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## Abstract

It is estimated the global population will reach 9 billion by the year 2050. This growth in population presents a very imposing problem for agriculture. A potential solution to increasing agricultural production is the mobilization of information through agricultural innovation systems. What has not been studied is the role the International Federation of Agricultural Journalists (IFAJ) has in this system. This study sought to describe the IFAJ and its membership's knowledge mobilization role within Agricultural Knowledge and Innovation System (AKIS), describe the issues facing the membership related to agricultural innovation systems, and record the practices members feel are best to identify stories of interest, create media pieces, and disseminate those media pieces. The results of the study indicate the majority of respondents work as journalists/reporters and a large portion of organizations employ fewer than five people. In respect to the AKIS model, the largest portion of respondents saw themselves as facilitators of knowledge movement. Despite some similarities, differences were revealed between the employment category types found within the IFAJ membership in their perceived objectivity when it comes to their role within AKIS. Talking to stakeholders was the most popular method of identifying stories of interest, involving the farm perspective was most popular strategy for the creation of interesting media pieces, and the use of digital and traditional media was the most popular method to disseminate their work. As IFAJ continues its dedication to providing helpful information to the world's farmers, the organization should realize its membership is not unified in its approach.

## Keywords

Agricultural knowledge mobilization, best practices, source trust, knowledge, knowledge transfer

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## Introduction/Need for the Study

The dissemination of information from a source to a receiver is as old as time itself. The idea something, some piece of information, is perceived of such value that it may be wanted, even needed, by someone else to the point we are motivated to share it is intrinsic to us all. When the receiver shares in that value for the information, an exchange happens in which both the sender and receiver have gained from the experience.

At this base level, stripped bare of extrinsic motivations, distractions, technologies, and other factors that make this simple human interaction more complicated, mutual understandings are reached, learning occurs, and individual growth and change are realized. Replicate this process and expand it to include others and the potential for individual and societal growth through innovation and the solving of problems that emerge through life in dynamic, ever-changing systems becomes a reality.

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Educators, journalists, and other individuals and organizations focused on the sharing of information can be found throughout the history. Expanding on the single source/receiver process, these individuals and their organizational structures often will gather information from a variety of sources on a single topic and assemble it in both a form and process that creates efficiencies as it distributes the information to a receiver that typically exceeds the number of one. As context can influence the effectiveness of information sharing, it is not uncommon to find individuals and organizations that limit their information sharing activities to a single context. Such is the case in agriculture and the International Federation of Agricultural Journalists (IFAJ).

With a history dating back to 1933 with the formation of the International Federation of the Agricultural Press in Belgium, the IFAJ is a non-political, professional association for agricultural journalists in 32 countries. IFAJ supports and encourages the practice of agricultural journalism in countries embracing freedom of the press and gives agricultural journalists and communicators a platform for professional development and international networking. IFAJ sees its role of providing helpful information to the world's farmers as well as reporting new trends to consumers as being critical to the future of the planet.

At this time in human history, the global population is predicted to grow to 9 billion people by 2050. This is creating fears of food insecurity, especially in less developed regions (United Nations, 2004). In addition, the United Nations Food and Agriculture Organization (2000) projected by 2025, the need for food in developing countries could possibly double. Ash, Jasny, Malakoff, and Sugden (2010) stated, "Feeding the nine billion people expected to inhabit our planet by 2050 will be an unprecedented challenge" (p. 797).

Core to addressing this global challenge is the ability to share information effectively — such as emerging research, new innovations, best practices, and lessons learned — with individuals and organizations that create the solutions to this challenge. To that end, it is critical to understand agricultural communicators' perceptions and behaviors within their role in the exchange of knowledge to their audience beyond the local, regional, or national levels.

### **Conceptual and Theoretical Framework**

To address the global challenge of food security, agricultural production will need to become more efficient in every region of the world. As a part of reaching that food secure outcome, agricultural knowledge systems also will need to operate as efficiently as possible. McKibbin et al., (2010) found more than 100 terms have been used to describe knowledge transfer or an aspect of the process. Because research is spread across multiple disciplines, barriers to compiling a comprehensive analysis of the body of knowledge are difficult (Levin, 2008; McKibbin et al., 2010). For this study, the review of literature and related theory was confined to the concept of knowledge mobilization.

