URBAN –
RURAL
ASSEMBLY

Title
Urban-Rural Ecosystems (WP5)

Summary
Ecosystem and green space play an important role in cities and rural areas (hinterland). Facing the great challenge of urbanisation, it is imperative to take ecosystem services and the new concept of 'green infrastructure' with its philosophy towards multifunctional green spaces into account. The working package 'Urban-Rural Ecosystem (WP5)' aims to record the changes in ecosystems and green spaces in the urban-rural continuum of the Huangyan-Taizhou region. A suitable longitudinal landscape section (transect) will be conducted, and especially the high-density inner-city areas, suburban areas and more rural hinterland areas free of buildings will be isolated in the definition phase of the project and coordinated with all partners of the consortium. The landscape longitudinal section represents not only different urban densities and building structures, but also different ecosystem types, for example urban, semi-natural and largely naturally preserved ecosystems.

A data analysis along the transect area will be based on metric landscape indicators and take urban-rural landscape structures into account. Synergies with WP4 (Urban-Rural Landscapes & Spatial Typologies) regarding the existing data will be coordinated and used in a targeted way. Furthermore, ecosystem performance indicators will be used to assess prominent trends, the development of green infrastructure and influencing factors of urbanisation. The analysis will be based primarily on accessible data for China, local and regional land use plans and ecological planning material.

The investigations will be carried out among three levels: At the macro level (Shanghai-Jiangsu-Anhui-Zhejiang province), dynamics of change will be identified in close cooperation with the other work packages. From these, relevant actors and driving forces on the meso-level (Huangyan-Taizhou region) are derived that are responsible for changes in ecosystems and green infrastructure. At the micro level (sub-regions of the Huangyan-Taizhou region), examples of good practice will be identified to show how the protection, maintenance and development of ecosystem types and green infrastructure can succeed despite urbanisation pressures. Finally, these examples will be tested for their transferability to the individual Real-World Living Labs (Reallabore) of the Huangyan-Taizhou region.

In close consultation with the other WPs (in particular WP4), another aim of WP5 is to develop an initial concept for the further development of a GIS-based working tool for inter- and transdisciplinary work and implementation of the project during R&D phase. This tool should take into account and integrate the data sets of the other WPs. Thus, the definition phase deliverables of WP 5 are:

1) A framework and relevant indicators for analysis of ecosystem services.
2) A selected transect based on investigation and data resource in study area.
3) A report including a conceptual approach for the development of a GIS-based data archive and map basis for mapping at least two ecosystem services and to share as a common working tool with the other WP's throughout R&D phase.

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