In this issue

R. Strange¹

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We start this issue with an appreciation of the life of Ronald Wood (1919–2017) by Simon Archer. Professor Wood or RKS, as he was widely known, had a long and distinguished career in Plant Pathology. In particular, he must be credited with providing the impetus for the study of the physiology of plant disease by the research at his University, Imperial College, London, and his book, *Physiological Plant Pathology*. The subject has gained ever-increasing interest and has inexorably evolved into Molecular Plant Pathology. Some may ask why a food security journal devotes several pages to the obituary of a plant pathologist. The answer lies in the number of papers in which plant diseases arise. Out of 714 articles published in the journal since its inception in 2009, 396 i.e. 55% include the term plant disease, even more than nutrition at 386 i.e. 54%. This suggests that plant diseases are recognized as important determinants of food insecurity. However, papers describing the details of how they should be dealt with probably belong in plant pathology journals but their effects on food security decidedly belong in this one!

The issue continues with a special section of 13 papers, describing part of a large project, Trans-SEC, dealing with regional food and nutritional security in Tanzania. The authors and their contributions are summarized by Stefan Sieber and in an accompanying paper by the same author the principles, research models and assumptions underlying the project are presented.

The special section is followed by an opinion piece and nine original papers ranging from increasing the diversity of local diets, through crop losses, both pre-harvest and post-harvest, to marketing, livelihoods and governance. Finally, there are two book reviews.

Peter Horton opines that only radical change in the way we produce and consume food will allow the delivery of a sustainable and just global food system. Neither organic agriculture nor business as usual will feed the growing population.

Peter offers a 10-point plan to solve the problem and suggests that each point should be tested empirically in specific locations.

Peter R. Berti and Heber Araujo Cossio report on the promotion of chicken rearing in order to provide improved diets for Bolivian people. Egg production was established in ~80% of intervention households and increased egg consumption was recorded but intake of most nutrients did not change.

The performance of three types of wheat in Ethiopia were compared by Zewdu Ayalew Abro and co-authors. These were traditional local varieties susceptible to stripe rust (caused by *Puccinia striiformis* f. sp. *tritici*), improved varieties that were rust susceptible and improved varieties that were rust resistant. The last of these increased yields by 8% in comparison with traditional susceptible varieties but rust pressures were low in the years under study. Unfortunately, the improved varieties, with or without rust resistance performed considerably worse than local varieties under drought and other abiotic stresses, emphasising the necessity of combining resistance to both biotic and abiotic stresses as well as high yield in the same variety.

Ruth Chepchirchir and co-authors report on the success of push-pull technology (PPT) as an integrated technique for the simultaneous control of stemborers, the parasitic weed, Striga, and low soil fertility in Uganda. This remarkable technique boosted yields of maize and reduced the probability of being poor from 48% to 28% as average household incomes increased from 135 to 235 US\$.

Post-harvest losses of horticultural crops in Samoa are a serious problem and consequently their reduction is a priority. Steven Underhill and co-authors found that losses were particularly high – up to 22% – for soursop (*Annona muricata*), papaya, Tahitian lime, mustard cabbage (*Brassica juncea*) and choko (*Sechium edule*). Contributing factors to these high losses were low or sporadic purchasing behaviour of consumers, necessitating long periods of storage and high tropical ambient temperatures.

Jannike Wichern and co-authors report on food availability and livelihood strategies among rural households across Uganda. Households with limited food availability relied

✉ R. Strange
r.strange@ucl.ac.uk

¹ Department of Genetics, Evolution and Environment, University College London, Gower Street, London WC1E 6BT, UK

mainly on crops grown on-farm but the majority of them were not food self-sufficient. Food availability patterns were largely matched by agroecological conditions and market access, with households in the drier northeast doing worst. The authors advocate interventions that include market access and off-farm opportunities.

Food crop marketing in Mozambique, a high price environment, was investigated by Rui Benfica and co-authors. They found that the relationships between smallholder agricultural productivity and market participation was bi-directional and that investments which lead to increased adoption of productivity-enhancing technologies could have significantly higher impacts on sales intensity than efforts to increase sales intensity could have on productivity.

Ana McCormick Myers and Matthew Painter provide evidence for a continuing pattern of racial and ethnic inequality in the United States in a study that included both native-born and immigrant Americans. When socio-economic status was held constant, blacks and Latinos, regardless of nativity status, were found to be significantly more food insecure than both foreign- and native-born whites.

The public food Distribution System (PDS) in Odisha State, India was assessed by Anjani Kumar and co-authors, who asked the question, can better governance improve food security? According to the figures, the answer was a resounding yes. These were taken from the National Sample Survey Organisation (NSSO) and from Village Level Studies (VLS) and showed increased coverage of households from 6.4% in 1993–1994 to 58.3% in 2011–2012. Moreover there was improvement in cereal consumption and general nutrition of a

large segment of the socially and economically weaker sections of society.

Soumya Gupta and co-authors studied the Women's Empowerment in Agriculture Index (WEAI) in relation to market orientation of farm production in India. The WEAI particularly focuses on the decision-making aspects of empowerment. Using data from three groups of adults i.e. landless, food-cropping and cash-cropping from the Chandrapur district of Maharashtra as representative of increasing degrees of market orientation, the authors showed that empowerment levels were highest for women in cash-cropping households followed in turn, respectively, by the other two households. The authors conclude that linking women to markets can enhance their power in agricultural domains and could be a pathway to their decision-making regarding the cultivation of crops, their sale and income. Further, they suggest that these could be areas for which relevant policies could be designed and tested.

Steven Yearley reviews Dieter Helm's book, 'Burnt out: the endgame for fossil fuels'. As agriculture is a major user of fossil fuels, should these be supplanted by renewables, there will be obvious implications for food security.

Malcom Blackie was impressed by Roger Leakey's book, 'Multifunctional agriculture, achieving sustainable development in Africa', considering it worthy of the widest readership possible. The book is based on papers published by the author from the mid 1990s to the present day and not only contains a staggering range of material but is also "a remarkable record of a scientific career devoted to changing the lives of the rural poor in Africa".