Levin (2008) defined knowledge mobilization as the connections between researcher and decision maker. Previous knowledge mobilization research has primarily had a healthcare focus (Sudsawad, 2007). However, an apparent lack of research exists pertaining to the role agricultural journalists and communicators play in mobilizing knowledge, though some research has been conducted examining journalists in respect to sharing scientific knowledge (Waddell et al., 2005). Manning (2013) stated there are two ways of gaining knowledge: The first way is by knowledge transfer (KT), and the second is knowledge exchange (KE).

### **Knowledge Transfer**

Knowledge transfer (KT) illustrates the unidirectional flow of knowledge. Knowledge transfer has

been likened to the Shannon-Weaver Model of communication (Wolfe, 2006). Within the agriculture industry, KT can be seen in Leeuwis and Van Den Ban's (2004) linear model of innovation (see Figure 1). However, according to Leeuwis and Van Den Ban (2004), researchers were getting ideas from farmers, a process that is not captured in this model or in the definition of knowledge transfer.

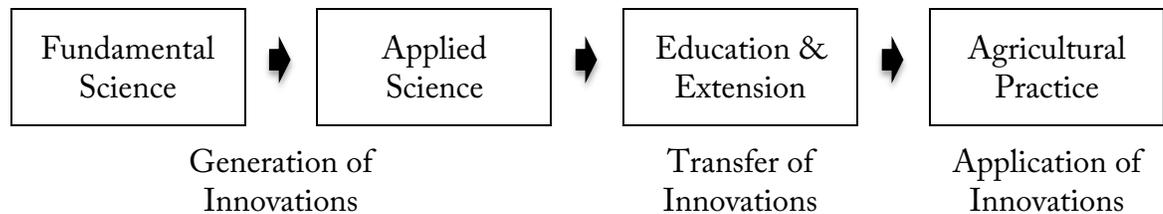


Figure 1: Leeuwis & Van Den Ban's (2004) Linear Model of Innovation

### Knowledge Exchange

Knowledge exchange represents the multidirectional flow of knowledge and includes other factors that influence the process such as trust. Feedback is another aspect included in the definition and models of knowledge exchange. Renn and Levine (1991) established the importance of identifying source trust in relation to communication effectiveness. Levin, Cross, Abrams, and Lesser (2002) examined trust with respect to the movement of knowledge. The researchers proposed strong ties, meaning strong relationships and high levels of trust, would positively impact knowledge transfer outcomes. The researchers also found people get knowledge from sources they have strong ties to adding that users get this knowledge from those ties because they are viewed as trusted and competent.

### Knowledge Movement Frameworks

Numerous frameworks exist illustrating the idealized process of knowledge movement with two being chosen for this study. The first is the Understanding-User-Context Framework (Jacobson, Butterill, & Goering, 2003). This framework is used to evaluate knowledge translation. Jacobson et al. (2003) evaluated the process by focusing on five areas they identified as important to knowledge translation: "the user group," "the issue," "the research," "the researcher-user relationship," and "the dissemination strategies." The user group is evaluated by a researcher's understanding of an end-user. Gaps in the user group were identified by the perceived level of understanding agricultural communicators have of their audiences. This information will shed light on communicators' perceived understanding of audiences as well as perceived relevance of the research being conducted in the communicators' respective countries.

The research area, according to Jacobson et al. (2003), is evaluated on the quantity and quality of the research available to users. Quality is evaluated in two methods: quality of research and research relevance. According to Sudswad (2007), knowing how users interpret research quality and quantity provides researchers insights into the relevance, congruence, and compatibility of available research. The researcher-user relationship is assessed in terms of perceived trust and interaction between researcher and research user. The last area this framework evaluates is the dissemination strategy. In this area, deficiencies are appraised in terms of channel of communication and knowledge of appropriate channels (Jacobson et al., 2003).

