## EDITORIAL

## In this issue

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This issue consists of ten original papers, two conference reports and two book reviews. The first six original papers are concerned with various food and livelihood resources and the remaining four, following on from the special section in the October issue, constitute a second special section dealing with nutrition-sensitive agriculture, guest edited by Detlef Virchow and Hannah Jaenicke.

Maarten van Ginkel and associates point out that past efforts to improve the livelihoods of the more than 400 million people who live in the developing world and depend on dryland agriculture have either not been successful or are now facing a declining rate of impact. They suggest that this has been due to piecemeal attention to individual components of the farming systems and that new more holistic approaches to research and development are needed.

Ernest Dube and Morris Fanadzo call attention to the dual use of cowpea on the African continent, the leaves being used as a vegetable as well as the grain from the same plant. Clearly a balance must be struck between harvesting these two different parts of the plant in order to maximise the total yield.

Sweet potato is an important staple on the African continent, where Uganda is the country with the largest production of nearly 3 million tonnes per annum. There are two types, white fleshed (WFSP) and orange fleshed (OFSP), the latter being a rich source of beta-carotene. This compound is absorbed from the intestine and converted into vitamin A in

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the presence of bile acids. There is therefore considerable interest in the distribution of OFSP in order to reduce the incidence of vitamin A deficiency. Richard Gibson describes how sweet potato vines, the means of propagation, are distributed in Uganda, mainly by private multipliers, and suggests improvements to the system. In particular, he advocates greater use of private multipliers by the National Sweet Potato programme in order to disseminate new varieties more widely and more quickly.

Pummelo, *Citrus maxima*, is a hybrid of sweet orange and grape fruit. It produces the largest citrus fruit known and is grown mostly in the East. Yuichiro Amekawa describes how Thai farmers of pummelo are balancing the twin imperatives of sustainability and maintenance of livelihoods. Two communities were chosen, one located in the highlands, which sold to local and domestic markets and the other, located in the lowlands, whose sales also included those for the export market. The highland community employed low-cost-lowreturn procedures whereas high-cost-high-return procedures were adopted by the lowland community.

Timor-Leste has one of the highest rates of chronic malnutrition in the world and a seaboard of over 500 Km, yet fishing, which could provide the needed protein, vitamins and micronutrients, is underdeveloped. According to Enrique Población, one reason for this is that the Timorese people have a land based culture, which is rooted in myth, the sea being regarded as a place of the wild and the unknown. Another reason is that animal meat, not fish, is an important part of rituals. These are ceremonies performed for the production of crops and at births, deaths and marriages. In order to tackle the malnutrition problem, the author, who lived for several months among the Timorese people, recommends development of the fishing industry and promotion of fish consumption. As a corollary, he also recommends investment and management of ice distribution, the ice being required to maintain the freshness of the fish.

Motshwari Obopile and Tapiwa Seeletso are also concerned with malnourishment, but on the African continent. They suggest that the problem could be ameliorated by a diet that includes direct consumption of insects or livestock that has been fed on insects. However, they report a decline in insect consumption (entomophagy) in Botswana, the only insect widely consumed being the mopane worm. In order to reverse this, they identified 26 species of insects (beside the mopane worm) that had been eaten by Batswana in the past and describe methods of collection, cooking and storage.

The following four papers form the special section concerned with nutrition-sensitive agriculture, which have been edited by Detlef Virchow and Hannah Jaenicke. The first by Gudrun Keding and associates points out that achievement of nutrition-sensitive agriculture will require a trans-disciplinary approach, which will include the three sectors, agriculture, nutrition and health at research, extension and political levels as well as educated consumers who understand what constitutes a healthy and sustainable diet.

The remaining three papers describe case-studies of nutrition-sensitive agriculture in Southeast Asia, South Africa and the Philippines. In the first of these, Katinka Weinberger describes the potential for home and community gardens to contribute to nutrition-sensitive food systems in Southeast Asia, an area which is characterized by high levels of economic growth but also by unsustainable production and consumption patterns. Production from these gardens is almost exclusively for own consumption and has the potential to provide more nutritious food and healthier urban environments and lifestyles.

Reporting from South Africa, Milla McLachlan and Anri Landman, assert that many South African households are not able to afford a balanced food basket at current food prices and income levels. This serious problem requires attention on several fronts. Entry points for nutrient-sensitive agriculture include linking small-scale production and nutrition education; strengthening alternative marketing channels and local food economies; monitoring food prices; and development of appropriate governance and institutional arrangements.

Oscar Zamora and associates describe a number of successes of nutrition-sensitive agriculture in the Philippines. Some of these have been the result of Government-initiated programmes such as one with the acronym LAKASS, which has reduced the incidence of underweight, stunting and wasting in the most nutritionally depressed municipalities of the country. Other successes have been in the implementation of school-based production programmes and bio-intensive gardening, to name two. There have also been crop-breeding initiatives with sweet potatoes, maize and rice. The authors emphasize that, among other factors, the successes of these programmes were attributable to strong political will. The two conferences reported were the 3rd annual one of the Leverhulme Centre for Integrative Research on Agriculture and Health (LCIRAH), held in London in June 2013 and the 10th quinquennial one of the International Society of Plant Pathology (ICPP2013), held in Beijing in August 2013. The two day LCIRAH conference, reported by Jody Harris and associates, consisted of four sessions: Empirical methods for analysing nutrition and food consumption; Randomized control trials and other methods for assessing interventions; New methods to assess food consumption and nutrition; and New methods to assess food systems. The complexity and interrelatedness of the constituent parts of the topic were emphasized but there was also an enthusiasm that now people were getting together to solve the problems of feeding the growing world population adequately.

The 10th International Congress of Plant Pathology, reported by You-Liang Peng and associates and attended by 1179 delegates from 73 countries, was a great success. There were two plenary sessions, one on the role of plant pathology in a globalized economy and the other, of particular interest to readers of this journal, had the title 'Can we improve global food security?' In this session, after an introduction by Richard Strange, three speakers, Zhaohu Li, Fen Beed and Ulrike Grote gave presentations on the physical, biological and sociopolitico-economic environments, respectively, in which sufficient food must be produced to feed the world's population. On the next evening there was a session with the title '1 billion hungry people: what can we do?' at which Lise Korsten and the 2009 World Food Prize laureate, Gebisa Ejeta spoke. After which, they were joined by the speakers from the plenary session of the previous day to form a panel to answer questions from the floor. Food Security was therefore well represented at the Congress. In addition, there were five keynote sessions nine evening sessions (including the one already mentioned) and 45 concurrent sessions. The range of topics was vast, illustrating the enormous array of organisms that attack our plants, the plethora of techniques required to combat them and the seriousness of the threat they pose to our food supplies.

David Ingram, the book review editor of Food Security, found 'Food Words—essays in culinary culture' an entertaining book consisting of sixty-one key words currently in common use among researchers and teachers in the field of food studies. These are arranged alphabetically and each is followed by a succinct essay—a useful reference for students of food studies.

The second book reviewed, 'The Burning Question' by Mike Berners-Lee and Duncan Clark, also had a warm reception from the reviewer, Peter Gregory, who found it well written and highly readable. The topic is the human use of fossil fuel and the associated consequences of changes in atmospheric composition and climate.