

## **The economic view on urban sprawl in decentralised metropolitan areas and its hinterland**

A globalised economy, the challenges of demographic changes and a national economy that is no longer growing “by nature” have turned the view on urban sprawl. It's not only a planner's task any more and e.g. the follow-up costs of sprawl are strong arguments for decision makers in policy and economy to focus on inner urban development vs. urban sprawl.

This case study will have a look at different forces of urban sprawl and will focus on the economic view on urban sprawl. The findings of this case study are based on a research project funded by the German Federal Ministry of Education and Research, called FLAIR by the German acronym. The FLAIR project (Land Use Management by Innovative Regional Planning) took place at the German Region of Southern Upper Rhine and due to this it focuses on decentralised metropolitan areas and their hinterland.

The economic view on urban sprawl as one aspect of the structural transformation taking place in Germany at the moment opens up the discussion on spatial aspects of economic processes. These processes are quite different at the edge of metropolitan areas and the hinterland. So Urban sprawl and the consumption of land are different. The hinterland is not concentrated on the “big hubs” as metropolitan areas are; it is mainly driven by medium sized cities which provide services for the surroundings. These medium sized cities feature higher schools, medical specialist, cultural facilities and commercial or manufacture companies of regional importance. The shape of urban sprawl in the hinterland can be considered as a typical shape of urban sprawl of medium sized cities.

### **Occurrence of urban sprawl**

To understand the occurrence of urban sprawl one can have a look at their driving forces like is e.g. done by the URBS PANDENS project (Urban Sprawl - European Patterns, Environmental Degradation and Sustainable Development) published at an ICLEI handbook. Due to the findings on this project the main driving forces of urban sprawl in economically powerful regions (like the Region of Southern Upper Rhine is one) are a strong growth at settlement and traffic surfaces. Investments in economic and traffic infrastructure lead to a higher local and regional accessibility from so far not yet developed properties. These investments are pulling new buildings ‘on the green field’. It usually concerns the settlement of a traffic-bound economy at first and at second their adjacent economy. This can accompany even with further residential use. – It's the phenomenon of urban growth.

Due to the high price of land properties the utilization of land per head of the population raises rather relatively slowly. If the speed of the population or economic growth slows down and the property process are relaxing the use of land and the floor space demand per head is increasing.

For example: Half of building stock in Germany is build after World War II. So in approximately 60 years the same extent of building stock has been built as in all centuries before.



Microsoft Virtual Earth, 2008

**Fig. 1: Example of Occurrence of Urban Sprawl**

This phenomenon is still lasting in economically strong regions and takes place in the metropolitan area. But the transmission to the hinterland is decreasing. Because of the less powerful independent economy – and the globalisation process is taking place in the hinterland as well – this described circle is uncoupled. Even though the majority of mayors and local councils are still acting in the old circles and dedicating new settlements and hope to get investments. But the majority failed with this strategy and in the end they have huge infrastructure costs for the developed properties but no return of invest.

### **Driving forces of urban sprawl in metropolitan areas and the hinterland**

Not only the driving forces of urban sprawl are different in metropolitan areas and the hinterland, the structure of investments, their type of investors and their type of investment is diverging. And on the other hand the organisation of (public) services is different. So in the end it's the question of private and public needs and burden-sharing. Due to the demographic changes in the surveyed project area there will be – at least at the medium term – a concentration of population in the metropolitan areas and shrinking in the Hinterland. This has an enormous effect on the economics of burden-sharing between private and public and e.g. infrastructure systems. This is especially due to the structure of providers of (public) services. In the metropolitan areas (with many clients) there are mainly privately organised providers and the hinterland (with fewer clients) the services are organised by public providers and in the end paid by the public.

