This special publication on African Indigenous Knowledge Systems and Food Security brings together a number of research papers based on studies conducted in Tanzania, South Africa, Democratic Republic of the Congo (DRC) and Malawi. The term ‘Indigenous Knowledge Systems’ is used to describe the bodies of knowledge developed by local Communities’ as opposed to the western scientific knowledge that is generally referred to as ‘modern’ knowledge. Indigenous knowledge has been articulated in various ways as the basis for local-level decision-making in local communities various aspects of life including issues related to food security. It has value not only for the culture in which it evolves, but also for scientists and development agencies striving to improve conditions in rural localities. It forms the basis of locating the development process within the context of local ways of knowing including culture and value systems. Incorporating indigenous knowledge, therefore, into food security policy strategies can lead to the development of effective strategies that are cost-effective, participatory and sustainable as they are based on what the people themselves know and can sustain.

One of the major challenges facing the world community today is to provide the people with the food they need based on their cultural values and available local resources. This challenge is most critical in low-income, food-deficit countries, most of them are in Africa where food production continues to grow more slowly than population. Even in these countries food needs vary from region to region and among different local communities. This means that approaches to food security have to be tailored to each situation, both environmentally and culturally. Ironically, food insecurity in rural Africa occurs where agriculture, both crop and animal production is still the main means of livelihood. Conceived efforts are therefore required to eradicate poverty and achieve food security by mobilizing innovative strategies from the local communities and people themselves using their own ways of knowing. These tend to be marginalized by western science and technology in the search for sustainable solutions to food security. This means putting people and their local knowledge systems at the centre of agricultural and rural development process.

The above is based on the increasing recognition that the availability of community and household food supply and access are crucial to achieve food security in African local communities. The use of indigenous knowledge systems in solving food shortage remains a powerful means of achieving and sustaining household food security. Most of this local knowledge resides in women, especially in the rural areas, where they are often responsible for food harvesting, processing and storage, collecting of water and firewood and for generating incomes for subsistence. They mostly use their own local knowledge systems. Therefore, any research and policy strategy development cannot neglect the role women and indigenous knowledge play in community and household food security.

In addition to cultivated crops and domesticated animals, African rural communities in their specific environments, collect, hunt and eat wild food resources as an important food security and nutritional strategy, especially during times of food shortage. These include fruits, nuts, leaves, mushrooms, roots, animals and eggs. Some communities, especially in the rainforests consume them more routinely and contribute to their overall nutrition through dietary diversity. These indigenous foods provide inexpensive, safe, nutritious foods throughout the whole year. Trial and error experiments have contributed greatly to the development of many indigenous techniques and practices for production, harvesting, processing and preserving foods at rural community and household levels. Indigenous methods and solutions applied by women to sustain household food supplies are culturally acceptable, economically practicable, and more appropriate for the local environment and conditions than modern techniques and solutions suggested by scientific experts. However, one aspect which tends to be neglected in research and food security strategies is the role and knowledge children, both boys and girls have about these wild and domesticated food resources.

The articles which constitute this special publication on African Indigenous Knowledge Systems and Food Security address the issues discussed above: Hassan Kaya looks at the indigenous knowledge of wild-food resources among children in Tanzania. Ally Z. Lyana and Manimbulu Nlooto discuss culture and food habits in Tanzania and the Democratic Republic of Congo. Fanti S. Pitso and Mmola R. Lebese look at the traditional uses of wild edible plants.
in arid areas of South Africa. Yonah N. Seleti and Gaoshebe Tlhompho discuss rural women subsistence farmers, indigenous knowledge systems and agricultural research in South Africa. Ally Z. Lyana interrogates perceptions of indigenous African hunting communities in Tanzania on the use of game meat resources. Hassan O. Kaya and Ally Lyna examines the knowledge and perceptions of rural communities in Tanzania on consumption of wild food resources. Joseph N. Lekunze makes a market analysis of cowpea and pumpkin leaves as indigenous vegetables in the North-West Province South Africa; Gaoshebe Tlhompho discusses African food security strategies and climate change. Gregory Kamwendo and Juliet Kamwendo discuss the contribution of indigenous knowledge systems to food security in Malawi.

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