In this issue

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This issue consists of acknowledgements of reviewers, alerts for policy makers, nine original papers and three book reviews. The alerts for policy makers have been extracted from volume 5 of Food Security, published in 2013.

Climate variability and change is the common theme of the first two papers. The one by Bekele Megersa and associates takes the very specific case of the Borana pastoralists, who live in the southern part of Ethiopia and the northern part of Kenya. They have been experiencing recurring droughts, which have caused huge losses of cattle, the predominant livestock species, and, as a result, declining milk production, their main staple and favourite food item. This, in turn, has been perceived as having deleterious effects on the growth of children and adults have become thinner and shorter. Households that practised livestock diversification fared better in times of drought than those that did not; goats, sheep, chickens, camels and donkeys being the commonest additions to cattle. Aline Mosnier and associates take the view that adaptation to climate should not be viewed as a local problem which is geographically isolated but should be seen in a global framework. They contend that, where regions are interconnected by trade and imports are taken into account, the overall impact of climate change may be positive.

The next three papers are all concerned with successful growth of food plants. In the first of these, Bernard Kamanga and associates, working in Malawi, examine the adoption of ten annual legumes by smallholder maize farmers, which had been promoted from 1998 to 2004 as a means to diversify food production and also to maintain soil fertility. The most important criterion for adoption was suitability as food and therefore soyabean and groundnuts were the front-runners. Contributions to soil fertility, owing to the ability of legumes

(in combination with *Rhizobium*) to fix nitrogen and suppression of weeds were of secondary importance. Wayne Ganpat and associates, working in Trinidad, also examined the uptake of improved cultivation methods, known as Good Agricultural Practices (GAPs) with vegetables as the crops of interest. They found that the most important factors governing compliance with GAPs were land tenure and the number of visits to farms by members of the extension service. As a result, they advocate urgent action by the government to regularize farmers' tenancy arrangements and better education of the extension service. David Grzywacz and associates point out that pests are highly damaging to crops in sub-Saharan Africa (SSA) but that existing methods of control rely largely on the use of synthetic agrochemical pesticides. These have had little effect as most poor smallholder farmers cannot afford them. They therefore advocate the use of biological control with natural enemies of harmful insects and pesticidal plant materials that are indigenous as cheaper alternatives. Two products, which show particular promise, are the endemic insect baculovirus, *Spodoptera exempta* nucleopolyhedrovirus (SpexNPV), effective against the African armyworm and the plant *Tephrosia vogelii*, which owes its insecticidal properties to compounds known as rotenoids. This plant, incidentally, was one of the legumes promoted in the Malawi study as a means of improving soil fertility.

The final four papers are all concerned with socio-economic aspects of food security. In the first of these, Hartwig de Haen and Vincent Réquillart focus on changing consumption patterns and the consequent pressures of these on natural resources and food security. They suggest that these have implications for foresight work. In particular, they consider that such work should take account of differences in diets among nations, externalities along the production chain, competition between food and non-food uses of agricultural commodities and between agricultural and non-agricultural use of land and the means by which food scarcity causes hunger and

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malnutrition. Bruce Frayne and associates examined data from 11 cities in nine Southern African countries by the African Food Security Urban Network. They show that, among the urban poor, it is poverty that is at the root of food insecurity and malnutrition and that therefore it is lack of access to food rather than lack of availability, which is the core of the problem. In other words and to use the terminology of Amartya Sen, the cause is their lack of entitlement owing to their poverty. The authors also review the double burden of nutritional diseases owing to the co-existence of malnutrition and obesity in the urban areas of Southern Africa. Continuing the theme of monetary poverty, Ibrahima Bocoum and associates caution against the uncritical use of monetary income or expenditure indicators as measures of food insecurity. They reached this conclusion from a detailed study in Mali in which they found about 35 % of households were either poor but satisfied their calorie requirements by eating cheap foods or were non-poor and failed to satisfy their calorie requirements owing to social obligations and high expenditure on health care or transport. The paper by Rui Benfica examines the effects of price shocks on different wealth groups in rural and urban areas of Malawi. He found that in both rural and urban areas, the poorest households carried the heaviest burden of food price increases. However, poor households in urban but not rural areas were able to compensate by adjusting away from more expensive items. In contrast, price hikes had less effect on rural communities than urban ones owing to the fact that more households in rural areas were able to both produce and sell food. The author concludes that households should be compensated for welfare losses that result from price shocks by strengthening social protection interventions. These could include direct cash transfers and labor intensive public works programs.

David Ingram reviews two books, which examine the potential impact of climate change, one concerned with West Africa and the other with Southern Africa, and draws attention to a third, dealing with East Africa with a publication date in December 2013 (after his review was written). All three are produced by the International Food Policy Research Institute. The West African book makes a number of recommendations, which include weather monitoring, enhanced irrigation systems, conservation of natural resources and improvement of an international road network to encourage trade within the region. The Southern Africa book draws separate conclusions for the different countries although some, such as irrigation,

capacity building and development of drought and heat tolerant crops are common to all. Taking up the issue of drought and heat tolerance, these are two of the traits from an African species of Resurrection Plant that are being investigated by Jennifer Thomson, whose very readable autobiography with the title 'The life and work of a scientist in GM crops' is reviewed by Jonathan Gressel. Prof. Thomson is based in South Africa but her concerns on the continent reach far beyond that country. To take one example, transgenic maize resistant to the serious problem of maize streak virus is, at last, being field-tested. The book finishes with a resounding 'Yes, GM crops can help feed hungry people in Africa' and a plea to African politicians to listen to the poor rather than those who spread disinformation about GM. The final book, which is reviewed by Steve Sturdy, has the title 'Nutritionism: the science and politics of dietary advice'. The author, Gyorgy Scrinis, reviews the changing and often contradictory advice given by scientists as to what we should or should not eat. Initially, there were considerable successes in identifying single nutrients, which were deficient in diets such as vitamin C and iodine, but nutrition scientists are increasingly realizing that single-nutrient studies (the 'nutritionism' of the title) and guidelines are inadequate to capture the complexities of real-world diets and nutrition. One criticism of the book is that the author does not deal in sufficient depth with the politics of dietary research and how research and advice are entangled with the interests of the food industry and corporate concerns.

Richard Strange Richard Strange's background is in Plant Pathology, a subject to which he was attracted by its relevance to food security and in which he has published over 90 papers and two books. He currently holds an Honorary Chair at University College London and an Honorary Fellowship at Birkbeck College, University of London. In 2013 he was elected Fellow of the International Society of Plant Pathology. He has been involved in numerous overseas projects, sev-

eral of which were located in different African countries and has supervised Ph.D. students from these and other countries of the Developing World in topics directly concerned with plant disease problems affecting their food security.