The Agricultural Knowledge and Innovation System (AKIS) illustrates the flows of knowledge

within the global agricultural industry, drawing connections between various groups with arrows showing two-way information flow. Roling (1992) integrated the system perspective of this model, the idea that consequences of actions are not linear, by means of his “formative experiences” working in various countries in agricultural extension capacities.

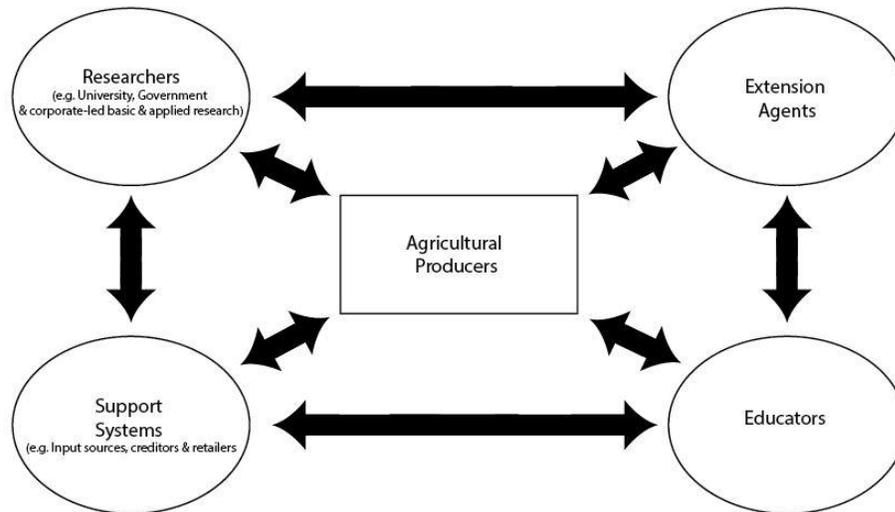


Figure 2: The Pakistan version of the AKIS model (Rivera, Qamar, & Mwandemere, 2005)

The AKIS model emerged from an earlier model depicting system members connected by two-way flows of communication (Röling, 1988). From this original model an “idealized” model emerged, the “Pakistan Model” (see Figure 2), which includes one aspect previously omitted — support systems (Rivera, Qamar, & Mwandemere, 2005).

### Purpose and Objectives

The purpose of this study was to determine international agricultural communicators’ perceptions and behaviors within their role in the exchange of knowledge to their audience. To accomplish this purpose, a set of four objectives was established. Those objectives were to:

1. Describe respondents in terms of their IFAJ guild of origin, employment position, and size of employing organization.
2. Describe potential differences between employment type categories and respondent’s perceived personal bias and the type and number of communication channels used to complete their knowledge mobilization activities.
3. Describe potential differences between employment type categories and respondent’s thoughts of the AKIS model and their perceived role/position within AKIS model.
4. Describe potential differences between employment type categories and their practices used to identify, create, and disseminate stories.

### Methods and Procedures

This study’s design was descriptive in nature and used a researcher-developed instrument created using Qualtrics™, an online survey deployment tool. The accessible population for this study consisted of members of the IFAJ who receive email communication from their respective national guild. IFAJ

membership is, according to Queck (2009), limited to journalists or communicators who reside in a country with a freedom of press and submit their membership dues to the organization.

Recruitment during both the pilot test and formal data collection processes was completed in a purposive manner due to the limitations of the IFAJ organization. Owing to privacy issues in certain member guilds and countries, IFAJ is unable to maintain an exhaustive list of its membership's email addresses. As a result, researchers were unable accurately define the population (i.e. membership), use probabilistic sampling procedures, or directly correspond with the potential participants in this study.

The instrument used to collect data consisted of questions from the review of literature as well as questions offered by a panel of agricultural communications experts from Canada, Japan, and the United States. Questions presented to respondents eliciting perceptions were Likert-type using a four-point scale (1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Agree*, and 4 = *Strongly Agree*). Two sets of semantic differential word pair scales were used to elicit respondents' personal beliefs of their understanding of the AKIS model as well as respondents' perception of their own bias. Initial word sets for the understanding semantic differential scale came from Osgood (1964).

