

Tropentag, September 11-13, 2024, hybrid conference

"Exploring opportunities ... for managing natural resources and a better life for all"

Biocultural diversity in agroforestry systems in Togo and Benin

Lena Grieger

Goethe University Frankfurt, Institute of Physical Geography & Center for Interdisciplinary African Studies, Germany

Abstract

For more than four decades, agroforestry has been object of research in several disciplines highly praised as innovative, although the practice of integrating forestry into agriculture and animal husbandry presumably stretches back to the beginning of agriculture itself. Both in Togo and Benin, traditional agroforestry plays a significant role in food security and is of great socio-cultural and medicinal value. At the same time, 'modern' agroforestry practices are gaining considerable interest as strategies for climate change adaptation and mitigation as well as carbon sequestration, reforestation, income stabilisation, yield improvement, agrobiodiversity and soil conservation. From a global point of view, agroforestry practices are considered to offer multiple-win solutions to address local and global challenges. In this context, local knowledge remains often overlooked or seen as a counterpart to scientific knowledge rather than an equal part of identifying innovations, solutions, and ways forward.

In Togo and Benin, there is still a lack of studies dealing with the heterogeneity of small-scale agroforestry farmers, their diversity, flexibility and resilience, traditional and 'modern' practices, local environmental conditions, and capacity of adaptation to and mitigation of climate change. It is at this point, where the study aims explore biocultural diversity in agroforestry systems in the two neighbouring West African countries. Within this framework, the relationship between biodiversity and human diversity as well as distinctive knowledge and skills are taken into account countering broad generalisations on Africa. The overarching objectives of this study are to take inventory of traditional and modern agroforestry practices in Togo and Benin and to map existing agroforestry systems within each agroecological zone of both countries based on case studies covering different climatic and ground conditions. To capture the complexity of the local agroforestry systems, a mixed-method approach is applied including remote sensing, exploratory interviews, and data base research. Mapping and understanding the biocultural diversity of agroforestry systems in Togo and Benin brings the assessment of the actual and potential contribution to climate change adaptation and mitigation as well as biodiversity conservation forward and helps to reevaluate existing agroecological knowledge.

Keywords: Agroforestry, biocultural diversity, climate change adaptation, small-scale agriculture, social-ecological systems, West Africa

Contact Address: Lena Grieger, Goethe University Frankfurt, Institute of Physical Geography & Center for Interdisciplinary African Studies, Altenhöferallee 1, 60438 Frankfurt, Germany, e-mail: l.grieger@em.uni-frankfurt.de