

Final Report

Extension Needs Assessment Keegan Gay and Dr. Joy Rumble





For More Information

Contact the Center for Public Issues Education at piecenter@ifas.ufl.edu or 352-273-2598

Suggested Citation

Gay, K. D., & Rumble, J. N. (2014). Extension Needs Assessment. PIE2014/15-1. Gainesville, FL: University of Florida/IFAS Center for Public Issues Education.

About the Authors

Keegan Gay – Graduate assistant, Department of Agricultural Education and Communication **Joy Rumble, Ph.D.** – Assistant professor, UF/IFAS Center for Public Issues Education and Department of Agricultural Education and Communication

Acknowledgments

We would like to thank all of our collaborators on this project. Without their help and support this project would never have gotten off the ground.

Sandra Anderson – Research Coordinator, UF/IFAS Center for Public Issues Education

Alexa Lamm, Ph.D. – Associate director, UF/IFAS Center for Public Issues Education; Assistant professor, Department of Agricultural Education and Communication

Arthur Leal - Graduate assistant, Department of Agricultural Education and Communication

Caroline Roper – Graduate assistant, Department of Agricultural Education and Communication

Courtney Owens – Graduate assistant, Department of Agricultural Education and Communication

Jessica Holt - Graduate assistant, Department of Agricultural Education and Communication

Kacie Pounds - Graduate assistant, Department of Agricultural Education and Communication

Laura Gorham - Graduate assistant, Department of Agricultural Education and Communication

Mary Rodriguez - Graduate assistant, Department of Agricultural Education and Communication

Pei-Wen Huang - Graduate assistant, Department of Agricultural Education and Communication

Shuyang Qu - Graduate assistant, Department of Agricultural Education and Communication

Taylor Ruth - Graduate assistant, Department of Agricultural Education and Communication

Yiqian Ma - Graduate assistant, Department of Agricultural Education and Communication

Contents

For More Information	2
Suggested Citation	2
About the Authors	2
Acknowledgments	2
List of Figures	5
List of Tables	5
Executive Summary	6
Introduction	6
Findings	6
Recommendations	6
Background	8
Methods	8
Results	9
Contentious Issues	9
Issues Affecting Clientele	9
Frequency of Addressing Contentious Issues	10
Knowledge of Contentious Issues	11
Sources of Leaning about Contentious Issues	12
Methods of Communication about Contentious Issues	13
Selecting Information to Share on Contentious Issues	14
Attitudes on Communicating Contentious Issues	14
Challenges in Communicating Contentious Issues	15
Policies and Regulations	16
Identification of Policies Affecting Clientele	16
Frequency of Addressing Policies and Regulations	17
Knowledge of Policies and Regulations	18
Sources of Information on Policies and Regulations	19
Sharing Information on Policies and Regulations	20
Attitudes on Communicating about Policies and Regulations	20
Challenges in Communicating about Policies and Regulations	21
PIE Center	22
PIE Center Communication Channels	22

PIE Center Resources	23
Level of Interest in PIE Center Services	24
Future use of PIE Products	25
General Impressions	25
Findings	26
Description of Respondents	26
Sex	26
Age	26
Number of Years in Extension	27
Role in Extension	27
Area of Specialty	27
Association Membership	28
Key Findings	29
Contentious Issues	29
Policies and Regulations	29
PIE Center	29
Recommendations	30
For Extension	30
For the PIF Center	30

