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## Increased food security through improved postharvest systems using renewable and sustainable energy for rural communities

### Trilateral Workshop United Kingdom, South Africa and Kenya

Venue: Protea Hotel Stellenbosch,  
Techno Avenue, Techno Park Stellenbosch,  
7600 South Africa  
Date: 4<sup>th</sup> - 8<sup>th</sup> September, 2017

**Final report: UK - Kenya - South Africa Trilateral Workshop**

Organised by



## **Increased food security through improved postharvest systems using renewable and sustainable energy for rural communities**

The need for increased food security in the rural communities of developing countries especially Africa was the focus of five days workshop held in Stellenbosch, South Africa on 4th - 8th September 2017. The workshop drew participants from South Africa, Kenya and United Kingdom.

Both Kenya and South Africa are developing economies with rapid urbanisation, necessitating innovations and improvements in the postharvest systems. Postharvest research has often targeted individual units of the postharvest system, an approach that overlooks positive and negative synergies among individual units in the system. Integrated postharvest system using sustainable and renewable energy through multidisciplinary collaboration and systematic research approaches is needed for setting out effective strategies and research agendas for ensuring sustainable food supply to vulnerable communities in Sub-Saharan African countries. The workshop explored ways of improving postharvest systems for rural communities to improve food security in Kenya and South Africa. The workshop provided the platform for sharing experiences and built multidisciplinary research network for improving processes and efficiencies in postharvest systems that specifically targeted vulnerable communities. Expertise across multidisciplinary boundaries examined the social, environmental, technical and economic dimensions and innovations in the postharvest systems that informed research and policy. The workshop integrated this expertise and linked early career researchers with each other and the established researchers from United Kingdom, South Africa and Kenya for future collaborations.

The workshop is organised by Newcastle University (UK coordinator: Dr Yaodong Wang), Stellenbosch University (South Africa coordinator: Dr Annie Chimphango) and Jomo Kenyatta University of Agriculture and Technology (Kenya coordinator: Prof Christopher Kanali); and is funded by Newton Fund (UK), National Research Foundation and Department of Science and Technology (South Africa) and National commission for science Technology and Innovation (Kenya) under the British Council Institutional Link with over 34 participants. Participants visited organic farm steads in Khayelitsha in Western Cape of South Africa and KROMCO (Pty) Limited, a deciduous fruits (Apple and Pearl) packing facilities in the Western Cape province of South Africa.

There were 12 early-career researchers from Kenya, 12 from South Africa and 10 from the UK attended the workshop. The mentors, Professor Tony Roskilly from Newcastle University; Professor Umezuruike L. Opara from Stellenbosch University; and Professor Joseph Matofari from Egerton University, gave the participants excellent guidance in their speeches and group discussions. The 34 early-career researchers were divided into 6 groups and each group produced a research proposal targeting a specific topic on post-harvest processing a typical agricultural product (selected by the group members as their case studies) and using renewable and sustainable energy locally available in rural areas. The outcome from the workshop are: 6 research proposals produced from the 6 groups; the attendees understand what the problems in food security in Africa are; what the potential solutions are and the methodologies /technologies can be used to solve the problems for rural communities. In conclusion, the workshop has achieved its goals and completed all the planned work.