Respondents were asked where they feel they operate within the AKIS model. If a respondent felt he or she was an arrow or arrows, a follow-up question was presented to determine which arrow. Arrows were assigned letters alphabetically progressing in a counterclockwise fashion moving from the outer arrows inward. Story identification, creation, and dissemination best practice questions were presented in an open-ended format.

Prior to full deployment of the instrument, a pilot test was conducted with the five members of the IFAJ Presidium. The IFAJ defines the presidium as the president, vice president, treasurer, secretary general, and past president. The pilot test began on May 6, 2013, two days after an informative article was posted on the IFAJ's website. Feedback was collected from the pilot test respondents and minor changes were made to the instrument. A post-hoc reliability was calculated for the AKIS understanding and perceived bias semantic differential scales with respective Cronbach's alpha score of .95 and .81 resulting.

On May 13, 2013, Dr. Owen Roberts, IFAJ's vice president, issued a tweet from his personal account directing his Twitter followers who were IFAJ members to be aware of the upcoming study and encouraging them to participate. Due to privacy issues within IFAJ, additional recruitment efforts were performed in the following method. The researchers sent an email requesting participation and outlining participants' rights to Roberts. He then forwarded the email to the IFAJ's secretary, who sent the email to IFAJ guilds worldwide to request they share the email with their country's membership.

The initial recruitment email was sent on June 4, 2013. In accordance with the recommendations provided by Dillman (2007) regarding response rate, a reminder email was sent on June 17, 2013, and a final reminder email was sent on June 24, 2013. Potential participants were made aware of their rights at the beginning of the questionnaire and also could cease participation by exiting their web browser at anytime during the questionnaire. Participants were not rewarded in any way for their participation.

Data collection ended July 17, 2013, when the data were downloaded from Qualtrics™ and imported into SPSS for data analysis. A total of 167 responses were collected. Of the 167 collected, 102 were determined to be complete, resulting in a completion rate of 62%. Statistical analyses consisted of means, medians, modes, standard deviations, ranges, and measure of relationship. For the open-ended section of the questionnaire, data were analyzed by open coding — the process by which qualitative data is labeled and separated into categories (Pandit, 1996).

As part of the data analysis process, respondents were grouped into one of three employment types: journalistic, corporate or governmental. The journalistic employment type consisted of journalists/reporters, publishers, and editors. The corporate employment type consisted of those whose response indicated they were industry communications professionals. The governmental employment type consisted of those whose responses indicated they were government communications professionals. Only two “other” responses were deemed as inappropriate for any one of the three employment types and were excluded in the data analysis process beyond the initial descriptive statistics used to portray all respondents.

## Findings

The first objective was to describe respondents in terms of their IFAJ guild of origin, employment position, and size of employing organization. Of the 102 respondents completing this question, 19 of the 32 IFAJ guilds (59.4%) were represented, with the largest portion of respondents from the United States ( $f = 36$ ; 35.3%), followed by Canada ( $f = 22$ ; 21.6%) and South Africa ( $f = 16$ ; 15.7%). When asked about their current employment position, the majority of the responding IFAJ members indicated they were journalists (reporter, editor, or publisher;  $f = 74$ , 72.5%) followed by corporate ( $f = 20$ , 19.6%), and government employees ( $f = 6$ , 5.8%). As for size of the respondent’s employing organization, the most frequently indicated organization size was of less than five employees ( $f = 32$ ; 31.1%) regardless of the employment categories (journalistic, corporate, governmental), with more than 62% of the total respondents being found in organizations with 20 or less employees.

