From the historical "garden city" concept to "community-supported agriculture (CSA)"
Designing and shaping the CSA FrohLaWi

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Rationale

Community-supported agriculture (CSA) is a relative new, grass roots-created concept to respond to some of the larger challenges humanity is recently facing. CSA aims at producing healthy and fresh food, decreasing ecological foot-prints of food production, protecting biodiversity and fostering social coherence among rural and urban humans. The garden city movement (GCM), on the other hand, more than 100 years old, was also concerned with social factors, aiming at healthy citizens and producing food for the urban population. Inspired by Edward Bellams book "Looking Backward" Sir Ebenezer Howard presented his novel plans for urban development in 1898 which became the starting point for the global GCM.

The urban quarter Frohnau was originally planed in the first decade of the last century and realized during the following few decades also as a garden city. Recently, on the other hand a CSA initiative started in Frohnau, based on the TU-students project "Maize monoculture becomes CSA and biodiversity hot-spot" which was completed in summer 2020. Meanwhile the association "FrohLaWi - Community Supported Agriculture for Frohnau and neighbourhood" was founded. Very recently even, this association will rent 12 ha of arable land to start realizing a CSA in close collaboration with the citizens' initiative "Diversity for the domain Stolper Feld".

Aims & expected outcomes

Against this background the overall aim of our project is to significantly contribute to the structure of FrohLaWi. In particular the project aims at

(1) deconstructing the theoretical basis and historical background of GCM and CSA. The scientific question is: What can we learn from the past? Expected outcome is a theory paper based on "The "garden city" in the green infrastructure of the future: Learning from the past" (Swensen & Berg, 2020 Landscape Research, 47:802-18)

(2) empirical analysis of the physical basis for FrohLaWi. The scientific questions are related to the quality of the soil and the site requirements of the crops in close relation to the needs for fostering biodiversity. Expected outcome is the proposal for and the design of a complet site-
adopted production plan for the CSA FrohLaWi, integrating novel approaches to sustainable agriculture like "permaculture" and "agroforestry".

(3) empirical analysis of the social basis for FrohLaWi. This part of our project will carry forward previous work, which identified the principal interests of different groups of stakeholders, e.g. "Waldkindergarten", schools, consumers, old people, recreation walkers, etc. The expected outcomes are stakeholder-adopted design concepts, which can be integrated in the overall concept of FrohLaWi, e.g. "school gardens", "hortical therapy" (see eg. Hortical therapy in greenery design. Example of the "Swiatlo" hospital Torun. Rogatka & Ziemkiewicz, 2020, Civil and Environmental Engineering Reports, 30(3):0001-0022.) etc.

Procedure

Theory: In the first three weeks we will analyze the concepts of GCM and CSA by literature studies, invited talks and student presentations.

Empirical work: One part is practical in-field soil survey, laboratory analysis of soil quality and soil pollution (due to long-term intensive conventional agriculture). An other part covers stakeholder involvement via interviews.

Excursions: We have various options, e.g. could visit one of the first CSAs in Germany (Kattenhof, lead by Mathias von Mirbach), the Krameterhof of Sep Holzer in Austria (permaculture) with a great side trip to see soil chronosequences in front of the Pasterze glacier (Grossglockner) and lake soil at "Weissensee".

Fig. 1: Our "playground" on February 20th.