Cultivating the Human Element: The Social Foundation of Ag-Science

What is the Role of Social Science?

Social science plays a critical, often transformative, role in basic agricultural science research - bridging the gap between fundamental laboratory discoveries and their societal application, ethical implementation, and public adoption.

Rather than merely being an "end-of-pipe" communicator, social science shapes how research questions are asked, how experiments are designed, and how findings are translated into societal impact.

Problem Framing & Contextualization

By integrating social and cultural contexts, social scientists transform basic research from an isolated pursuit into a human-centered endeavor that addresses real-world critical issues and societal needs.

Interdisciplinary Collaboration

Through collaborative knowledge co-production, social scientists partner with lab researchers to enhance ethical standards, data integrity, and public engagement.

Improving Public Trust

By analyzing public values and motivations, social scientists identify the drivers of technology adoption, ensuring innovations in agriculture, are successfully integrated into society.

Ethics & Data Integrity

Social scientists ensure research aligns with societal values by providing ethical expertise and managing conflicts of interest in emerging fields.

Translating Results to Policy

Social scientists serve as vital intermediaries, translating complex laboratory data into evidence-based frameworks that guide policymakers in developing effective public strategy.

Delivering Practical Solutions for Agriculture

Beyond the Binary: The Importance of Farmer Behavior for Profitability

“By interviewing farmers, social scientists revealed that "dis-adopting" cover crops is often a strategic adaptation to economic constraints rather than a simple failure. This shift in perspective transforms rigid binary data into a dynamic spectrum of behavior, providing more insights into the underlying drivers behind farmer profitability and productivity”.

Closing the Gap: Re-calibrating Research for the Real-World Farmer

“Social science reveals that farmers who volunteer for on-farm research often possess behavioral biases and management styles that differ significantly from the general farming population. By identifying these discrepancies, agricultural agencies can re-calibrate their research design to ensure investments yield practical innovations that work for all farmers”.

The Dairy Portfolio: Mapping Realistic Paths to Productivity

“While 80-86% of dairy farmers have successfully integrated weather resilience strategies, social research indicates that capital-intensive mitigation efforts are hindered by specific infrastructure and feasibility constraints. By identifying these distinct farm profiles, social science enables policymakers to move beyond one-size-fits-all programs toward flexible, tailored funding that aligns goals with the operational realities of all dairy systems”.

The Backyard Breakthrough: How Local Sourcing Drives Public Health

“Social science research into "homegrown" food practices reveals that gardening, hunting, and direct farm purchases significantly improve dietary quality, particularly in food-insecure households, leading to measurable reductions in heart disease risk. These findings underscore the public health potential of incentives to support local food production and have garnered international recognition for their global relevance in nutrition strategy”.

This document was developed collaboratively by members of the agInnovation Social Science Subcommittee. This group includes faculty from land-grant universities across the United States researching and teaching in the agricultural social sciences. For more information contact members at: https://escop.info/committee/social-sciences-subcommittee-sssc/