Objective two sought to describe potential differences between employment type categories and respondent’s perceived personal bias and the type and number of communication channels used to complete their knowledge mobilization activities. To determine personal bias in communication efforts, respondents were provided a semantic differential scale with four bipolar evaluative adjective word pairs (e.g. *persuasive – objective*) with a 12-point scale between the words. Respondents indicated their personal belief by selecting the position between the word pairs that best reflected their evaluation of their personal belief. The number relates to their position on that scale with a higher number reflecting the least biased adjective. The results of each pair indicate journalistic members consistently perceived themselves as being the least biased while corporate members consistently perceived themselves to be more biased in their behaviors than other IFAJ employment types (see Table 1).

Table 1

*Bias Semantic Differential Word Pair Results Broken Down by Respondent’s Type of Employment (f = 95)*

	Overall		Journalistic ( $f = 69$ )		Corporate ( $f = 18$ )		Governmental ( $f = 6$ )	
	$\mu$	$SD$	$\mu$	$SD$	$\mu$	$SD$	$\mu$	$SD$
Persuasive: Objective	8.3	2.9	9.1	2.4	5.9	2.7	8.0	3.3
Offering a Point of View: Unbiased	6.7	3.3	7.1	3.3	5.3	3.2	6.0	3.2
Advocating: Journalistic	8.2	3.2	9.0	2.8	6.1	3.2	7.2	4.0
Biased: Balanced	8.6	2.7	9.1	2.6	6.8	2.4	8.0	2.8

*NOTE:* Sixteen of the study participants did not complete this section of the study.

When this data is displayed as a line chart for the four word pairs, the consistency of the responses by employment type becomes clear. Figure 3 indicates all employment categories tend to offer their point of view when communicating, with no employment category having achieved a mean score of 12. The blue line (second from right with the letter “A”) represents the mean scores for all respondents. The orange line (far right with the letter “J”) represents the scores from journalistic (J) employment category; the pink line (far left with the letter “C”) represents the corporate (C) respondent category; and the green line (second from left with the letter “G”) represents the government (G) respondent category. As the lines illustrate, differences appear to be present between the employment categories.

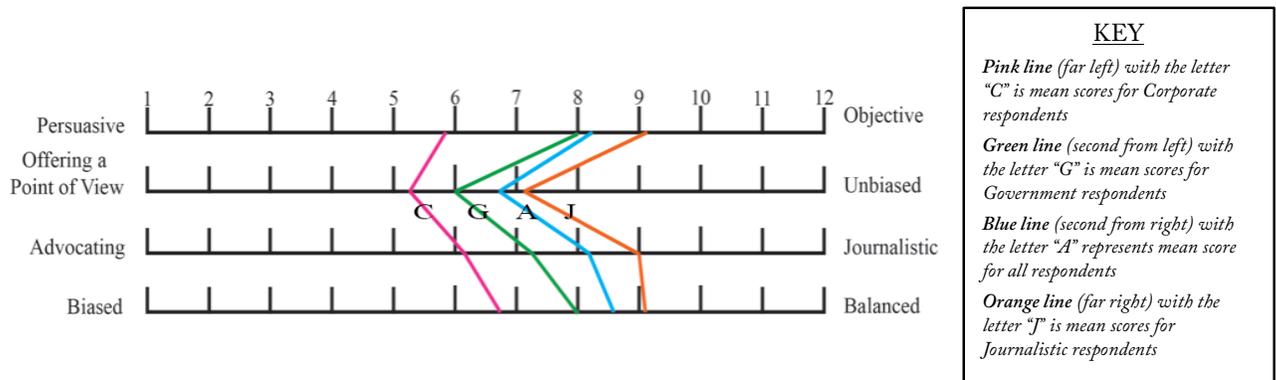


Figure 3: IFAJ Member Perceived Level of Personal Bias by Employment Type

Table 2 shows the frequency and percentage of communication channels respondents use to disseminate information to their audience. Magazines represented the largest percentage of channels used ( $f = 71, 69.6\%$ ). However, the next two most popular channels are electronic in nature — email ( $f = 67, 65.7\%$ ) and social media ( $f = 66, 64.7\%$ ) — with email being the most popular channel for corporate communicators ( $f = 18, 90\%$ ). Podcasts were the least used communication channel ( $f = 15, 14.7\%$ ). The governmental communicators did not use blogs ( $f = 0, 0.0\%$ ).

