

The 'Functional Landscape Approach': Building a socio-ecological evidence base for its contribution to adaptation and resilience in wetland catchments.

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Sustainable land management is increasingly taking a landscape approach to advocate simultaneously for local and multiple stakeholder-negotiated development and environmental objectives. Landscape approaches advance earlier frameworks that failed to acknowledge or reconcile either biodiversity or societal trade-offs, and that often tended toward externally-derived or imposed management interventions. Most recently, the management of land to balance biodiversity, food security and ecosystem services outcomes has been informed by socio-ecological systems thinking that seeks to promote an interdisciplinary understanding of any given 'landscape' where environmental and social factors continually interact in complex, adaptive and resilient ways. Reflecting these concepts, and integrating local and external scientific knowledge, the Functional Landscape Approach (FLA) was developed by Wetland Action, focussing on wetland systems in rural sub-Saharan Africa to contribute to environmentally sensitive and climate resilient strategies for safeguarding essential ecosystem services and improving livelihoods and well-being. In particular, the FLA stresses the ways in which land productivity can be improved through supporting, strengthening or re-establishing functional linkages between wetlands and their catchments and provides a basis for local identification of specific interventions to improve the sustainability of land use. Crucially, it also emphasises the need for community-based institutional support and the importance of incentives through market linkages and value-chain development. In this paper we will describe our experiences of developing and implementing the FLA in Ethiopia, Zambia and Malawi over the past two decades. Drawing on successful and less-successful elements of participatory planning, monitoring and evaluation, and the facilitation of long-term sustainable benefits, we will discuss some of the accomplishments and challenges that can be associated with approaches that seek to achieve win-win outcomes for environment and society, and that place particular emphasis on embedding such thinking within and across government, local and community-based institutions. We will highlight, that although underpinned by sound environmental and social scientific concepts, and notwithstanding valuable anecdotal information, the FLA currently lacks robust scientific data as evidence in support of its use. Outlining why we attribute this issue partially to challenges associated with interdisciplinarity, we will introduce a project, at the conceptualisation stage, which seeks to build this evidence base. We will conclude by outlining opportunities for potential collaborations and invite contributions from the floor.