MSKÜ Campus Garden: A Living Laboratory for Interdisciplinary Learning, Climate Adaptation, and Inclusion Through Cultivation

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Abstract

The impacts of climate change on agricultural production, food security, and natural resources highlight the need to promote sustainable production practices and integrate climate adaptation into educational processes. University campuses provide important learning environments where such practices can be introduced to students and the wider community.

The Muğla Sıtkı Koçman University Campus Garden, through its activities conducted since 2019, provides a living laboratory model that brings together ecological agriculture, climate adaptation, sustainable food systems, and inclusive education. The project engages students from different disciplines, academics, children, older adults, people with disabilities, and volunteers in production-based learning activities.

At the Campus Garden Ecological Agriculture and Practice Area, activities include cultivation without chemical fertilisers or pesticides, the conservation and propagation of local seeds, seed swap, biological pest control, and the planting of saplings and medicinal and aromatic plants. These activities are supported by courses, student visits, community service activities, and workshops.

The project's central approach is that climate change and sustainability education should not be limited to short-term awareness-raising activities. Instead, students are encouraged to participate directly in cultivation processes, developing skills in ecological agriculture, resource management, collaboration, and environmental responsibility. Practices such as using local seeds, increasing crop diversity, improving water-use efficiency, and protecting soil are considered approaches that may contribute to strengthening the resilience of agricultural production to drought, rising temperatures, and extreme weather events.

In the next phase of the project, activities undertaken since 2019 are expected to be systematically documented, and measurable indicators relating to production, participation, and resource use will be developed. The project also plans to improve the transferability of the model to other higher education institutions through practical guides in Turkish and English, digital promotional materials, and dissemination tools.

The Campus Garden provides a practical sustainability model demonstrating that climate change adaptation is not limited to technological and administrative measures but can also be supported through education, participation, local production, and social inclusion.

Keywords: Living laboratory, ecological agriculture, climate adaptation, sustainable food systems, ecological literacy.

MİDUG Thematic Area: WP3 – Living Laboratories, Circular Economy, and Youth.