QSA Notes

Food security: the family farmer and the global food system

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The farmers' market in Kampong Thom, Cambodia

According to the UN Food and Agricultural Organisation's (FAO) State of Food Security and Nutrition in the World 2020 report, the number of people affected by hunger globally has been on the rise since 2014. Nearly 750 million – or nearly one in ten people in the world – are exposed to severe levels of food insecurity, and what's more, approximately 2 billion people do not have regular access to safe, nutritious and sufficient food. We are already off track for meeting Sustainable Development Goal 2.1 to end hunger and all forms of malnutrition by 2030, and it is estimated that the COVID-19 pandemic may add up to another 130 million to these figures [1] .

Even with food available, health and nutrition are not givens: much of the population in question live in lower income countries and rely on starchy staple foods with limited access to nutritious fruits, vegetables and animal source foods. The FAO estimates that some 3 billion people cannot afford a healthy diet, which on average costs five times more and is unattainable for those living on or below the international poverty line. Unsurprisingly, the prevalence of undernourishment is higher amongst women than men, and geographically speaking, is highest in the African continent, at 19%, which is more than double the global average.

The UN Food Systems Summit, to be held this September, is aimed at guiding the transformation of global food systems to reduce hunger and address malnutrition. It was also welcomed for finally recognising the significant role of farming in climate and biodiversity concerns. Achieving the Sustainable Development Goals means that the path towards SDG 2 (Zero Hunger) must fundamentally integrate SDGs 3 (Good Health and Wellbeing) and 13 (Climate Action).

However, the summit's framework fully assumes that productivity is the key problem of food systems to be able to feed a growing world (WEF 2020), and that market-based and high-tech industrial solutions such as value chain integration and genetic engineering are essential factors necessary for addressing global food security. Meanwhile, no mention was made of ecological farming, civil society or the concept of food sovereignty, despite the supposed focus on sustainable food systems.

This comes despite clear and growing evidence that the industrial food system contributes significantly to environmental degradation and climate change. Its 'high-external input, resource-intensive agricultural systems have caused massive deforestation, water scarcities, biodiversity loss, soil depletion and high levels of greenhouse gas emissions,' (FAO 2018) the last of which is estimated at 21-37% globally.[1]

The fact also remains that it is primarily small-scale producers who feed their communities. [2]

It is no wonder then that controversy has surrounded the summit, demonstrating an unfortunate but typical example of the political and economic powers at play in international decision-making. 'The summit appears extremely biased in favour of the same actors who have been responsible for the food crisis,' observes one rights group (*The Guardian* 2021). But the UN Special Envoy leading the Food Systems Summit denies her connections to big agribusiness and the Gates Foundation have influenced the summit's orientation. And while the inclusion of human rights in a revised agenda has been much welcomed, hundreds of small-holder farmer, civil society, indigenous and human rights groups are maintaining their stance in boycotting the summit, as they remain concerned that the structure and framework of the summit will still effectively leave them, and their view and concerns side-lined.

As with many of QSA's project partners, many of these farmers whose livelihoods and income depend on agriculture, are increasingly employing various kinds of organic and regenerative agriculture that are proving viable and socially, economically and ecologically sustainable for managing – and balancing – their food and livelihoods security together with the health of their people, land and animals. Organic farming, agroecology, agroforestry and permaculture (to name a few) are continually evolving.

These days, St Jude Family Projects in Uganda runs a small research and innovation lab – one of several exciting indications of the cumulative impact that QSA and DFAT funding has

contributed to in terms of organisational strengthening over the years. The lab is geared towards improving access and methods to resources and increased productivity in sustainable, organic and regenerative agriculture. Keeping their interests grounded in the practical circumstances, applicability and results for the common farmer (including those involved in the QSA project), Daniel and Godfrey, who are both researchers and agricultural trainers, continue their experiments with a lot of energy, employing 'recipes' tested from Daniel's soil studies in the US, and combining them with local indigenous and practical knowledge derived from working with local farmers. Daniel is very informed about the wider political context relating to agriculture, and is aware that the growing successes of regenerative agriculture is worrying the big agri-companies.

Effective methods for seed coating and preservation have been taught and applied with farmers for seed saving and are already proving very effective at keeping pests and rodents away. One method they are using in the project is mixing (blackstrap) molasses with ash as a coating for seeds prior to storage; another uses lantana and chili. This also helps the farmers not to eat the edible seeds! At planting time, the coat of molasses and ash provides additional nutrients and minerals as well as encouraging microbes in the soil so that the seeds can prosper.

During my last visit to St Jude in early 2020, Godfrey demonstrated his learned method of banana reproduction and node sterilisation: many more suckers can be produced from a single node, and this has been used to help revive banana cultivation en masse in the current project.

In terms of technology, an innovative seed planter (see picture) was also introduced in the current project. It is a relatively cheap and simple, yet immensely labour-saving and time-efficient mechanism for the otherwise highly intensive work involved in the planting season for smallholder farmers. The idea comes from Daniel's Masters research and an old tool that has been modified and appropriated for a new purpose. QSA and DFAT funding has helped to replicate the tool for the project's farmers groups. The seeds are loaded into the tube, which is then used upright, eliminating the need for farmers to bend to reach the soil. Instead of requiring either two people or two rounds of the field to plant and then cover the seed, the seed planter does both in one movement, releasing the right amount of seed as the planter strikes the ground. Altogether, the seed planter more than halves the time and effort required for manual planting, saving farmers many hours of almost literally back-breaking work.

Banana sucker multiplication

Daniel holding a seed planter

Friends, if you wish to support QSA and its project partners' work in food security through COVID-19 and recovery, please consider donating to enable this work to prosper. Projects are multifaceted and help to improve nutrition, agricultural skills, water harvesting, marketing and sustainable livelihoods. Visit our website for details – www.qsa.org.au

All photos credit: QSA.

1. FAO, IFAD, UNICEF, WFP and WHO. 2020. *The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets,* Rome.

2. Canfield M, Anderson MD and McMichael P. 2021. *UN Food Systems Summit 2021: Dismantling Democracy and Resetting Corporate Control of Food Systems,* Frontiers in Sustainable Food Systems, 5:661552