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Scientific Networking to Combat Desertification — Creating Interdisciplinary and Participatory Bonds to Sustain Rural Livelihoods

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Abstract

Natural resources are still the major economic backbone of most rural households in arid, semi-arid and dry sub-humid regions. Multifarious social, economic and political reasons especially during the last century have supported the policy of maximum utilisation of these resources. This has resulted in the widespread disruption of farming systems up to the point of desertification. Field research in drylands emphasises the importance of interdisciplinary and participatory-based research approaches to combat and to prevent desertification for stabilising the rural production systems. The German Scientific Competence Network for Research to Combat Desertification (Desert*Net) was established to form a binding link between different scientific fields, policy makers, development agencies, public institutions and stakeholders in order to support applicable sustainable land use systems in degraded areas. Desert*Net recognises mono-disciplinary excellence as the pre-stage for aggregating reliable information for inter-disciplinary research. Desert*Net identifies pressing desertification-related issues at the social, economic and political level. This network scientifically supports innovative research concepts that are feasible and applicable to the local realities in desertification-prone areas. For this reason member institutes of Desert*Net co-operate with countries affected by or prone to desertification in the line of technical and methodological training, scientific knowledge transfer and applied field research.

The Desert*Net member project BIOTA Southern Africa (www.biota-africa.org) which is funded by the German Federal Ministry of Education and Research (BMBF) exemplifies, how the development of a new strategy helps to sensitise members of local communities in Southern Africa to the complex ecological and socio-economic causes and effects of desertification. New strategies in order to combat land mismanagement require the participation of local stakeholders in research for sustainable development. BIOTA Southern Africa for instance supplies community members with target information on ecological indicators. A major aim of the long-term training at eight rural communities is to encourage them to realise their own role in combating or preventing land degradation, as well as their expectations to other vital groups (science, political administration, development agencies). Incentives should be created for self-administration and income diversification which are in balance with local natural resources.

Keywords: Capacity development, desertification, inter-disciplinarity