

**Symposium:** Community-based planning with landscape services

**Title:** How to assist community-based planning processes in adapting land-use to climate change in West-Africa?

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The project “West African Science Service Center on Climate Change and Adapted Land Use (WASCAL)” follows the vision to build and develop capacities in cooperation with 10 West African countries to consult, among others, land-use planning processes. A challenge in breaking down methods and instruments that are already used in planning practice in a European or North-American context is that decision and participation processes in land-use planning are way from being standardized and that actor involvement faces much more problems in (i) identifying locally and regionally relevant actors and (ii) building a sustainable and permanent communication base to enable and keep them involved in planning (e.g. Ford and Thomas-Slayter, 2001). Furthermore, pressures in ensuring food-security or availability of green and blue services are extremely high and daily scarcity in essential resources (Lwasa, 2010; Fürst et al., in press) might prevail in building a system of spatial planning aims such as the landscape services concept (Temorshuizen and Opdam, 2009).

In an iterative adaptation concept of the land-use planning software platform GISCAME (Fürst et al., 2010 a, b; Fürst et al., 2012), we intend therefore to involve actors at different decision, consulting and planning procedure levels, starting first from regional and local knowledge holders (scientists, consultants, persons of trust with prominent societal status in the communities). We expect them to support the specification of methods and instruments that assist planning processes taking particularly the question of communication, transparency and comprehensibility into account. Also, we expect them to support a preliminary more detailed definition of services to be considered in planning which comprise not only the provision of the most essential resources, but also services that contribute to the resilience of the local and regional socio-ecological systems as such. In a next step, we will use our initially adapted platform and system of planning targets to discuss, extend and further adapt it with directly concerned local and regional actors (smallholders / community representatives). Approaches of multi-stakeholder planning and participatory planning are finally intended to be introduced and tested respecting the local community structures and their specific means of communication and consensus building.

Our presentation will give some very first results in this iterative adaptation process and intends to provide some very first lessons learnt on how different elements in a planning-

support platform have to be altered and modified in their importance and conception in the planning system compared to the European origin of GISCAM. We intend also to give a short outlook how to better conceive and make use of cellular automata with irregular cell structure and manifold cell actions that correspond better to highly irregular land-use systems in Africa.

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