

## **AES Symposium: Organic Resource Use and Smallholder agriculture in SSA:**

In Sub-Saharan Africa, most of the rural population use solid biomass for cooking and heating, with wood, dung and crop residues the main energy sources. However, these resources are also crucial to long term sustainable food production and water use. Dung and crop residues provide organic fertilisers that improve water holding capacity of the soil. Demands on organic wastes for fuel and livestock feed reduce the use of dung and crop residues as soil amendments, which reduces biomass production and organic inputs to the soil.

In many places in Sub-Saharan Africa the scarcity of organic resources and its impact on long run soil fertility therefore pose significant challenges for the development of small holder agriculture. This symposium considers organic resources use in Sub-Saharan Africa, its links to food & nutrition security and smallholder agricultural development, and the associated trade-offs between food, energy and water.

The symposium will explore the loss of soil fertility and degradation in sub-Saharan Africa and its causes, the potential remedies, and potential trajectories for the future. Drawing on evidence from Ethiopia and Ghana it will consider specific examples of the consequences of poor soil fertility and the trade-offs which farm households face, discuss novel evidence on farmer investment behaviour in soil improvements. Finally, it will provide some insights into the successes, failures and future challenges from the perspective of one of the International agencies which aims to deliver new evidence-based approaches that address key challenges in the area.

### **Speakers**

Steve Wiggins Agricultural development and soil quality: what do we understand about the longer-run dynamics? (Overseas Development Institute)

Euan Phimister Incentives for improving soil fertility: Farm level evidence from Ethiopia (University of Aberdeen)

Victor Owusu Farmer Investment in Soil Conservation in Ghana (Kwame Nkrumah University of Science & Technology, Ghana)

Bedru Balana Water-Land-Ecosystem (WLE) based approach to Natural Resources Management and Livelihoods. (International Water Management Institute, Ghana)