Table 2

Type of Communication Channels Respondents use to Disseminate Information to Their Audience ( $f = 102$ )

Channel Type	Overall		Journalistic ( $f = 74$ )		Corporate ( $f = 20$ )		Governmental ( $f = 6$ )	
	$f$	%	$f$	%	$f$	%	$f$	%
Magazines	71	69.6	51	68.9	15	75.0	4	66.7
Email	67	65.7	44	59.5	18	90.0	3	50.0
Social Media	66	64.7	47	63.5	15	75.0	3	50.0
Newsletters	51	50.0	30	40.5	15	75.0	5	83.3
Internet Video	49	48.0	35	47.3	10	50.0	3	50.0
Blogs	40	39.2	31	41.9	8	40.0	0	00.0
Newspaper	39	38.2	30	40.5	10	50.0	4	67.0
Radio	30	29.4	13	17.6	12	60.0	5	83.3
Television	18	17.6	12	16.2	5	25.0	1	16.7
Podcasts	15	14.7	12	16.2	2	10.0	1	16.7

NOTE: Respondents could indicate use of more than one channel

Table 3 shows the number of channels respondents commonly use to disseminate information to their audiences. The results indicate the respondents and their organizations commonly use multiple channels to disseminate information to their audiences with 92.8% ( $f = 92$ ) using at least two channels. While the average number of channels used to disseminate information was 4.48, more than half of the respondents (52.8%) use five or more channels to disseminate information with corporate communicators being the most likely group to use five or more channels (80.0%). The data collected revealed IFAJ members use as many as 10 different channels to disseminate information to stakeholders.

Table 3

*Number of Communication Channels Respondents Use to Disseminate Information to Their Audience ( $f = 106$ )*

Number of Channels	Overall		Journalistic ( $f = 72$ )		Corporate ( $f = 20$ )		Governmental ( $f = 6$ )	
	f	%	f	%	f	%	f	%
One	14	13.2	10	13.9	1	5.0	1	16.7
Two	13	12.3	13	18.1	0	0.0	0	0.0
Three	10	9.4	9	12.5	1	5.0	0	0.0
Four	13	12.3	8	11.1	2	10.0	2	33.3
Five	21	19.8	11	15.3	7	35.0	1	16.7
Six	11	10.4	6	8.1	5	25.0	0	0.0
Seven	14	13.2	9	12.5	1	5.0	1	16.7
Eight	7	6.6	4	5.6	2	10.0	1	16.7
Nine	2	1.9	2	2.8	0	0.0	0	0.0
Ten	1	0.9	0	0.0	1	5.0	0	0.0

*NOTE:* The average number of channels used was 4.5. Employment types may not total 106 due to nonresponses and “other” responses.

Objective three sought to describe potential differences between employment type categories and respondents’ thoughts of the AKIS model and their perceived role/position within the AKIS model. Respondents were provided a semantic differential scale with seven bipolar evaluative adjective word pairs with a 12-point scale between the words. Respondents indicated their thoughts about the AKIS model by indicating the position between the word pairs that best reflects their thoughts of the model. The number relates to their position on that scale with a higher number reflecting the positive adjective as it relates to the AKIS model. The word pairs then were summated to create an overall understanding score. The results of each pair indicate journalistic members do not see a positive value in the AKIS model while IFAJ corporate members were more likely to see value in the model (see Table 4).

