Abstract

Feeding the booming human population and at the same time conserving biodiversity is a global challenge. Yet, it is particularly acute in developing countries where biodiversity is high and food-security low. There is an ongoing debate whether land for nature and for agriculture should be segregated (land sparing) or integrated (land sharing). While these strategies still need unambiguous empirical validation, we here illustrate the real-word complexity of this issue by focusing on the case of Kenya, hosting one of the fastest growing populations in the world. We discuss historical effects and those arising from recent demographic pressure, and integrate these with biotic and abiotic constraints (soil fertility and climate) that additionally challenge land sparing and sharing strategies for biodiversity conservation. Generically, our contribution stresses the importance of recognising the specific context in which land-use strategies are to be applied, and underline the need of a deeper understanding of local conditions. This work goes beyond the current theoretical and highly abstract land-use debate that has been published in high impact journals but which may be less efficient on solving local conflicts.