

The role of soil quality and soil conservation for private gardening in South-West Germany

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In the past centuries, agriculture played a major role in the economy of Germany, and private gardening was common practice. With the shift from agriculture to (service-) industry, less people work in their own garden for subsistence purposes and thus are no longer in direct contact with soil. However, the "Kleingarten"- and "Schrebergarten"-movements still exist in Germany, within which gardeners use soil to provide themselves with fruit and vegetables. The gardeners spend their leisure time cultivating the soil, planting, and harvesting. We ask as to whether these gardeners have a specific relation to soil quality and soil conservation, and what it is they associate with soil. Moreover, how do they use soil? Is soil quality assessed prior to planting? How do private gardeners conserve their soil? Interviewer-administered questionnaires were carried out in the respective gardens. Additionally, management practices were observed, and the fertility of the topsoil was measured.

The research area is located in South-West Germany between the Black Forest and the Swabian Jura in a rural district. However, the "Kleingärten" investigated belong to the regional centre there and thus developed in an urban context. The theoretical framework of the SFB 1070 ResourceCultures was used for the study.

A small portion of the surveyed private gardeners used simple box kits to analyse soil quality. However, the majority relied on experience and traditional knowledge to determine their management practices. This behaviour complicates the establishment of up-to-date knowledge about sustainable soil use like no-till and raised vegetable beds. Many surveyed persons have an agricultural background inasmuch as their (grand-) parents were farmers or at least owned a garden. Soil conservation practices are common, like the use of green manure to prevent the soil from drying out and supplementing soil with compost. Soil pollution is related to the use of chemical fertilizers which many private gardeners try to avoid. However, most people surveyed are neither aware of soil pollution by industry and traffic, nor of the enrichment of pollutants in compost.

Generally, the surveyed gardeners, who had a mean age of 66 years, used a different approach to soil than soil scientists. They are in touch with the soil in their garden on a daily basis and therefore analyse it, and changes within it, constantly. The analytical tools which they use seem to be more rooted in traditions than in modern science.