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“Competition for Resources in a Changing World:  
New Drive for Rural Development”

## Competing Claims on Natural Resources: the Role of (Plant) Science

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### Abstract

Competing claims on natural resources become increasingly acute, with the poor being most vulnerable to adverse outcomes of such competition. A major challenge for science and policy is to progress from facilitating univocal use, to guiding stakeholders in dealing with potentially conflicting uses of natural resources. The development of novel, more equitable, management options that reduce rural poverty is key to achieving sustainable use of natural resources and the resolution of conflicts over them. Here we describe an interdisciplinary and interactive approach for: i) the understanding of competing claims and stakeholder objectives; ii) the identification of alternative resource use options, and; iii) the scientific support to negotiation processes between stakeholders. Our aims are to contribute to develop new interdisciplinary methods, to design new options and conflict resolution among multiple groups of stakeholders, and to develop policy interventions that simultaneously improve livelihoods and the sustainable use of natural resources. Research is being conducted in southern Africa, a region characterised by heterogeneous and highly dynamic resource uses. A comparative approach is used to examine the different drivers of resource use dynamics and the interacting claims of multiple stakeholders on these resources. The methodological approach not only seeks to describe and explain resource use dynamics and competing claims, but also to contribute actively to negotiation processes between stakeholders operating at different scales (local, national, regional and global). It will explore alternatives that can contribute to more sustainable and equitable use of natural resources, and, where possible, design new technical options and institutional arrangements. In this paper I will specifically focus on the role of research on plant production systems within the broader debates on livelihoods of people in marginal areas and exploitation of natural resources.

**Keywords:** Alternative resource use, livelihoods