

NATIONAL RESEARCH AGENDA

American Association *for* Agricultural Education
 2011- 2015 Research Priority Areas

Informed Choices

Public and Policy Maker Understanding About Agriculture and Natural Resources

Key Outcome: *Consumers and policy makers will have accurate understanding of and informed opinions about agriculture and natural resources. Further, policy decisions at all levels will reflect win-win solutions that ensure the long-term sustainability of agriculture, natural resources, and quality of life in communities across the nation.*

Technologies, Practices & Products

Background

In the year 2010, the earth's human population almost reached seven billion. This growing population is experiencing changes in demographics, increased urbanization, increased worldwide agricultural production needs, and changes in agricultural trade policies. In the midst of these changes, the world population is still dependent upon an agricultural system that will provide them with food and clothing as well as an increasing variety of other products (including energy) designed to enhance their living environment.

is important for all Americans. Supporting this argument is the increasing influence of special interest groups involved in issues such as animal rights, pesticide usage, soil and water conservation, and other environmental concerns as they seek to gain the media's and public's attention—often through emotional pleas or capitalizing on negative events in agriculture to better position their cause.

Challenges

As fewer people are directly involved in production agriculture, public support of the industry becomes even more important. Agriculturally literate people make personally informed decisions about agricultural related topics such as food safety, genetic engineering, and pesticides versus non-pesticide issues. In contrast, individuals without a basic understanding of all sides of an issue react without reason, frightened for themselves and their families. The resulting damage to the agricultural industry is unreparable (Glassman, Elliot, & Knight, 2007; Tisdale 1991).

The issues and problems facing agriculture today are important to the general public as well as those employed by the industry. Food safety, soil conservation, and animal welfare are examples of issues that directly affect agriculture and are of serious concern to a broad range of citizens (Birkenholz, 1990; Leising, Igo, Heald, Hubert, & Yamamoto, 1998). The complexity and interwoven nature of these issues and problems has increased since the initial agricultural literacy definition in 1988 created new research needs. For example, recent policy decisions made to increase the scale of bio-energy within the U.S. energy supply has had a ripple effect on grain and livestock supplies and consumer food prices not to mention the use of water and other resources impacted by these production decision—all of which is typically misunderstood by the public.

The growing complexity of agriculture issues coming before legislators and the general public will impact the future of the agriculture industry. While the agricultural education profession continues its efforts to create an agricultural literate society, we need to know if our intervention efforts are targeting too elementary of a level to impact these more complex issues. In addition, we need to

Scientific & Professional Workforce

The foundation to this important economic, political, and life-sustaining system is still the farm. However, less than two percent of the U.S. population lives on a farm—a stark contrast to 30% in 1920 and 15% in 1950 (National Research Council, 1988). Technological and economic advances have led to reductions in the number of farms and rural community population and a comparable increase in average farm size. One of the consequences of these shifts is that the majority of today's elementary school children are at least two generations away from first-hand knowledge of agriculture (American Farm Bureau Federation, 2002; Farm Bureau Federation, 1983). The result is a profound revelation that the future of American agriculture rests in the hands of ninety-eight percent of the United States population who do not reside on a farm and may have little to no understanding of agriculture.

Beyond the farm, American agriculture is a broad-based, growing industry that employs people in virtually every community in the nation, plays a vital role in the history of the nation and the food and fiber system, and contributes to our nation's economy and national security. Unfortunately, this ability to produce food and materials for human usage is a system that the average American takes for granted. This seemingly ambivalent attitude combined with the population shift from rural communities to more urbanized areas has weakened the real success story of American agriculture (Jepsen, Pastor, & Elliot, 2007; Pope, 1990).

Arguably, an understanding of agriculture's history and current economic, social, and environmental significance, both domestically and internationally,

Meaningful, Engaged Learning

Efficient & Effective Programs

Vibrant, Resilient Communities

better understand how to create more effective educational and informational messages that increases the public's understanding of these complex agriculture issues.

Opportunities to Respond

As our global population grows to a projected nine billion people by 2050, the non-agriculture population has little to no understanding of the complexities involved with sustaining a viable agriculture system. The potential negative impact of an uninformed population on the United States and global agriculture and food systems is great. An informed citizenry, including policy decisions at all levels, will create win-win solutions that ensure the long-term sustainability of agriculture, natural resources, and quality of life in communities across the world.

Previous research efforts by the profession related to this priority have established a foundation for future disciplinary and interdisciplinary efforts including the use of systems-based approaches and research methodologies. This foundation has increased our understanding of related message and curriculum development, delivery method preferences and effectiveness, and the extent of change in audience knowledge, attitudes, perceptions and behaviors after experiencing an educational

program or consuming produced information and messages. In spite of more than twenty years of agricultural literacy research success, changes within agriculture and our society have increased the need for further research. Our areas of scientific focus should include:

- » Increasing our understanding of related message and curriculum development, delivery method preferences and effectiveness, and the extent of change in audience knowledge, attitudes, perceptions and behaviors after experiencing an educational program or consuming related information and messages.
- » Demonstrating the impact of agricultural literacy efforts on a variety of stakeholder behaviors including consumer behavior (e.g. K-12 test scores, voting behavior, food consumption behavior). Literacy efforts must be reciprocal in that members of the agriculture industry must also increase their understanding of various stakeholder group needs and/or behaviors.
- » Determining the potential of emerging social media technologies, message formats, and strategies in realizing a citizenry capable of making agriculture-related informed decisions.

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ADDITIONS