

WORKING PAPER

Pathways to increase food availability and nutrition security via biomass production and processing innovations

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ABSTRACT

The priority area synthesizes outcomes of various work packages that deal with technical and institutional innovations in biomass production. The contributions of these innovations to improved food availability are identified. Food availability is understood as one of the four aspects of food security, and its improvement is achieved by higher crop productivity and nutrient content as well as lower quantitative and qualitative losses during processing. The focus will be on optimizing plant production with affordable low budget technologies to increase crop biomass and quality for farmers. The approaches will increase both the potential and the realized biomass yield at low cost, which will be of benefit to food and non-food consumers. This integrated system will address future challenges of yield potentials and farmer decision making. Food utilization is addressed through nutrition security by identifying locally growing food items with high nutritional value and a dietary assessment and subsequent dietary adjustment.

The lead research question is on how food biomass availability, nutrition security and income generation can be enhanced through innovation systems for production of food biomass by smallholders. Outputs in the priority area will be achieved through exchange and transfer of scientific information, innovative knowledge and technology and research outputs between cooperating Institutions in Africa and Europe to improve the livelihood of the farming community in Africa. Specific outputs will be Journal article, living toolboxes, manuals and handbooks, software.