List of Figures

Figure 1: Respondents Identification of Contentious Issues Affecting Clientele	9
Figure 2: Reported Frequency of Addressing Contentious Issues	10
Figure 3: Respondent Knowledge of Contentious Issues	11
Figure 4: Usefulness of Sources of Information on Issues	12
Figure 5: Effectiveness of Methods in Communicating about Contentious Issues	13
Figure 6: Respondents' Methods of Selecting Information to Share on Issues	14
Figure 7: Challenges in Communicating About Contentious Issues	15
Figure 8: Respondents Identification of Policies Affecting Their Clientele	16
Figure 9: Frequency of Addressing Policy with Clientele	17
Figure 10: Respondent Knowledge of Policies	18
Figure 11: Usefulness of Sources of Information on Policies	19
Figure 12: Respondents' Methods of Selecting Information to Share on Policies	20
Figure 13: Challenges in Communicating About Policies and Regulations	21
Figure 14: Effectiveness of PIE Center Communication Channels	22
Figure 15: Usefulness of PIE Center Resources	23
Figure 16: Interest in PIE Services	24
Figure 17: Use of PIE Products	25
Figure 18: Sex of respondents	26
Figure 19: Age of Respondents	26
Figure 20: Respondents Number of Years in Extension	27
Figure 21: Respondents Role in Extension	27
Figure 22: Respondents Area(s) of Specialty	28
Figure 23: Respondent Professional Association Membership	28
List of Tables	
Table 1: Respondent Attitudes on Communicating Contentious Issues	14
Table2: Respondent Attitudes on Communicating Policies	20

Executive Summary

Extension Needs Assessment OCTOBER, 2014

Introduction

In order to further establish a role in Extension, the PIE Center conducted a needs assessment of Extension agents across the state of Florida during June 2014. Previously interviews were done with Extension agents in Florida and those findings were used to guide the question development for this needs assessment. The survey was conducted online following Dillman's (2009) Tailored Design method. Surveys were sent out to all 350 extension educators in Florida, with 125 completing the survey. The purpose of this survey was to determine the needs of Extension with regards to the communication of contentious issues and policies as well as what kinds of products and services can be offered by the PIE Center to fill these deficiencies.

Findings

- Food safety, management of invasive species, and water quality were the most commonly identified and addressed
 contentious issues while food security, immigration, and management of endangered species were the least
 commonly identified.
- Fertilizer and water regulations were the most commonly identified and addressed policies and regulations while
 fishing rights, immigration reform, equipment regulations, and trucking regulations were the least commonly
 identified.
- Experts/Specialists in a particular field, EDIS publications, and in-service trainings were identified as the most useful methods to learn about contentious issues and policies.
- One-on-one in person, phone calls, emails, group meetings, and workshops were identified as the most useful methods for communicating with clientele about contentious issues.
- Source reliability was a factor in determining what information to share for all agents.
- Respondents felt that communicating about contentious issues and policies was important, essential, encouraged, and meaningful, but found it to be difficult and complex.
- Respondents reported that the availability of false or misleading information, and complexity of issues/policies were the biggest challenges in communicating with clientele about contentious issues and policies.
- Respondents felt that public policy fact sheets, workshops with decision makers, and webinars with guest speakers would be the most useful PIE Center resource.
- Interest in PIE center services was generally high with evaluation, marketing, and educational program development services having the most interest.
- Interest in potential PIE Center products was generally high with the most interest being in short videos of speakers.
- Some respondents had misconceptions of what constitutes a public issue, what the PIE Center is, and a lack of knowledge about what the PIE Center offers.

Recommendations

• In-service trainings focusing on contentious issues and crisis communication could allow agents to become more comfortable with complex nature of the subjects and how to communicate in a highly charged environment.

- Experts and specialists were identified as a very effective way to learn about both contentious issues and policies, as such Extension should strive to ensure that agents in the field are easily able to identify and contact appropriate university faculty when questions arise.
- Programs specifically designed to teach clientele about determining reliability and bias of information could assist in dispelling the challenge of the plethora of false or misleading information.
- Continued efforts to increase brand visibility could help insure Extension is aware of PIE Center contributions.
- Seeking out partnerships with field agents to develop programs to work in underserved issues such as food security and immigration can benefit both Extension and the PIE Center by expanding clientele bases, and making impact as change agents.
- Continued development of public policy fact sheets, workshops with decision makers, and webinars with guest speakers could prove valuable as respondents felt such services would be useful.

