



In this issue

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This issue of Food Security consists of an acknowledgement of reviewers and editors who have given up valuable time to review papers submitted to Food Security over the last year, a letter to the editor and 15 original papers together with reviews of four books under the heading of ‘Books in Brief’.

The first two of the original papers are concerned with access to appropriate genetic material of crop plants. These are followed by five papers, dealing with the dietary quality of various crop species and their cultivation. The subjects of the next two papers treat two forms of access and their relevance to food security: access to common resources and access to information from informal institutions. These are followed by a paper describing the use of mobile-phone services in a nutrition programme in Malawi and a paper using a Produce Desirability tool, showing, as an example, that the desirability of grocery store fruits and vegetables is lower in more rural counties of Montana State, USA. The last four papers deal essentially with the politics of food provision.

In the first paper, Ola Westengen and co-authors examine linkages between genebanks and farmers’ seed systems, placing them in six categories: Reintroduction, Emergency Seed Interventions, Community Seed Banks, Participatory Plant Breeding, Variety Introduction and Integrative Seed System Approaches. These were investigated from the point of view of enhancing farmers’ access to crop diversity and strengthening their access to suitable seeds.

Access to improved seed varieties remains an important constraint in many countries, as discussed by Adu-Gyamfi Poku and co-authors. Using Ghana as an example, they found that, despite the government passing a law, which aims to increase the availability of improved seed varieties to farmers by providing more opportunities to the private sector, there is still a chronic lack of varietal diversity. This was attributed to limited involvement of smallholder farmers in setting breeding priorities, restricted private sector participation in source

seed production, limited ability of an under-resourced public regulatory body to ensure high seed quality through mandatory seed certification and overdependence on a weak public extension system to promote improved varieties. The authors contend that these all represent challenges to governance.

Kibrom Sibhatu and Matin Qaim add to the literature concerning the relationship between farm production diversity and dietary diversity of smallholder farm households. Building on data from Indonesia, Kenya, and Uganda, they found that simple species count was positively associated with most dietary indicators but this relationship became insignificant in many instances when food groups were substituted for species count. Rather, dietary diversity was generated by cash income. The authors conclude that improving the functioning of agricultural markets and smallholder market access are key strategies for enhancing nutrition.

Enid Katungi and co-authors found that investment in research and dissemination of climbing bean (*Phaseolus vulgaris*) contributed significantly to improved household welfare in Rwanda. Planting of one additional kilogram of climbing bean seed raised per capita bean consumption by 2.8%, increased the probability that a household was food secure by 0.6% and decreased the likelihood of being poor by 0.6%.

In a rather similar paper, but with a different crop, Moti Jaleta and co-authors examined the role of the more extensive area occupied by improved maize varieties (IMVs) in Ethiopia, now second only to *teff* (*Eragrostis tef*). They found empirically that IMV adoption had a robust and positive impact on per capita food consumption and also significantly increased the probability of smallholders being in food surplus.

Yonas Bahta and co-authors report on homestead food garden (HFG) programmes implemented by the South African government. They found that such programmes reduced food insecurity among rural households by as much as 41.5%. To further promote farmers’ participation in HFG programmes, they suggest that facilitating easy access to credit, extension services, fertilizer, irrigation facilities and land are needed.

In a related paper, Samrat Singh and Meenakshi Fernandes investigated agricultural production and dietary diversity in a local market intervention, Home-Grown School Feeding

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(HGSF), in Ghana. They found that the intervention promoted greater diversity of food groups in school menus. These included non-staple crops such as dark, green leafy vegetables, which may alleviate deficiencies in key nutrients such as vitamin A and iron.

Pedro Delvaux and Sergio Paloma point out that common resources, although little researched, provide a hidden harvest for rural households and may act as a safety net in the event of poor harvests or seasonal lean periods. Drawing on data from the Nigerian General Household Survey, administered in 2012–2013, they found that access to common pasture and water resources was significantly associated with less reporting of food insecurity but that access to common forests, surprisingly, tended to be associated with food insecurity despite their being a potential source of food. No evidence was found for access to commons being a seasonal safety net for households during the lean season.

Mastewal Yami and Piet van Asten studied the influence of informal institutions in achieving sustainable crop intensification in Uganda. They found that informal institutions played a central role by enhancing farmers' access to land resources, financial resources and farm inputs. However, they were biased against non-clan members and female members of communities.

International development programmes are becoming increasingly holistic, involving multiple goals such as the integration of agriculture and nutrition, 'impacts at scale' and value for money. However, such numerous goals create complexity and tensions among them. In the light of this, Chris Huggins and Alvaro Valverde adopted a systems theory to examine a mobile Nutrition programme (mNutrition) in Malawi, which aims to improve nutrition, food security and livelihoods for rural women and children, through mobile phone-based information services.

Carmen Byker Shanks and co-authors present a Produce Desirability (ProDes) Tool in their paper. This is a measure of the food environment in that it assesses the desirability of fruits and vegetables and is based on sensory characteristics, which are generalizable and can be applied in different socio-ecological contexts. The characteristics are overall desirability, visual appeal, touch and firmness, aroma, and size. The tool was tested in the USA and showed that desirability of grocery store fruits and vegetables was lower in more rural counties of Montana.

In the first of the last four papers, which are mainly of a political nature, Willeke Veninga and Rico Ihle discuss the import vulnerability of the Middle East with particular reference to the effects of the Arab Spring on the wheat trade in Egypt, where wheat is highly subsidized. They found pronounced seasonal patterns in the years 2010 and 2012–2014 which were stable but a strong negative demand shock in the second half of 2011 caused by political turmoil, resulting from the Arab Spring.

Jeroen Candel and Robbert Biesbroek discuss policy integration in the European Union governance of food security in the wake of the global food price spikes of 2007–2008 and 2010. They found that some advances had been made but that there were significant differences among policy domains and integration among policies appeared to have come to a halt in recent years. They end the paper by saying, "Although high policy integration ambitions help picturing the desired path forwards, in the short-term it may be more productive to harvest the low-hanging fruit to ensure that actions do speak louder than words."

Governance at the multi-government level is also the theme of the paper by Lisa Clark, but is concerned with international food assistance. She examined Ready-To-Use Foods (RUF) to treat malnutrition, local-regional procurement (LRP) strategies to obtain raw materials for RUFs and international standards for food safety and quality applicable to finished RUFs. However, some of the proposed changes for international standards of RUF safety and quality may conflict with other priorities such as incorporating locally sourced foods, for example, pulses.

Finally, Koen Dekeyser and co-authors re-examine the concept of food sovereignty. They point out that this often lacks clarity, leading to a variety of interpretations. Originally, the concept arose out of La Via Campesina (LVC), translated as 'The Peasant Way', and has been characterized by Edelman as '*at once a slogan, a paradigm, a mix of practical policies, a movement and a utopian aspiration*'. Predicting the future of such a movement is problematic, particularly as the question of who is sovereign does not have a universally accepted answer – the peoples, communities, the state? Nevertheless, the authors suggest that food sovereignty may play a 'connecting concept', uniting streams of theory and practice from systems thinking to post-growth economics and social innovation.

David Ingram, our book review editor, enjoyed all four books published by Oxford University Press, which he reviewed and which address broad, generic issues relating to food security worldwide.



Richard Strange, Editor-in-Chief of Food Security. 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 100 papers and two books. He currently holds an Honorary Chair at University College London and is a Fellow of the International Society of Plant Pathology. He has been involved in numerous overseas projects, several of which were located in 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.