



UNIVERSITÄT  
BAYREUTH

Geographisches Kolloquium

Dr. Cheikh Mbow

## Local impacts of large scale climate change and mitigation in African Savannah landscapes



April 23 2014

12–14:00 at H8 GEO II

Entry Free and Open to All

### Abstract

This talk presents the impact of climate change and variability on various land uses in savannah dominated landscapes of Africa. The long term trends of rainfall and temperature will show the neglected impacts of short term threats such as dry spells, flash floods, or decadal rainfall change particularly in the Sahel. Many impacts of these climate effects will be exemplified in the case of the Sahel. These include human and animal threats because of water shortage, water and wind erosion, soil impoverishment, parasite plants and pest, invasive species etc. Drivers of land use change as a response to direct and indirect climate effects will be highlighted. Extension of farm and subsequent deforestation processes, land competition and shortage of land in productive areas are analyzed as a results of the game-changer from extensive to intensive cultivation systems. The presentation underlines the importance of non-forested land for the mitigation efforts as these have much more potential to increase tree cover and to reduce deforestation and carbon destocking. Emerging need for bioenergy or high value crops and interrelated land grabbing will be addressed as important issues for the new governance framework and climate change negotiation for Africa. Non climate factors play an important role that could amplify climate change effect. In particular the mining sectors, the change in commodity prices in the international market are adding additional complexity in the difficult understanding of land use processes. Finally, the speaker will point to solution avenues through social- mobilization, improved land use and regional initiatives such as the Great Green Wall (GGW).

### Cheikh Mbow

Dr. Mbow is Senior Scientist on climate change and development at the World Agroforestry Centre (ICRAF) in Nairobi. He is Adjunct Associate Professor at the Forestry Department of Michigan State University-USA. He is a lead author for Working Group 3 of the IPCC AR5. Dr. Mbow was Associate Professor for 11 years on remote sensing-GIS and climate change at the University Cheikh Anta Diop of Dakar (UCAD).

He is an expert on disturbances of savanna vegetative systems, particularly the impact of bush fires and land cover changes in rural areas. He has experience with above-ground carbon stock assessments, vegetation inventory the use for carbon models, and the monitoring of vegetative communities.