Background

This study was conducted to determine the needs of Extension agents in the state of Florida with regards to communication about contentious issues and policies. The needs assessment began with the interviewing of eight agents of various types throughout the state by graduate students in the Department of Agricultural Education and Communication. The results of these interviews were used to help inform the development of the survey used in this study. Questions resulting from these interviews were aimed at determining: what contentious issues and policies agents were facing, how often they were addressing these issues and policies, what their knowledge level of these issues and policies were, what sources they use to learn about issues and policies affecting their clientele, what communication channels they use to convey this information, how they determine what information to share, what their attitudes toward communicating contentious issues and policies are, and what challenges they face in communication. Additionally questions were added to this study to assess what kinds of programs and information agents are interested in receiving from the PIE Center.

Methods

To achieve the purpose of this study an online survey design was used to collect data in June of 2014. The audience of this study was Extension educators within the state of Florida. A census sampling method was used to survey all 350 educators within the state with 125 completing the survey for a 35.7% response rate. Dillman's (2009) Tailored Design method was used in this study. A pre-notice letter was sent out from the Dean of Extension a week prior to the launch of the survey. The initial contact was followed by three reminders and a final notice before the closing of the survey, approximately a month after opening.

The survey instrument was informed by the previously conducted interviews with Extension agents across Florida. Once the instrument was complete a panel of experts were consulted to insure face and content validity. Data was analyzed for descriptive statistics using SPSS \$21.00.

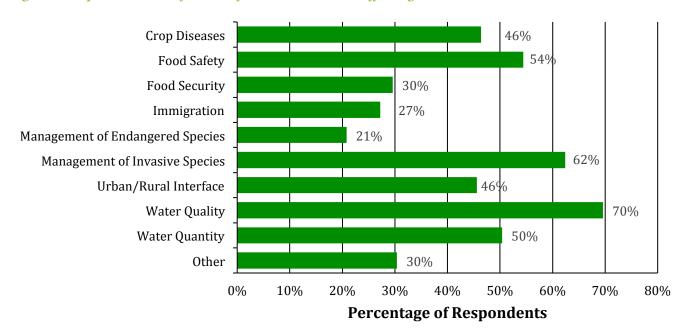
Results

Contentious Issues

Issues Affecting Clientele

Respondents were asked to identify which contentious issues were affecting their clientele (Figure 1). Issues of water quality, management of invasive species, and food safety were identified by the majority of respondents as affecting their clientele. Meanwhile, issues of food security, immigration, management of endangered species, and other issues were identified the least often as affecting clientele. Other issues identified included: youth development, production practices, fertilizer/pesticide licensing & safety, resource management, crop prices, habitat restoration, sea level rise, climate change, urban horticulture, home owners associations, genetically modified organisms, economic issues, worker safety and preparation, anti-agriculture sentiments, and health care & obesity.

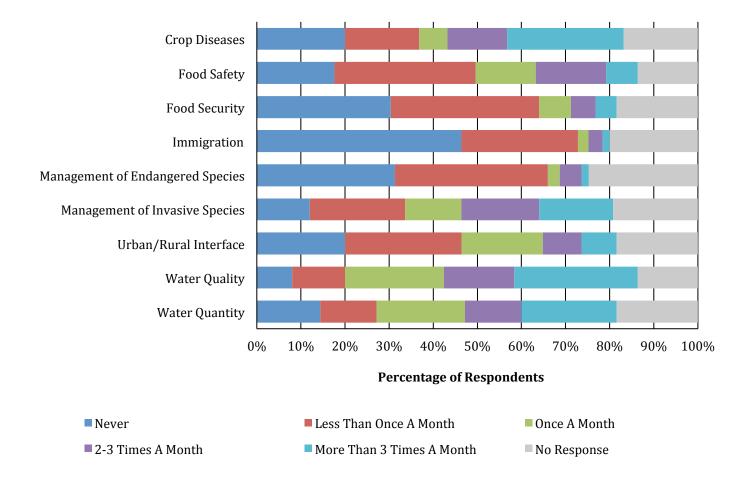
Figure 1: Respondents Identification of Contentious Issues Affecting Clientele



Frequency of Addressing Contentious Issues

Respondents were asked to identify how frequently they addressed contentious issues (Figure 2). Issues of immigration, management of endangered species, and food security were addressed less frequently than other issues. The most frequently addressed issues were water quality, crop diseases, and water quantity.

