

In this issue

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This issue reflects the considerable international concern there is for food security on the African continent, with five original papers and two book reviews. Two of the other papers are concerned with Timor, one from the west of the island and the other from the east (Timor Leste), which seceded from Indonesia in 1999. One of the final two papers is concerned with the management of diseases in durian and jackfruit in the Philippines and the other with association of food insecurity with lifestyle behavior and body mass index among baby boomers and older adults. The two book reviews concerning Africa have the titles ‘Frontiers in Food Policy: perspectives on sub-Saharan Africa’ and ‘The Great African Land Grab? Agricultural Investment and the Global Food System. African Arguments’. The two other reviews concern climate change and development, and seaweeds.

Chrispen Murungweni and co-authors demonstrate the importance of disaggregating data in order to understand how people with different livelihoods cope with hazards. Taking the specific case in south eastern Zimbabwe of drought and development of the transfrontier Gonarezhou National Park, they recognized three types of livelihood: cattle-based, crop-based and non-farm based. Responses to serious drought were specific to the particular household type and there were interactions among them. Such information is useful in understanding vulnerability and adaptive capacity, and formulating interventions seeking to strengthen resilience.

Rice is one of the most important crops for food security in sub-Saharan Africa but, as Philomena Ogwuiké and co-authors point out, weeds are major constraints to productivity. Taking their data from nearly a thousand farmers in 4 countries, Cameroon, Democratic Republic of Congo, Togo and Uganda, they recorded the time taken to weed an upland rice

crop manually once, twice or three times and the consequent yield increases: the times taken were 173, 259 and 376 h.ha⁻¹, and the yield increases were 1.2, 1.7 and 2.2 t.ha⁻¹, respectively. However, in order to increase food security and alleviate poverty in the region, instead of increasing manual weeding, they propose development of locally adapted labour-saving strategies for weed control.

Laura Pereira and co-authors assert that, owing to a decline in subsistence agriculture across sub-Saharan Africa, there is an increased role for the private sector in food security strategies but that this is not sufficiently accounted for in food policy. They found that the purchase of food by the rural poor was an important food security strategy but that they were constrained by lack of income. Moreover, in consequence, they were liable to diet deficiencies owing to inadequate access to essential micronutrients.

Drought and virus infection are two of the major constraints to the production of sweet potato. Varieties that are drought tolerant, virus resistant and virus free are being developed but their uptake in the Kabale district of Uganda by poor rural households remains low. John Ilukor and co-workers modeled the potential adoption of these varieties and found that it was altitude dependent. Paying farmers, who farmed at moderate and higher altitudes, to adopt was economically sound but not at lower levels. Subsidy, in the form of free planting material that was virus free, only increased potential uptake by a modest 2 %. The authors suggest that policy should focus on creating environments that allow farmers to market their produce and thus raise their returns.

Pesticides are the principal means by which pre- and post-harvest diseases and infestations of crops are controlled. Concern about the safety of synthetic compounds has fired renewed interest in pesticidal plants but, according to Phosiso Sola and co-authors, several factors are stacked against their deployment in sub-Saharan Africa. These include inconsistent efficacy of plant products, lack of data on efficacy and safety,

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the prohibitive cost of registration, and a conventional pesticides sector that is inadequately developed. They suggest that commercialisation of botanical pesticides in sub-Saharan Africa will require favourable environments not only for the propagation and cultivation of pesticidal plants but also for their commercial development, which will need a conducive environment in the areas of regulations and protocols for production, marketing and trade.

The first of the two papers concerning the island of Timor investigates the impacts of a government subsidized rice programme on poor households in West Timor, where the traditional staple is maize. When the subsidized rice became available, all of the households interviewed by Bronwyn Myers and associates bought it, but because of a preference for maize about 30 % did not buy it again. Of those that bought it more than once, about half did so infrequently through lack of cash, suggesting a targeting failure, and some sold their own produce to purchase the subsidized rice, perversely leading to a poorer diet and food shortages. In the second paper from the island, as in the paper by John Ilukor and co-workers from Uganda about sweet potato, the subject is the low uptake of improved food crop varieties. These were introduced by the Seeds of Life programme in the wake of the destruction of buildings, equipment, irrigation systems, road infrastructure and disruption of market activities by the Indonesian army when the Timor-Leste (East Timor) population voted for independence from Indonesia in 1999. Liv Jensen and co-authors found, in a survey that encompassed over 1,500 households, that the factor, which was most strongly related to adoption, was having a relationship with a grower of an improved variety and the closeness of that relationship. Social relationships should therefore be taken into account when formulating dissemination strategies for new crop varieties.

In a further paper dealing with the difficulties of promoting the uptake of new technologies among smallholder farmers, Rosalie Daniel and co-workers report on the case of severe diseases in durian and jackfruit in the Philippines. Both were caused by the Oomycete, *Phytophthora palmivora*, but there was limited understanding of these diseases by farmers and extension professionals. However, farmers identified management of the diseases as their highest priority. They were therefore given information on the biology, epidemiology

and management of the diseases. In a three year participatory programme, trials were managed by growers, managers and extension staff. Benefit-cost analyses of the results allowed the formulation of three management packages—low-, medium- and high-input, giving farmers a choice according to their resources and capacities.

SangNam Ahn and co-authors studied associations of food insecurity with body mass index (BMI) among baby boomers (persons born between 1946 and 1964) and older adults (persons born before 1946) in an eight-county region of Texas. Of the baby boomers, 32 % were overweight and 41 % were obese. Figures for the older adults were 38 % and 29 %, respectively. About 8 % of each group were both obese and food insecure. With baby boomers and older adults, there was positive association between food insecurity and BMI only among adult females. Increased BMI was more common among ethnic minorities and those who were depressed. These statistics appear to be the harbingers of considerable health concerns in the future associated with overweight and obesity.

'Frontiers in Food Policy: perspectives on sub-Saharan Africa' edited by Walter Falcon and Rosamond Naylor emanates from a symposium series held at Stanford University's Center on Food Security and the Environment. It is a thought-provoking book of 17 chapters, written in the main by economists, which expounds on many of the salient points concerning food policy in this area of the world. One of the topics discussed in several of the chapters is security of land tenure, which is the subject of Lorenzo Cotula's book, 'The Great African Land Grab? Agricultural Investment and the Global Food System. African Arguments'. A particular feature, which is brought out in Benny Dembitzer's review of the book, is that, contrary to most perceptions, the vast majority of the purchases are made by local people at the expense of other local people. 'Climate Change and Development' is part of the fifth assessment of the Intergovernmental Panel on Climate Change (IPCC). Two other volumes will be released later in the year. The final book reviewed is 'Seaweeds: Edible, Available, and Sustainable' by Ole G. Mouritsen. David Castle found this an entertaining and well-researched book, which is richly illustrated — a must buy for anyone interested in the many aspects of seaweeds.