

# Farmers' responses to crises key to informing effective food security policy

October 12 2015

---

A better understanding of how farmers in developing countries cope in times of stress is needed if funding to support food security is to be used effectively, according to an academic at the University of East Anglia (UEA).

Governments, NGOs and international organisations spend millions of pounds every year on the [seed](#) sector in developing countries, the aim being to increase food production, support nutrition and build resilience to climate change. Significant amounts are also spent on emergency seed responses to disasters, such as drought, typhoons and earthquakes, and civil unrest.

However, research by Dr Shawn McGuire, working with Dr Louise Sperling from the organisation Catholic Relief Services, challenges some of the conventional approaches to supporting [food security](#), in particular the priority given to commercial seed shops as the main way to supply [farmers](#) with new crop varieties. The findings suggest that money could be more effectively spent to reach poor farmers, by working with other channels, particularly with local markets.

Ahead of World Food Day on Friday, Dr McGuire will speak on Wednesday at the second International Conference on Global Food Security, being held at Cornell University, New York. He will present results from a study which, for the first time, examined farmers' seed use patterns during times of stress and the implications for food security action and policy.

Contrary to assumptions that all farmers scale back in the face of stress, the results show that most farmers do not change the amount they sow. Of the more than 2500 small farmers surveyed in six countries only a minority reduced sowing amounts and many increased them. Farmers are dynamic and adapt to threats and opportunities facing them, while multiple seed sources - especially local markets - help their resilience.

It comes as a new animated film about the research is launched on Tuesday by UEA, aiming to highlight the issues around seed supply and to encourage debate as well as policy change. The film, entitled *Seed is Big Business in Development*, illustrates how nearly all of the spending by governments and development organisations goes towards one or two seed channels - commercial markets or community-level projects. However, these supply just two per cent of the seed used by farmers. The most important channel, local markets, supplies more than half of all seed yet is ignored, or even undermined by policy and practice. The film also draws on research and advice provided by [Seed.System.org](http://Seed.System.org), a dedicated online resource providing practical guidance to development and aid professionals.

"Whether it is chronic stress, such as drought, or acute stress such as an earthquake, most people can strategise and obtain seed to sow," said Dr McGuire, a senior lecturer in the School of International Development at UEA. "Even in a crisis farmers are able to access seed and grow crops.

"We need to understand that systems don't just collapse in times of stress or disaster. We shouldn't underestimate the resilience of these farmers, they have many different ways of getting seed and will change their crops to suit the conditions and opportunities available to them. It is as much about opportunities as threats. Often when people sow less of a crop, it is not due to a lack of seed, but to other issues, such as land shortages, or because they are switching to another crop with better market value."

Dr McGuire added: "That is not to say that things can't be improved. Policy makers and donors need to step back and see the bigger picture. Improving the quality of seed available to farmers, and everyone's access to seed, are important challenges. But this should focus on a wider set of crops and supply channels.

"The quantity of seed farmers sow and pattern of seed use shed new light on processes of change in agricultural systems. They provide an important indicator for understanding food security and for guiding humanitarian and development actions."

The study used what is thought to be one of the largest datasets on seed systems available and analysed farming practices across multiple crops over two seasons. It surveyed smallholder farmers in Haiti, Kenya, Malawi, South Sudan, the Democratic Republic of Congo and Zambia, looking at how much seed they sow, what crops they grow and why during times of stress compared to what they normally do.

Dr McGuire said: "Many major organisations promote food security and this work challenges some widely-held assumptions about how to do this. Commercial shops are not the only way; farmers get seeds from many different sources, depending on their crop, market links, exposure to risk, and so on.

"Food security policy should be based on an understanding of the seed systems farmers actually use. Development efforts should collaborate strategically with seed supply channels that reach small farmers, such as local markets. There are many innovative ways to do this."

Provided by University of East Anglia

Citation: Farmers' responses to crises key to informing effective food security policy (2015,

October 12) retrieved 26 April 2024 from <https://phys.org/news/2015-10-farmers-responses-crises-key-effective.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.