coordination team. Each region has a representative in the Board and stakeholders such as politicians, environmental NGOs and planners can communicate with their own representative in the Board.

*Carmen Aalbers,
Alterra Green World Research*

A shrinking city with suburban growth?

Leipzig, Germany

The conurbation of Leipzig-Halle (4,387 km² and 1,073,467 inhabitants) has a long history as an important urban centre in Central Europe. Leipzig was first mentioned in official documents in the year 1015. The core of the urban region, the city of Leipzig (with 530,000 inhabitants in 1989 and 501,000 in 2005), is presently challenged by suburban growth and international investments on the one hand, and inner-city shrinkage, emigration and extremely low rental costs on the other.

In the eastern part of Germany, the former socialist German Democratic Republic (GDR), processes of urban sprawl were almost unknown during the post-World War II period. This was due to the socialist planning system directing investments primarily to urban centres such as Leipzig. Only the building of the

notorious prefabricated housing estates on the urban fringes could be seen as a peculiarly »socialist variant« of urban sprawl. In Leipzig, such estates provided housing mostly for people from old, run-down built-up areas and from demolished villages of the open-pit mining area south of the city. Apart from the inner city, which consists of a solid, dense structure of 19th and 20th century tenement blocks, the city's territory contains large areas of the typically suburban mixture of land uses. These include agricultural open land, forests and restoration areas.

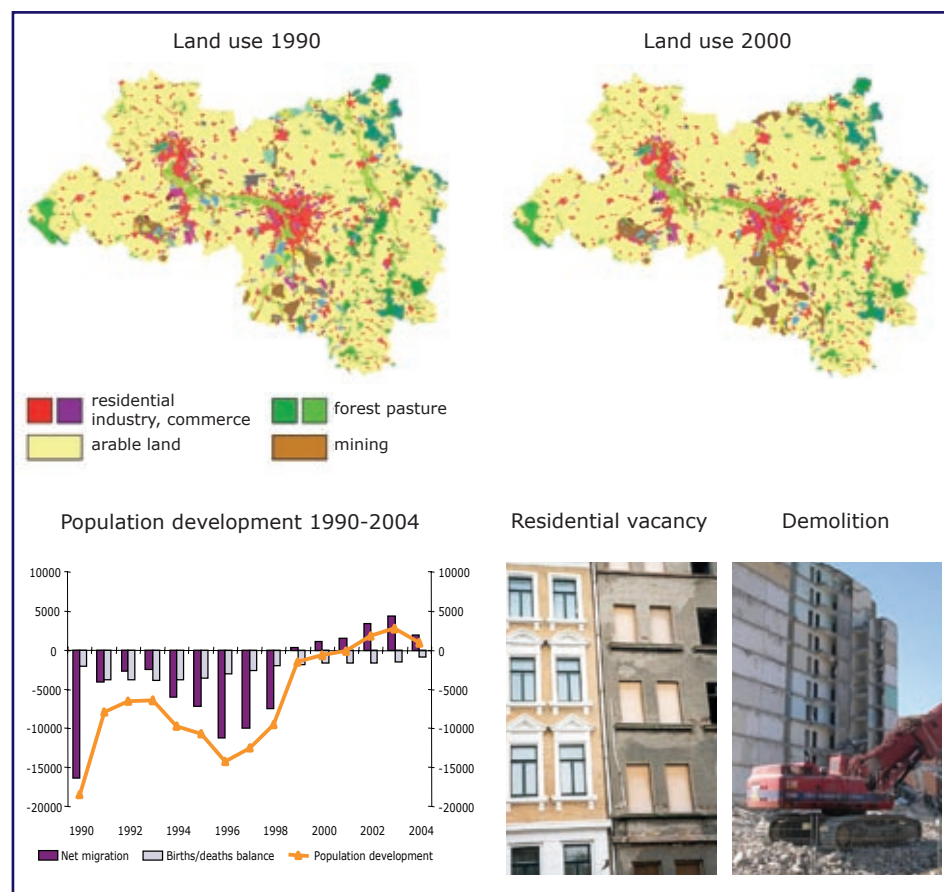
Before and after the GDR, however, large-scale changes in land use were quite common in the region. The city experienced a period of vibrant growth between around 1870 and 1930, reaching its historical maximum population

of over 700,000 in the early 1930s. This made Leipzig into Germany's fourth-largest city and one of the most densely populated ones at the time. City development was accompanied by urbanisation of what were then the city's rural surroundings. From 1989, post-socialist transformation ushered in a period of heavy urban sprawl, with shopping malls, enterprise zones and residential »parks« spreading – in this order – in the city's outskirts and into the suburban townships. Industrial decline, low birth rates, emigration, and residential vacancies, however, contradicted the expectations linked to these investments. This eventually led to a large oversupply on the markets for housing, office space and developed land in general.

