

## **Stakeholder perception about urban sprawl impacts in land degradation in Lithuania. The importance of profession and education.**

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Stakeholders have an important impact on land use planning. Their visions and culture, shape and influence the decision makers and the legislation (Schwilch et al., 2009; Fleskens and Stringer, 2014; Pereira et al., 2016; Subiros et al., 2016). Nowadays, urban sprawl is one the causes of land degradation, causing important, environmental, social and economic problems. This expansion to rural areas is caused mainly by lifestyle changes, cultural views, increase of mobility, house price in city centers, poor air quality, noise, small apartments, unsafe environments, lack of green areas, competition among municipalities, development of transport network and social problems. Urban sprawl is currently an important problem in Lithuania, especially in Vilnius. Vilnius residents are concerned about the impacts of urban sprawl in environmental, social and economic aspects. Nevertheless, this depends very much on the age of and the occupation of the residents (Pereira et al., 2014). However, very little information is available about the vision of stakeholders regarding this position. The objective of this work is to study the stakeholder's perception about urban sprawl impacts on land degradation in Lithuania. A total of 86 stakeholders from different institutions were interviewed and asked to rate from 1 to 5 according to the importance of the question (1=very low; 2=low; 3=medium; 4=high and 5=very high). The questions carried out were. Does urban sprawl have impacts on a) consumption of land and soil, b) loss of soil permeability, c) loss of soil biodiversity, d) loss of best agricultural land, e) increase in the use of water and fertilizers in less productive areas, f) increase in soil erosion in remote areas, and g) loss of natural habitats. These variables were analyzed according to the gender, age, place of residence (urban/countryside), Profession, field of studies, study level and if the participant was a member of a NGO. A general regression was carried out in order to understand if the respondent's characteristics influenced the rates attributed to the questions raised. Regressions were considered significantly different at a  $p < 0.05$ . The majority of the respondents were males and lives in urban areas. They work mainly on the environmental sector and protected areas, have a master degree, studied environmental and social sciences and are not members of an NGO. The variables that explained significantly the question "consumption of land and soil" were profession, study level and gender. Males working as researchers and hold a PhD diploma valued very much this question. The questions "loss of soil permeability and soil biodiversity" were explained significantly by the respondent's profession and study level. In this case researchers with a PhD rated very high this question. The question "loss of best agricultural land" was explained significantly by the profession and gender of the participants and the question "increase in soil erosion in remote areas" explained significantly only by the profession. Male farmers rated very high the question, "loss of best agricultural land" while engineers and researchers rated very high the second. The last question "loss of natural habitats" was explained significantly by the membership in an NGO. The members of NGO rated very high this question. None of the respondent's characteristics explained significantly the question, "increase in the use of water and fertilizers in less productive areas". Overall, the results show that professional occupation and education level have a high impact on the awareness about the impacts of urban sprawl in land degradation.

### References

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