In this issue

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This issue begins with two review papers, one dealing with the threat to food security in Africa posed by alien invasive insect and mite species and the other with nutrition-sensitive livestock interventions in the Sahel. These are followed by 12 original papers encompassing a wide range of topics, the first of these dealing with the impact of soil and water practices on the vulnerability to food insecurity of households in Eastern Ethiopia. The next three papers are concerned with food production and handling, and are followed by three further papers in which the sociological elements of production are considered. After two papers dealing with mainly sociological issues, the final three papers present economic treatments of food commodities.

Gudeti Sileshi and co-authors draw attention to the threats posed by invasive insect and mite species (AIS) to food production and biodiversity in Africa. They identified 16 such species that affected all categories of food crops on the continent, causing annual losses in financial terms of over US\$ 1 billion and untold suffering in human terms. In order to counteract this, the authors propose a pan-African strategy of biosecurity and that this should be complemented by yield improvement technologies.

Reporting on a workshop concerning the Sahelian region of Africa, Paula Dominguez-Salas and co-authors point out that, despite the considerable potential for livestock and animal-source foods (ASF) to improve the nutrition of vulnerable households, they are under-exploited, even though, in some areas, human nutrition is dependent on them. One particularly salient observation was that 79% of those who attended the workshop and worked with livestock had never monitored outcomes of attempts to improve human nutrition.

Million Sileshi and co-authors examined the impact of soil and water conservation practices on household vulnerability to food insecurity in Eastern Ethiopia. Using endogenous switching regression and propensity score matching, they found that the adoption of soil and water conservation reduced the probability of farmers being food insecure and positively impacted per capita food consumption expenditure and net crop value. Accordingly, they suggest that policymakers and development organizations should consider soil and water conservation as main strategies to reduce land degradation and improve the livelihoods of rural farm households.

Santiago Lopez-Ridaura and co-authors report on the typology of farm households and their livelihoods in the food insecure Western Highlands of Guatemala, where maize and coffee are the dominant crops. Analyzing data from nearly 5,000 farm households, they found that 52% of farms did not have the means to attain sufficient energy from their agricultural activities. However, farm households that were maize-based, coffee-based or farmed speciality coffees were 60%, 83% and 74% food secure, respectively. They suggest that the procedure of combining typology of farm households and their livelihoods with the analysis of their food security status provides a useful approach to targeting development interventions aimed at combating hunger, poverty and malnutrition.

Badrin Nessa and Hermann Waibel found that homestead aquaculture in Bangladesh increased household food consumption and improved dietary diversity by generating additional cash income and stimulating higher fish consumption from home production. They emphasized that homestead fish production is important for many low-income households but averred that Governments tend to undervalue home production by the poor. They therefore suggest that the Department of Fisheries in Bangladesh should reconsider its view on the role of homestead pond production and give it greater recognition in its extension activities.

In a second paper on aquaculture, Cyprian Odoli and co-authors examined post-harvest technology in small-scale fisheries, which contribute about 4.7% of Gross Domestic Product in Kenya. They found abundant interventions in both handling and

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processing, but low utilization (<40% of installed cold rooms, dryers and smoking kilns) and a weak regulatory framework.

Rwanda has experienced significant economic growth following the 1994 genocide. This growth is attributed to the expansion of its agricultural sector, specifically farming intensification and the government's focus on creating strong agriculture cooperatives. However, many academics have argued that Rwanda's growth comes at the cost of an authoritarian governmental regime, whose policies have too heavy a hand in the daily activities of smallholder farming. In contrast to this perception, John Meador and David O'Brien found that most co-operative members, particularly females, trusted their cooperative leaders. Moreover cooperative policy, most notably the mandatory inclusion of high numbers of females in cooperative decision-making, is helping to promote strong agricultural institutions as well as sustainable economic development.

Clifton Makate and co-authors studied the adoption of drought-tolerant maize and conservation agriculture in Zimbabwe. They found that adoption was skewed towards wealthier households with larger land holdings and access to agricultural extension. They suggest that reducing the gap between the rich and the poor by subsidizing the uptake of improved maize varieties, including drought tolerant ones, prioritizing equitable land distribution and providing specialized extension services could improve food security.

In Ethiopia, agricultural land is extremely fragmented and densely populated. Fitsum Adela and co-authors found high levels of poverty among farmers without access to irrigation. Using an endogenous switching regression (ESR) model, the authors found that governance of irrigation, perceived water scarcity and access to information had significant effects on the adoption of irrigation schemes. From their model they were able to conclude that existing governance regimes, rather than physical scarcity of water, was responsible for the perception of water scarcity.

Marta Kozicka and co-authors analyzed India's Targeted Public Distribution System (TPDS). Their main objective was to explain the under-purchase, or low take-up, from the TPDS, which is typically attributed to 'leakage', i.e. the diversion of food grains from eligible consumers. The authors suggest that a solution to the problem is self-targeting, whereby poorer households increase their consumption from the TPDS and wealthier households restrain themselves from consuming subsidized commodities. From a large household dataset, the authors estimated that a minimum of 6.5% of grain from TPDS would be saved.

Kaipeng Wang and Nicholas Bishop studied the association between social support, monetary resources, and food insecurity among a nationally representative sample of older Americans. Analyses included 1,164 Americans aged 65 and above from the 2012 Health and Retirement Study and the

2013 Health Care and Nutrition Study. They found that older adults with greater social strain and lower emotional support were at increased risk of food insecurity. Greater monetary resources moderated the effect of social strain but low emotional support reduced the effect of greater household assets to non-significance. The authors conclude that the quantity and quality of social relationships should be considered as factors affecting food security.

In the first of the three papers dealing principally with the economics of food commodities, Alejandro Acosta and co-authors, combining market structure and econometric methods, analysed price transmission. They proposed a structural analytical framework, consisting of three steps, and applied it to the milk market of Panama. This confirmed that the milk market structure in Panama is oligopsonistic i.e. there were only a few buyers and that there was collusion among them.

Kebede Gebru and co-authors investigated the role of the malt barley business in the amelioration of food insecurity in Northern Ethiopia. They first examined the reasons for inclusion or exclusion from the business and then the food security impact of inclusion. Older farmers and farmers living far from the main town of the district were excluded but inclusion results in higher incomes, better food access and higher diet diversity scores.

In another paper on coffee production in Rwanda (see the paper by John Meador and David O'Brien), David Ortega and co-authors obtained data from over 1,000 coffee producing households, showing that cooperatives were a critical institution for building farmer capacity, promoting adoption of improved technologies and inputs, and increasing productivity. The role that cooperatives could play in increasing farmer welfare and reestablishing the coffee sector as a pillar of growth in the country is discussed.

In the first of the two books reviewed, *Food Bank Nations*, Robert Herdt quotes a statement made not by the author, Graham Riches, but from the foreword by Elizabeth Dowler, who asserts that the book is "a passionately argued and evidenced polemic against the neoliberal capture of charitable response to local experiences of poverty, manifested as people 'going hungry', in some of the richest nations on earth." Dr. Herdt agrees with the argument and that "polemic" is an appropriate word but finds that the book is "thin on factual backing and heavy on rhetoric".

Ralph Cummings, who reviews R.S. Paroda's book *Reorienting Indian Agriculture: Challenges and Opportunities*, is an economist who has followed Indian agricultural development for over 60 years. He found the encyclopaedic nature of the book both a strength and a weakness, so although it "covers everything", research, extension and production programs are not evaluated.