Since the late 1990s urban sprawl around Leipzig has abated considerably. Currently, the administrative territory of Leipzig covers almost 30,000 ha (298 km²), following the recent incorporation of several suburban towns and villages. Leipzig's present situation is rather paradoxical, turning it into an interesting case for PLUREL. Ongoing dynamics of suburban growth (single and semi-detached housing settlements, new »housing parks«) with adjacent, partly over-dimensional construction activities at the urban fringe should be acknowledged. Simultaneous depopulation and related shrinkage, residential vacancy, and »perforation« followed by demolition in the inner city areas also need to be considered. The main PLUREL research question for the Leipzig region is the following: how do we steer sustainable land use development in an urban region with close neighbourhoods of »islands of suburban growth« and urban decline, abandonment and shrinkage?

The Leipzig region is a representative example for carrying out an ex-post analysis of social, economic and environmental consequences of post-socialist, highly dynamic land conversion, extreme urban sprawl and considerable shrinkage under conditions of demographic change. The city's interest in shrinkage issues is demonstrated by various international events on the issue hosted during the past decade, such as the exhibition of »Shrinking Cities«.

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Promoting regional governance in land use planning

Warsaw, Poland



PHOTO: ARKADIU ZIOLEK

Warsaw, the capital city of Poland, is a compact city surrounded by predominantly rural municipalities. The city has features of a metropolitan city and is the most dynamic Polish city in terms of economic development and population growth, even though Poland as a whole, as well as the country's overall urban population have experienced a stagnating population. Warsaw, like other metropolitan cities in Central and Eastern Europe, undergoes processes of rapid suburbanisation. The Warsaw region is also subjected to extensive urban sprawl. These phenomena were the most important arguments for developing new legal tools for meeting the challenges resulting from rapid urban growth. New legislation on spatial planning was enforced in 2003. This legislation calls specifically for preparation of spatial development plans for metropolitan areas in order to guide and manage dynamic development processes. Such a plan for the Warsaw Metropolitan Area (WMA) is currently being prepared by the Mazovian Office of Regional Planning, an office subordinated to regional (Mazovian Voivodship) self-government. Although there are many functional links between Warsaw and the municipalities situated in the

urban region, there are only few examples of cooperation between Warsaw and these municipalities, or amongst the municipalities themselves. This is because the structure of local governments in the urban region is decentralised and fragmented; collaborative practices in terms of governance are poorly developed. Thus preparation of the WMA spatial development plan and elaboration of development policies for the whole WMA as well as their implementation comprise major challenges that requires new innovative approaches and tools.

As governance practices are undeveloped and extremely rapid, uncontrolled suburbanisation processes and economic development are taking place, a number of problems arise. These problems relate to traffic congestion, solid waste disposal and encroachment of residential and commercial development on agricultural and forest land. A considerable part of peri-urban development occurs in uninhabited (i.e. formally rural) territory and shows typical characteristics of a sprawling land consumption.

Within PLUREL, the team of the Polish Academy of Science in cooperation

with national stakeholders is working on identifying areas of spatial conflicts and critical spheres of policy making and spatial planning which need to be addressed to make management of development processes effective. There is an urgent need for rationalisation of the process of land development process and land use change. Moreover, likely demand for various functions (sectors) need to be assessed for different planning perspectives – 5, 10, 20 years – in terms of size (volume) and characteristics such as quality, interdependence between activities, and site. Results of the research activities should help predict and estimate the different consequences (e.g., ecological, demand for transportation infrastructure) of development processes and guide them to match the demand and supply sides. Studies should also provide tools and methods of coordination of planning and decision making processes in situations characterised by a large number of autonomous local governments. In this way, land use governance in the Warsaw urban region can be strengthened.

*Miroslaw Grochowski,
Polish Academy of Sciences*

Attractive urban landscapes as competitive advantage

Hangzhou, China



PHOTO: HE YOUJUN

The city of Hangzhou is located in the rapidly developing Yangtze River Delta stretching from Shanghai over Hangzhou to Ningbo. The city of Hangzhou alone has around 4.1 million registered inhabitants (2006 census), a figure to which unregistered residents must be added. Measured on the basis of registered population the city population has grown about 1.2-1.3 percent per year since 1980.

Hangzhou has several economic development zones established in the early 1990s. These have received massive foreign investments and house internationally as well as Chinese owned companies. Since the introduction of the economic development zones the economy of Hangzhou, measured as the GDP of the larger administrative region of Hangzhou, has maintained an annual growth rate of more than 10 %.

Population growth and rapid urban development create a demand for urban

expansion. This is catered for by the city of Hangzhou through outward urban growth and, for the longer term, through the planning of self-contained satellite towns that will surround the core area of the city. Due to the scarcity of developable land as well as recent national legislation that reinforces farmers' rights to the land and makes urban expansion more difficult and expensive, high emphasis is put on efficient land use. Thus older villages are demolished and developed, together with the surrounding green field sites, into new subdivisions with very high floor-space ratios.

