On-Farm Experimentation Community Info No. 44

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On-Farm Experimentation Community (OFE-C)

International Society of Precision Agriculture (ISPA)

Co-editor of the month

Thanks to my co-editor of the month, Dr. Onesmus Kitonyo, Lecturer at the Department of Plant Science & Crop Protection, University of Nairobi, Kenya.

Why OFE matters in Kenya: Lessons from the Field

A recent article in Growing Africa documents how an OFE process is reshaping farmer–researcher engagement in Kenyan maize systems. By shifting farmers from passive recipients of recommendations to active experimenters, the approach sparked enthusiasm for testing new technologies directly on their own fields. The experience shows how simple experimental design, shared observation, and structured reflection can rapidly change mindsets, strengthen trust, and create a practical co-learning platform where farmers and scientists learn together from real-world conditions. Learn more here.

OCP School Labs: Mobile Soil Science Supporting Farmer Learning

OCP Africa's School Lab initiative brings soil testing directly to farmers' fields through mobile laboratories, generating field-specific diagnostics that farmers can use to test and adapt nutrient management practices. By combining soil sampling, geospatial mapping, and farmer training, the program supports learning under real farming conditions rather than standardized recommendations. Readers interested in the OFE aspects can see Section 3, "Knowledge Creation" of the 2024 Annual Report for details on the soil testing and feedback process, and examples of how results are shared with farmers across multiple sites.

Practical Farm Research: Turning Farmers' Questions into Evidence

Beck's Practical Farm Research (PFR) approach supports farmers in running structured experiments on their own fields, comparing practices, products, and management decisions under real-world conditions. Farmers define the questions, trials are implemented at farm scale, and results are analyzed to generate locally relevant insights rather than one-size-fits-all recommendations. This model closely mirrors OFE in practice, showing how farmer-driven experimentation, paired with consistent methods and analysis, can accelerate learning across diverse farming contexts. Learn more here.

Paper Highlight: Making Sense of Unreplicated On-Farm Experiments

This paper presents a methodological framework designed to help interpret unreplicated OFEs, especially in situations where yield maps are unavailable. The paper contrasts what farmers learn

from average yield comparisons versus spatial and causal analyses enriched with soil, terrain, weather, and management data, revealing how added context can sharpen interpretation of real-world trials. Together, these comparisons show how scientists can support farmer-led OFE by applying appropriate analytical methods to the data farmers already collect, even when classical experimental designs are not feasible. Read the paper here.

Very short survey for a workshop at the next ICPA in Brazil

We want to gauge your interest for a workshop on OFE organized at the next ICPA in Porto Alegre, Brazil. We want to explore with you what is the value proposition of farmer-centric OFE for scientists. Why would scientists be involved in farmers' experimentation process? The survey takes **about 1–2 minutes** to complete. Take the survey here.

This letter was prepared by Louis Longchamps, co-chair of the ISPA OFE Community
Should you have something to share with the Community or the Community leaders, let us know here.