Table 4

*Semantic Differential Word Pair Results Indicating Respondents' Thoughts of AKIS Model Broken Down by Respondent's Type of Employment (f = 87)*

	Overall		Journalistic (f = 62)		Corporate (f = 17)		Governmental (f = 6)	
	$\mu$	SD	$\mu$	SD	$\mu$	SD	$\mu$	SD
Terrible: Outstanding	7.6	2.6	7.3	2.6	8.2	2.7	9.2	1.9
Unhelpful: Helpful	7.4	3.0	7.2	3.0	7.6	2.5	8.7	3.8
Inadequate: Adequate	7.9	2.9	7.6	3.1	8.4	2.3	9.7	2.0
Worthless: Valuable	7.5	2.6	7.1	2.7	7.9	2.1	9.5	2.3
Random: Logical	8.0	3.0	7.8	3.1	8.1	2.9	8.8	2.6
Ineffective: Influential	6.3	2.7	6.0	2.7	6.8	2.4	8.2	2.6
Irrelevant: Relevant	7.0	2.9	6.8	3.0	6.8	2.3	8.7	2.6

When this data is displayed as a line chart for the seven word pairs, the consistency of the responses by employment type becomes clear (see Figure 4). The orange line (far left with the letter “J”) represents the scores from journalistic employment category; the pink line (second from the right with the letter “C”) represents the corporate respondent category; and the green line (far right with the letter “G”) represents the government respondent category. Similar to the perceived bias response in Figure 3, differences appear to be present between the employment categories.

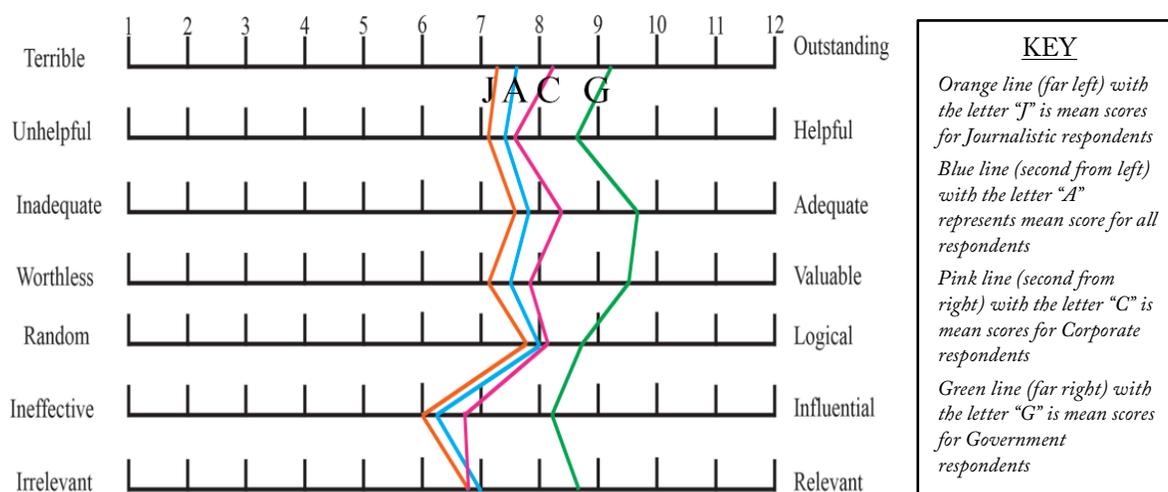


Figure 4: IFAJ Member Understanding of the AKIS Model by Employment Type

Respondents were presented with a depiction of the model and were asked to identify themselves as working as a researcher, an extension agent, a support system, an educator, or as an arrow or arrows within the AKIS model (see Figure 2). Respondents most frequently saw their role as an arrow in the AKIS model (f = 47, 46.5%) indicating their role as facilitators of information flow between the five groups represented in the model (agricultural producers, researchers, extension agents, educators, or

support systems) followed by being in the role of educator ( $f = 30$ ; 29.7%). Questioning those who saw themselves as facilitators (an arrow) revealed that the respondents commonly perceived their role in the AKIS model as the conduit between a potential information source (researcher, extension agent, educator, or support system) and the agricultural producer, with the most frequent connection being the conduit between researchers and the agricultural producer ( $f = 36$ ; 76.6%).

Objective four sought to describe the potential differences between employment categories and their knowledge mobilization practices. Table 3 contains a list of best practices IFAJ members provided in terms of identifying stories of interest. Overall, responses referencing “talking to stakeholders” were the most popular method, a practice also the most popular with journalistic ( $f = 17$ , 40.5%) and corporate professionals ( $f = 6$ , 40.0%). Governmental professionals prefer to use current relationships to identify stories ( $f = 2$ , 50.0%).

