Ecosystem Services of Homegardens as Perceived by Non-Garden Owners in Eastern Tyrol, Austria

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Background

Ecosystem services have emerged as a way to assess the many benefits that humans receive from various ecosystems. While research has assessed larger systems such as forests and oceans, smaller agroecosystems, home gardens in particular, have received less attention. Research that has looked at gardens has mostly identified ecosystem services and looked at perceptions and attitudes of the respective gardeners. Moreover, home garden research tends to predominately focus on tropical regions, leaving little information on temperate climates. In the Eastern Tyrol district of Austria, gardening plays an especially unique role. Many farmers, organic and convectional alike, maintain home gardens in addition to farming. The rural landscape of alpine Eastern Tyrol has undergone massive changes over the past hundred years, with farmers changing their production to suit economic and consumer demands (Vogl & Vogl-Lukasser, 2003). Research has found a decline in cultivated field vegetables, fiber crops, and cereals in many alpine areas. Additionally, management practices have changed, resulting in agrobiodiversity loss (Penz, 1996). Although the agricultural landscape in the Alpine region has undergone changes, the respective home gardens that compliment farming operations have maintained their importance and foremost biodiversity (Vogl & Vogl-Lukasser, 2003). This thesis is a part of the "Homegrown- Agro-Biodiversity in Farmers Home gardens" project. Data collected by Vogl & Vogl-Lukasser (2003) 20 years ago will be re-collected and compared to see whether or not home gardens persist, how and why, and to identify any transitions.

Aims/Research questions

This thesis foremost seeks to shed light on the relevance and importance of home gardening in the global north by looking at it through an ecosystem services lens, using Eastern Tyrol as a case study. This paper aims to add to the literature by examining the perception of ecosystem services provided by home gardens as perceived by non-gardeners/garden-owners. The research questions are as follows:

1.) Which ecosystem services of home gardens do neighbors of gardeners perceive?
2.) What respondent characteristics are correlated with the perception of ecosystem services? (Ex. Age, gender, education, distance to garden, size of garden, distance to garden, time spent in garden)
3.) How do neighbors value ecosystem services provided by home gardens?

Methods

As a part of a larger project ("Homegrown"), this research relies on pre-selected but randomized home gardens, and their surrounding neighbors, which were originally looked at 20 years ago. Of the 196 gardens looked at 20 years ago, 72 will be re-examined this year. My participants will be chosen based on two criteria: 1.) they do not have their own home garden, and 2.) they live near one or more of the 72 home gardens and have a view of the respective garden(s) from their home. The goal is to get at least 20 participants, ideally more. Likert Scale questionnaires and Rich Picture methods are used to gain insights into the perception and valuation of various ecosystem services. The Likert Scale is based on the Millennium Assessment for ecosystem services and consists of 48 items, which will be ranked on a 1-4 scale, 1 being completely agree and 4 being completely disagree. The second method "rich pictures," is a qualitative method in which participants are asked to draw pictures. Results of both methods will be coded using the ecosystem services framework, while questionnaire results will additionally be analyzed using statistical methods.

Study programme	M.Sc. Organic Agriculture & Food Systems
Lifetime	4/2018 - 10/2018
First examiner	Dr. Claudia Bieling (Hohenheim, Stuttgart)
Second examiner	Dr. Christian Vogl (BOKU, Vienna)
Link to project website	http://www.nas.boku.ac.at/en/ifoel/arbeitsgruppen/arbeitsgruppe-wissenssysteme-und-innovationen-agwi/projekte/homegrown/

References

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