

RESUME

11/02 - Introducing nature into cities or preserving existing peri-urban ecosystems? Analysis of preferences in a rapidly urbanizing catchment

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Nature-based solutions (NBS) are increasingly being promoted as a means to address societal and environmental challenges, especially flood risk reduction. In the context of rapidly urbanizing catchments, NBS can take part of the development of sustainable cities, either by conserving peri-urban ecosystems from urban sprawl or by developing green infrastructure in the cities. Both can provide a wide range of co-benefits (e.g., climate regulation, air quality regulation), but also generate some negative effects (e.g., mobility issues, unsafety, allergens).

We develop and implement a Discrete Choice Experiment survey to analyse people's perception of co-benefits and negative effects, and associated preferences for the two types of NBS at a catchment scale. The results obtained from 400 households living in a French Mediterranean catchment highlight that people associate numerous co-benefits to NBS, but also negative effects. Our estimations reveal that resident households are ready to contribute large amounts through a tax increase for the development of NBS (from 140 to 180 EUR/year, on average). There is however a strong heterogeneity of preferences at the catchment scale influenced by income, location of the respondent along an urban–rural gradient, and perception of the importance of ecosystem services.

These differences may reflect urban environmental inequalities at the catchment scale, which are important to take into account in order to avoid distributive inequalities.