



Isaya Kisekka

Isaya Kisekka, is the recipient of the 2022 Netafim award for Advancements in Microirrigation for his outstanding research, outreach, and service to the microirrigation community.

Kisekka is an associate professor of agricultural water management and irrigation engineering in the Department of Land, Air and Water Resources and the Department of Biological and Agricultural Engineering at the University of California Davis (UC Davis). Kisekka also serves as the Director for the UC Davis Agricultural Water Center of Excellence, where he leads efforts on sustaining groundwater and irrigated agriculture. The overall goal of his research is to quantify water cycling in agroecosystems and to develop sustainable agricultural water management practices and advanced irrigation technologies that optimize crop production and economic outcomes while minimizing negative impacts on the environment such as groundwater depletion and contamination.

Kisekka has led the development of a concept called Data-driven Precision Irrigation Management (DPIM) to help almond and walnut growers manage spatial variability with microirrigation systems. DPIM involves taking relatively simple, low cost steps to retrofit an existing orchard microirrigation system to better match the soil variability with the goal of improving production and reducing leaching of nutrients to groundwater. The main contribution of DPIM has been to help growers more precisely apply water within different management zones by using data to refine irrigation management decisions.

Kisekka has also conducted considerable research on Mobile Drip Irrigation (MDI) in California and Kansas. MDI involves retrofitting center pivot or linear move systems

with drip-lines to minimize nonproductive water losses, especially for systems constrained either by regulatory policies or hydrology. His work has shown that this technique can substantially minimize soil water evaporation and increase soil water storage especially in semi-arid climates such as the Central Valley of California.

Kisekka has also had a major impact on irrigation education. He was instrumental in the revival of the irrigation curriculum at UC Davis.

A 14-year member of ASABE, Kisekka has contributed as a member and leader on a number of committees. He is currently a member of the Natural Resources and Environmental Systems Hydrology and Irrigation Groups, the Irrigation Management, Microirrigation, and Turf and Landscape Irrigation committees.

Kisekka has authored or coauthored more than 130 peer-reviewed articles, book chapters, conference proceeding papers, and other publications. Throughout his career, Kisekka has received a number of awards including the 2020 Excellence in Education award from the Irrigation Association and the 2016 New Innovator award from the Foundation for Food and Agricultural Research.

