

PhD projects at Faculty of Agriculture – Group of Agronomy

SUSANNE ZIEGLER**Agricultural use of wetlands scrutinized on sustainability and yield potential – Rice production in the Namulonge inland valley: effect of different cropping systems on yield and nutrient flows**

Keywords: cropping systems, East Africa, fertilizer effects, nutrients, green manure, rice, yield potential, yield limiting factors, wetlands

This research proposal is embedded in the GlobE project wetlands in work package A2 part b with the aim of exploring wetlands in East Africa towards their potential and constraints for agricultural use. This objective will be approached by testing different management options and production systems looking at yield potentials and resilience of the systems. Two central field trials (CFT) will be conducted in Tanzania and Uganda. My own focus will be in Uganda with the set up at Namulonge Research Station. Rice will be assessed as a crop due to their importance of starch supplying aliments.

The main objectives of the research are:

- investigate different cropping systems covering a gradient from low to high cropping intensity
- explore the effects of mineral fertilizer, green manure and farm yard manure on yields
- test the different production systems on yield potential
- provide information on the main yield-limiting factors

Data collection will be recorded for four cropping cycles.



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Work Package	
Countries of work	Uganda
1 st Supervisor	Prof. Dr. Ulrich Köpke
2 nd Supervisor	Prof. Dr. Mathias Becker
Subject	Rice production
Faculty	Faculty of Agriculture
University	University of Bonn
Working period	16/09/2013 – 15/09/2016