



EAT Stockholm Food Forum 2018

Background Paper

Transforming Agri-Food Systems from the Ground Up: Empowering Smallholders

DISRUPTIVE DIALOGUE CO-ORGANIZED BY EAT & RUFORUM

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Global demand for food is projected to grow significantly between 2005 and 2050¹. How can the world meet this demand while ensuring that poverty and hunger are reduced and the environment protected?

Family farming is core to agriculture, with 98 percent of the world's farms being family operated. The size of these farms varies across continents, but most comprise less than two hectares. Smallholder farmers are estimated to control between 53-75 percent of agricultural land and to contribute to between 53-80 percent of global food². While current yields are significantly lower than their potential, empirical evidence³ has repeatedly shown that small farms are economically efficient, especially when land is scarce and labor abundant⁴.

This makes it **more imperative than ever to work with small farmers** to meet both global food needs and achieve the United Nations' Sustainable Development Goals, especially in the face of climate change. Improving the productivity and sustainability of small farms and their links to markets is important to the farmers themselves, consumers worldwide, agribusinesses small and large as well as local, national and international governments. We need to better understand the issues faced by small farmers, including their current status and needs, as well as encourage dialogue that will promote new technologies that rely less on scale. This will help leapfrog small farmers into global food chains.

What is needed is well known and can be condensed into better access to information/services not only for production, but also storage, packaging, processing and selling in different markets – where access is defined as the knowledge, understanding and ability (financial, physical and geographic). Small farmers are often remotely located and disconnected and are increasingly marginalized with declining land, poor education, inadequate infrastructure and poor gender relations. They are also disproportionately affected by poverty, hunger and disease. Small farmers need access to improved, relevant technologies and natural resource management (NRM) practices, inputs, financial services, markets, secure access to land and water and ways to manage market and climate risk. Greater investment is therefore needed in relevant research and development, rural infrastructure and connectivity, empowerment, and enhancing and facilitating markets for resources, information, inputs and outputs. Linking farmers through modern approaches to information, aggregation and sharing for greater participation can create a win-win scenario of more food and less poverty.

¹ Nelson et al, 2014 <https://onlinelibrary.wiley.com/doi/abs/10.1111/agec.12089>

² FAO, SOFA 2014, Graeub et al 2016, Lowder et al 2016

³ Barrett et al. (2010) emphasize that although "some studies do show large farms being more productive on average than small farms[...] such cases are the exception rather than the norm."

⁴ Binswanger, McCalla and Patel, 2010

This Disruptive Dialogue will enable a focused discussion aimed at promoting a greater understanding of the challenges and potential solutions for smallholders, several of whom will share their experiences in person.

What is less well understood is how the Fourth Industrial Revolution can contribute to solving these challenges. New ways of communicating and organizing have made it more possible to link people and groups within communities and across the world. Mobile phones, mobile money and social media have already changed the food landscape. Social media has helped spread the understanding of the health and biodiversity benefits of ancient grains and foods (quinoa, millets, amaranth, chak hao rice etc are gaining global markets) and indigenous vegetables are becoming commonplace in large African supermarkets and also finding space in western and urban markets. These same foods, particularly a diversity of indigenous plants, can significantly contribute to dietary shifts to both healthy and sustainably produced foods. Crowdsourcing can be much more effectively used to aggregate produce for sale and for purchasing inputs, for farm advisory services and for financing agriculture. These opportunities are not only helping farmers and consumers, they are also providing exciting jobs and entrepreneurial opportunities that straddle the production, marketing and monitoring and evaluation of food. Some examples include hello-tractor (<https://www.hellotractor.com>), mFarm (www.mfarm.co.ke), iCow (www.icow.co.ke), Sourcetrace (<http://www.sourcetrace.com>), FEWSNET (<http://fews.net>), linebooker etc.

Adapt, Adopt and Market. What do we need to do to make this widespread? How do we ramp up opportunities to:

- Adapt: technologies to suit small farmers; or traditionally produced commodities to meet the tastes of modern, urban consumers (research, innovation, information) as well as to reduce waste;
- Adopt: learn about, understand and finance new small farming systems; or eat differently (information, education, facilitation) and,
- Market: link small, scattered, isolated farmers into global food chains; make it more attractive for consumers to buy and eat more sustainably produced food (information, aggregation, facilitation).

Create and share information and facilitate. This requires farmers, consumers, government agencies, the business sector and researchers to come together and gain a better understanding of each other, including which policies, attitudes, infrastructure and approaches are needed to seize new opportunities and address old challenges. We need to find ways to work together to make it possible for small farmers to sustainably provide healthy foods for the future.

Platforms for dialogue. Universities and colleges are well placed to convene ongoing engagement at the local, national and regional levels. They have the facilities and the mandate. They engage in research, education and information sharing. They have close ties with youth, farmers, researchers, governments and business and they can be a neutral platform for frank and open dialogue. They can also ensure that lessons are integrated into future capacity-building activities. At the international level an arena such as EAT Stockholm Food Forum can bring together a much broader spectrum of big players in global food, giving attention to the importance of building the voice of small farmers in setting the policy agenda. The Disruptive Dialogue raises the question of how small farmers can find their role in driving the transformation of the global food system.