## Sustainability | Individual communication

# IC - (20819) - PEOPLESHED AS CRUCIAL ELEMENT IN URBAN-RURAL DEPENDENCIES AND OPPORTUNITIES TO DESIGN NBS FOR RESILIENCE IN EUROPE AND CHINA

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#### **Background and objectives**

Interrelationships between urban and rural areas are fundamental for the development and safeguarding of viable future living conditions and quality of life. These areas are not well-delineated or self-sufficient, and existing interrelations sometimes bias one over the other. Major urban challenges facing China and Europe are related to changes in climate and environment, and to decision-making that makes urban and rural landscapes more susceptible to environmental pressures. Focusing on six European and Chinese cities and surrounding rural areas under study in the EC-funded REGREEN project, we examine how nature-based solutions (NBS) may assist in counteracting these pressures.

#### Process and methods (for empirical research)

Focusing on six European and Chinese cities and surrounding rural areas under study in the EC-funded REGREEN project, we examine how nature-based solutions (NBS) may assist in counteracting these pressures. We analyse differences between European and Chinese systems of governance, reflecting on the significance of scale of research needed to understand how NBS provide benefits.

### Main results (or main arguments in the case of critical reviews)

The European and Chinese solutions exemplified in this study tackle the nexus of various environmental and peoplesheds. We highlight interactions between differently delineated *sheds* (watershed, airshed, natureshed and peopleshed), which differently influence interrelationships between urban and rural areas. In the urban-rural interface, peoplesheds comprise socio-demographic, socio-economic, and socio-cultural as well as mobility aspects, with varying boundaries, trajectories and flows of people. These human factors impact local environments and resource management.

## Implications for research and practice/policy | Importance and originality of the contribution

Peoplesheds are linked to biophysical spatial entities such as landscape characteristics and to social relations including ownership, stewardship and neighbourhood bonds. The combined biophysical and social spatial scales that delineate a peopleshed do not align with administrative or ecological boundaries. Regarding opportunities for urban-rural resilience it is important to consider when attempting to introduce landscape-scale change for the benefit of regional ecosystems.

Palavras-chave: urban planning, airshed, watershed, natureshed, peopleshed, rural-urban fringe, social and biophysical scales, Nature-based solutions (NBS), green infrastructure