The pragmatic pursue of efficient land use is paralleled by a clear objective of the city administration to improve the quality of life and create an attractive environment for tourists as well as for the inhabitants. This is reflected in the 11th five-year plan for Hangzhou's Economic and Social Development that aims to create a »paradisiacal Silicon Valley« and

to build a well-off society in all ways. The Strategic Plan as well as the Plan for the Construction of an Ecological City are important instruments for implementing this vision. The Ecological City plan aims to apply ecological principles and systems engineering to improve the environment and environmental performance of the community, including maintenance and provision of green spaces to enhance the quality of life.

A major example of the city of Hangzhou's dedication to an ecology inspired quality of life strategy is the protection of the famous West Lake area, a historical lake and park landscape close to the city centre. Another example is that of the establishment of additional recreational sites within the urban area, such as the Xixi wetlands.

Hangzhou is a rapidly developing urban region which is strong in attracting services and high tech industries. Apart



from locational advantages, a main reason for the success of Hangzhou is its image of being one of the most liveable cities in China because of its cultural heritage and attractive landscapes. These soft factors are likely to become even more important for the future economic development of Hangzhou. Therefore, the protection and sustainable development of these values will be a major issue for the future of the city region. This includes the development of strategies that successfully balance the need for urban development with the protection of farmland and open space. Farmland in close vicinity to the urban core will not only continue to be important for the production of food and other produce (e.g., silk). It also needs to be strengthened as a carrier of the city region's future green structure for recreation and environmental services.

Thomas Sick Nielsen and Stephan Pauleit, University of Copenhagen

PLUREL People



Interview with Carmen Aalbers, Alterra Green World Research

What is your role in PLUREL?

First of all I am coordinating between the efforts of the national research teams that work in the seven case study regions. We need to make sure that local insights and expertise are properly integrated and considered within PLUREL. This may require unorthodox research. My second task is to promote stakeholder involvement in both local and project-wide PLUREL activities. Research-practice cooperation has many faces, and my ambitions in this respect are rather high. I want PLUREL to produce results that are relevant, usable and accessible to stakeholders in European urban regions. My third role, as Module 3 coordinator, will be to closely collaborate with the coordinators of the other module and workpackages.

How will PLUREL benefit from your own expertise?

My international experience at policy as well as »field« level in land use planning and collaborative natural resource management should be beneficial. As project manager and researcher, I have always worked in close cooperation with practitioners, and have in fact been a practitioner myself. My focus on practical needs and associative way of working should benefit PLUREL.

What will be PLUREL's most important results?

Ours is the only green open space related Integrated Project under the Sixth Framework Programme that studies the (peri-) urban context. Several Fifth Framework projects (within the City of Tomorrow

theme) called for more attention for peri-urban areas because of their marginal position in administrative areas, be it rural or urban. In my view, PLUREL should provide European policy makers with insights and advice on sustainable development options for these areas. As far as models can be developed to contribute to these insights, PLUREL should develop them. On the other hand, the models and insights should also be accessible to the regions themselves, through tailor-made knowledge dissemination.

Which challenges can stand in the way of PLUREL's success?

The combination of today's complex urban world and an integrated research approach constitutes a challenge. Sound cooperation between different research disciplines is essential for project success. Boundaries between research disciplines are generally very resistant and even the most motivated and capable researchers are not always able to overcome them.

Why should policy makers be interested in PLUREL?

As policy making body, the European Commission's Directorate General for Science, Research and Development is interested in tools that forecast developments in peri-urban areas. Policy makers from urban regions should be interested in our work as well, because the use of PLUREL findings might have an effect in their domain. Our project is open to cooperation with policy makers. We have even created a special body for this: the Board of Stakeholders.

Announcement of International Conferences

Title:

»Multifunctional Land Use in the Rural-Urban Perspective«

Dates: 7th – 9th of November 2007

Venue:

Bled, Slovenia

Organisers:

European research network »Landscape Tomorrow« et al.

For further information: <http://www.bf.uni-lj.si/ag/hidrologija/LTConference/>

Title:

»Impact Assessment of Land Use Changes«

Dates: 6th – 9th of April 2008

Venue:

Humboldt University, Berlin, Germany

Organisers:

SENSOR, EFORWOOD, PLUREL and SEAMLESS projects

For further information:

<http://www.sensor-conference2008.eu/>

PLUREL



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- ARC systems research GmbH, Austria
- Institute for Local Government Studies, Denmark
- The Finnish Environment Institute, Finland
- University of Paris I & COE/CCIP, France
- Agricultural and environmental engineering research centre, CEMAGREF, France
- Centre for European Economic Research GmbH, Germany
- Christian-Albrechts-University of Kiel, Germany
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- University of Ljubljana, Slovenia
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- Munich Design International, Germany
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- University of Groningen, The Netherlands
- Queen's University Belfast, United Kingdom
- The Chinese Academy of Forestry, China
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Peri-urban Land Use Relationships

Strategies and Sustainability Assessment Tools for Urban-rural Linkages

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