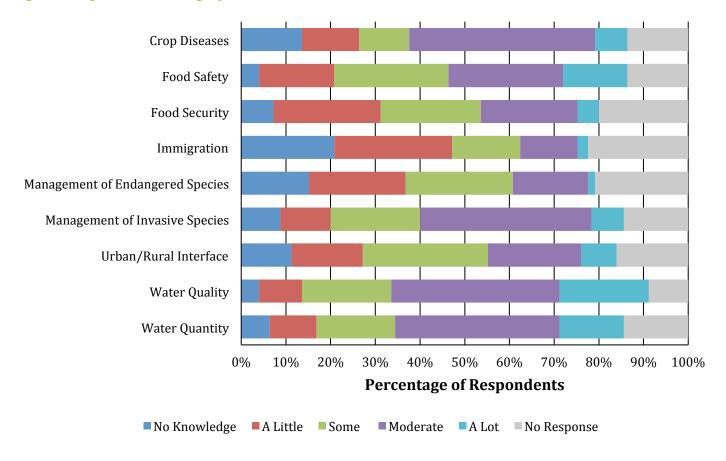
Figure 2: Reported Frequency of Addressing Contentious Issues



Knowledge of Contentious Issues

Respondents were asked to identify their level of knowledge on contentious issues (Figure 3). Respondents reported having less knowledge on issues of immigration and management of endangered species, but more knowledge on issues such as water quality, water quantity, and crop diseases.

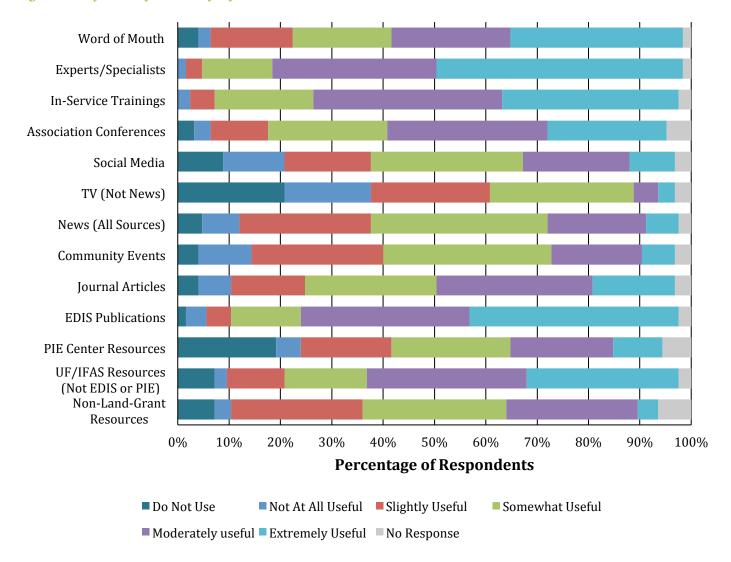
Figure 3: Respondent Knowledge of Contentious Issues



Sources of Leaning about Contentious Issues

Respondents were asked to identify the how useful or not useful several sources of information were in learning about contentious issues affecting their clientele (Figure 4). Overall, respondents found experts/specialists in a particular field, in-service trainings, and Electronic Data Information Source (EDIS) publications to be the most useful. In contrast to this respondents identified social medial, TV (not news), news (all sources), and community events as being the least helpful in learning about contentious issues.

