
The issues driving global food security are complex. They involve many variables such as culture, economics, gender, biology, climate, and of course, politics. What may seem like a simple issue, often has confounding variables at play. One of the goals of *Field Notes* is to highlight these complexities and the science which could help unravel them. But sometimes complexity is an issue of perspective. And a new perspective can be an invaluable tool. The more angles from which to objectively see an issue, the closer we can get to the truth. I was confronted with a new perspective recently: Urban Agriculture.

Food produced from urban agriculture, with its premium price for equal nutritive value (1), has to me always seemed a great example of a luxury choice. It's popular appeal driven by those healthier-than-thou voices of friends and neighbors enjoying us to "know where your food comes from". I was guilty of dismissing it as a solution in search of a problem. But not all urban agriculture is created equal.

In the year 2007, for the first time in history, the population residing in urban centers around the globe surpassed that portion of the population living in the rural countryside; and the trend continues. Currently, 55% of the global population lives in an urban area, with projections of 68% by 2050. In parts of the developing world, well over half of city dwellers live in extreme poverty and are documented spending as much as 85% of household income on food. Studies of urban agriculture in the developing world have demonstrated it's contribution to higher calorie intake, more diverse and nutritious diets, as well as increased household income. It has also shown even greater benefits to women who often don't have equal employment opportunities in urban areas. Estimates are that women comprise 65% of urban farmers globally. With continuing global migration toward urban centers (a great majority of which is occurring in Asia and Africa as they continue to industrialize), urban agriculture has potential to make a significant contribution to global food security going forward. (2, 3)

2018 was a foundational year for EGX in every sense of the word. To the best of our knowledge, our vision of merging faith-based efforts with rigorous academic agricultural research is a relatively novel undertaking and, quite like founding a new organization, is FULL of firsts. We began working with our first clients, an American couple leading an AIDS/HIV clinic and 80 local staff, in a village on the Mambilla Plateau of eastern Nigeria. They have become keenly aware of how improved agricultural practices could impact the lives and livelihoods of their community.



Priority one has been identifying and establishing relationships with the institutes, scientists, and experts, who possess the technologies (crop varieties, cultural practices, etc.) which will improve food production for local farming families. Through our connections at both Kansas State University and Oklahoma State University, we have established relationships with leadership and scientists at the International Institute of Tropical Agriculture (IITA), an international research institute with an annual budget of just over \$100 million, conveniently based in Ibadan, Nigeria. We are currently working with IITA to sift through their latest research, for solutions which could change the outlook for household nutrition and income on the Plateau. Next, through our relationships at the University of Nebraska-Lincoln, we were introduced to scientists in the national Nigerian extension service (NAERLS), the agency responsible for introducing farmers to new ideas and production practices. Our new friends at NAERLS were excited to learn of someone wanting to make a difference in agriculture for families on the Mambilla Plateau and have committed to lend whatever assistance and expertise they can.

Africa is littered with good intentions. Someone commented to me that as you drive into any village, you will inevitably see a weathered sign marking a development project initiated by some NGO (non-governmental organization) at some point in the past. But too often, all that remains of the project is the faded sign. One of the major reasons so many great projects don't last is a lack of community buy-in. The project was based on an "outside looking in" perspective. It's critical to understand the complexities of a community and its agricultural production systems. We believe those complexities are best understood by those living and working in the community every day. This is why EGX, rather than initiating projects, equips those on the ground, already invested in the community, with expertise from within the country, to initiate agricultural projects tailored to that community.

The HIV/AIDS clinic on the Mambilla Plateau who are seeing a need to improve agriculture - they understand the community. The research institutes in Nigeria (IITA and NAERLS) have the scientific and technical capacity to make a difference on the plateau. The next step is bringing everyone together. We're now arranging a trip for sometime in June or July, in which the agricultural issues of this region of the Mambilla Plateau will be assessed, and a strategy will be developed to impact lives and livelihoods on the plateau.

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East Gate Extension is a 501c3 charitable nonprofit organization. www.eastgateextension.org

1. Garcia, J.M. and Teixeira, P., 2017. Organic versus conventional food: A comparison regarding food safety. *Food Reviews International*, 33(4), pp.424-446.
2. Orsini, F., Kahane, R., Nono-Womdim, R. and Gianquinto, G., 2013. Urban agriculture in the developing world: a review. *Agronomy for sustainable development*, 33(4), pp.695-720.
3. Poulsen, M.N., McNab, P.R., Clayton, M.L. and Neff, R.A., 2015. A systematic review of urban agriculture and food security impacts in low-income countries. *Food Policy*, 55, pp.131-146.