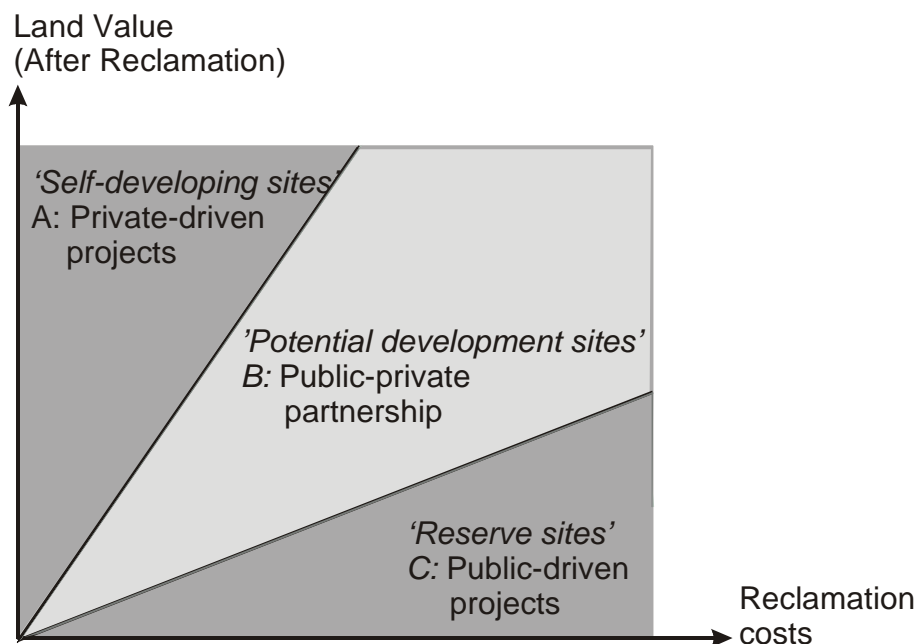
### **Investors in different spatial contexts**

The way investors act in different spatial contexts or markets are different. They can be distinguished by their type of invests:

- Large scale global players (with an international and national stage),
- Mid scale regional actors (in and around urban areas with high density)
- Small scale local investors (even as public activity).

In the context of a strategic land use management in urban sprawl areas it has to be considered, that the Brownfields are among various qualities. The economic point of view is the focus for an investor, which can be measured in the outcome (e.g. as Return of Invest).

Concerning the quality of a Brownfield the CABERNET-Group arranged three types.



**Fig. 2: Brownfield Types by CABERNET**

The large scale global players prefer to develop Greenfields or at least Brownfields from Type A.

On the other hand, several projects (e.g. sustainable land use management Stuttgart) showed up, that the highest quantity of brownfields have a size of 1 to 5 hectares, which are small and medium sized brownfields. Global players are not highly interested in those B and C-Areas, because they have quite often difficult stakeholders (community of heirs and/or owners; indifferent cost prognosis for reclamation; unattractive surroundings; ...). These circumstances are not suitable for an investor who is developing as fast as possible and even selling before the buildings are realized.

Investors with a local focus are different from that. Very often they had been established by public authorities and the public still serve as shareholders. In Germany it becomes a topic that these public companies gets sold to private investors, which is in a quite controversial discussion.

In urban sprawl areas it has to be considered that the majority of brownfields are mostly privately owned small and very small brownfields (up to 10.000 square meters). These parcels of land very often block the development of a quarter because the owner has no financial need to sell or to develop. Another aspect is that the maintenance of existing buildings in the centre of small cities and villages gives an impression and could be a model for positive activities in the surroundings (or a negative impact if the buildings get more and more neglected).

### **Strategies for activating Brownfields**

How can the municipality, the private land owner and the private investor be motivated to start an active land use management and what are suitable tools for it?

First of all, the municipality needs an overview of existing brownfields in their districts. Unfortunately the municipalities very often do not have the resources (manpower and technical) to establish and maintain such an information system for brownfields. But especially for the B- and C-Areas need someone who feels responsible for them and care about. So it's necessary to get more awareness for private investment. Ownership of land parcels is protected by German constitutional law and so related to a high level of rights but also accepting obligation. There is a need for a new civic involvement.

As a third strategy the existing formal planning instruments should be completed by informal activities. Strategic planning procedures were applied in the mentioned FLAIR project. Multiple planning teams (architects, spatial planners, real estate economics) are involved and get supervised by an accompanying group with internal and external experts. It is a five-step procedure by kick-off-meeting, intermediate presentation, planning workshop and final presentation of the teams and a two-day-meeting by the accompanying group to produce the final recommendations which are handed out to responsible actors. The strategic planning procedure is very helpful for strategic decisions on the local and regional level.

Due to the demand on money and time for strategic planning procedures three-step activities of this procedures have been tested. This approach is e.g. done in German research project called KMUeKMF (Small and medium sized enterprises develop small and medium sized Brownfields). The Focus had been on precise brownfields, so the money and time-factor had been reduced.

Cooperative planning procedures with kick-off, Intermediate and final presentation were applied as a three-step instrument. Additionally one can use a two-day-planning workshop as a one-step instrument to get a "quick-and-dirty" impression of the chances and weaknesses of a brownfield.

All three informal activities have things in common:

- Working with several teams,
- Working with clear and different roles,
- Working in different scales.