Figure 4: Usefulness of Sources of Information on Issues



Methods of Communication about Contentious Issues

Respondents were asked to indicate how effective or ineffective various methods of communication were in communicating with their clientele about contentious issues (Figure 5). Communication methods involving one-on-one in person, phone calls, emails, group meetings, and workshops were seen as being more effective than newsletters, websites, and blogs. One-on-one in person communication was seen as being the most effective overall. Other methods of communication included site visits, school enrichment classes, cable TV, radio, and newspapers.

One-on-One In Person Phone Call **Email Group Meetings** Workshops Newsletter Website Blog Other Methods 20% 30% 40% 50% 60% 70% 80% 90% 100% 0% 10% **Percentage of Respondents**

■ Very Ineffective ■ Ineffective ■ Neither Effective nor Ineffective ■ Effective ■ Very Effective ■ No Response

Figure 5: Effectiveness of Methods in Communicating about Contentious Issues

Selecting Information to Share on Contentious Issues

Respondents were asked to indicate their level of agreement or disagreement on the ways they select what information to share with clientele about contentious issues (Figure 6). Respondents unanimously agreed that source reliability was a factor in what information they chose to share with clientele, however the majority of respondents agreed that all the methods of selecting what information to share were utilized.

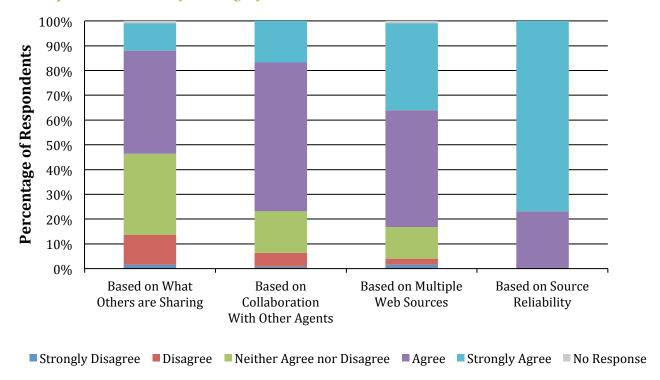


Figure 6: Respondents' Methods of Selecting Information to Share on Issues

Attitudes on Communicating Contentious Issues

Respondents were asked given a semantic differential scale and asked to indicate their attitude about the phrase: "Communicating about contentious agriculture and natural resources issues with clientele is...." Higher numbers indicate a more positive attitude (Table 1). Respondents indicated positive attitudes in feeling that communicating contentious issues was important, essential, meaningful, and encouraged, however they had more negative attitudes on difficulty, and complexity.

Table 1: Respondent Attitudes on Communicating Contentious Issues

Statement	n	M	SD	
Unimportant : Important*	122	4.52	0.73	
Optional : Essential*	122	4.30	0.85	
Meaningless : Meaningful*	122	4.21	0.72	
Discouraged : Encouraged*	120	3.73	1.00	
Difficult : Easy*	122	2.66	1.03	
Complex : Simple	121	1.70	0.76	

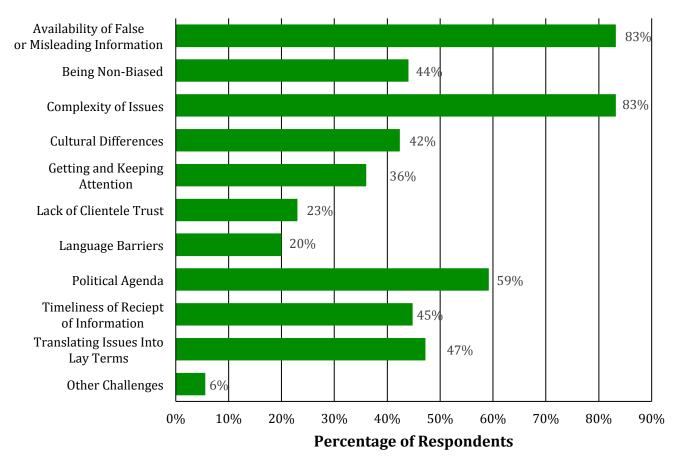
Note: Responses based on semantic differential scale from 1 to 5 with the word on the left being equal to 1 and the word on the right being equal to 5.