Table 5 also illustrates the means by which IFAJ members create stories of interest for their audiences. “Involving the farm perspective” was overall ( $f = 16$ , 34.0%), and among the three employment categories, the most popular response, though results showed greater diversity among journalistic professionals with a greater variety of practices being used to create stories.

When asked about the best practice respondents used to disseminate their information to their primary audience, the use of multiple channels was again confirmed as the most popular (59%) method of dissemination overall and among the three employment categories (see Table 3). Traditional media was defined as print and/or radio, and digital media was defined as web-based media (e.g. social media). It should be noted this information was solicited near the end of the questionnaire and response rates diminished considerably, likely attributable to fatigue bias.

### **Conclusions, Recommendations and Implications**

With the imposing challenge of feeding the world’s growing population, the mission of the IFAJ to provide information that supports the success of the world’s farmers serves as a critical component for achieving that outcome. Helping to illustrate the efforts of knowledge mobilization in agriculture is the Agricultural Knowledge and Innovation System (AKIS).

Table 5  
*Respondents Reported Best Practice for Identifying, Creating, and Disseminating Stories to Their Stakeholders by Employment Category*

	Overall		Journalistic		Corporate		Gov't	
	f	%	f	%	f	%	f	%
Identifying stories ( <i>f</i> = 61)								
Talking to stakeholders	23	37.7	17	40.5	6	40.0	0	0.0
Maintaining relationships	13	21.3	6	14.3	5	33.3	2	50.0
Surveillance of social media	11	18.0	8	19.1	2	13.3	1	25.0
Attending relevant meetings	11	18.0	8	19.1	2	13.3	1	25.0
Cooperating with other organizations	3	4.91	3	7.1	0	0.0	0	0.0
Creating stories ( <i>f</i> = 46)								
Involve the farm perspective	16	34.0	9	27.3	5	50.0	2	66.7
Involve researchers or research findings	13	27.7	9	27.3	3	30.0	1	33.3
Show the relevance to the reader	6	12.8	4	12.1	1	10.0	0	0.0
Commitment and time	6	12.8	5	15.2	1	10.0	0	0.0
Brevity	2	4.3	2	6.1	0	0.0	0	0.0
Attend meetings	2	4.3	2	6.1	0	0.0	0	0.0
Show the practice/product	2	4.3	2	6.1	0	0.0	0	0.0
Disseminating Stories ( <i>N</i> = 41)								
Use both digital and traditional media	24	58.5	16	59.3	6	50.0	2	100.0
Traditional media only	13	31.7	9	33.3	4	33.3	0	0.0
Digital media only	4	9.8	2	7.4	2	16.7	0	0.0

However, within the IFAJ membership, this study found diversity in the focus and methods used for knowledge mobilization by the members based on their employment category. Differences were found in members' perceived level of bias as they conducted their information dissemination activities for their type of employing organization with journalistic IFAJ members perceiving themselves as the least biased while corporate IFAJ members perceiving themselves as more biased than the other employment categories.

For all employment categories, the use of multiple channels to disseminate the information is commonplace with both print and digital channels being used and the number of channels often exceeded five.

What was commonplace among the IFAJ members was their appreciation of the AKIS model. While more highly valued by the governmental membership types, all members considered the AKIS model as valuable and they saw themselves as facilitators of the flow of information between the five groups in the AKIS model, with the most frequent connection being the conduit between researchers and the agricultural producer.

Despite the use of multiple print and digital channels and differing perceptions of objectivity, IFAJ members still see their roles as connecting the source and the receiver in the genesis of the writing process when they are identifying and creating a story.

As a professional organization, IFAJ needs to recognize the diversity that exists in its members as each works individually and collectively in harmony with IFAJ's mission and focus. Armed with

such information, IFAJ can more effectively support its members through information and professional development experiences that will serve them as they serve farmers and, ultimately the growing world population.

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