^{*}Reverse-coded item

Challenges in Communicating Contentious Issues

Respondents were asked to identify challenges they faced when communicating with clientele about contentious issues in a check all that apply question (Figure 7). Availability of false or misleading information (83%) and complexity of issues (83%) were the most commonly identified challenges in communication; while lack of clientele trust (23%), and language barriers (20%) were the least commonly identified challenges. Other challenges that were identified include emotionally charged issues, false perceptions, organizational discouragement from involvement, conflicting science, closed-mindedness, religious beliefs, and political pressure.



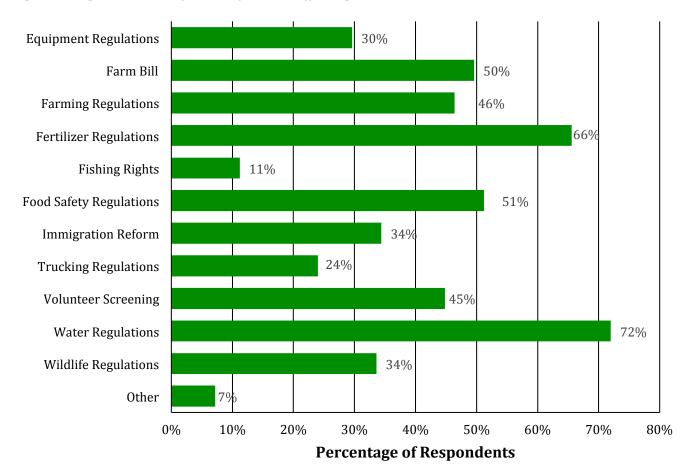


Policies and Regulations

Identification of Policies Affecting Clientele

Respondents were asked to identify what policies and regulations were affecting their clientele (Figure 8). Water (72%) and fertilizer (66%) regulations were the most commonly identified regulations affecting respondents' clientele. Fishing rights were only reported to affect 11% of respondents' clientele, however this is likely due to the lower number of Sea-Grant agents compared to other types of agents. Other policies affecting respondents' clientele included: energy policies, zoning regulations, the Affordable Care Act, pesticide regulations, and school regulations.

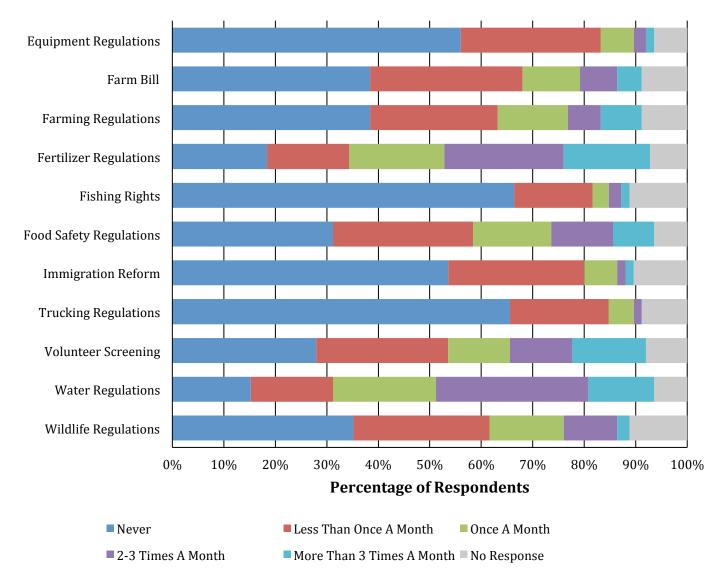
Figure 8: Respondents Identification of Policies Affecting Their Clientele



Frequency of Addressing Policies and Regulations

Respondents were asked to identify how frequently they addressed policies and regulations with their clientele (Figure 9). Fertilizer and water regulations were most frequently addressed by respondents, while equipment regulations, fishing rights, immigration reform, and trucking regulations were least frequently addressed.

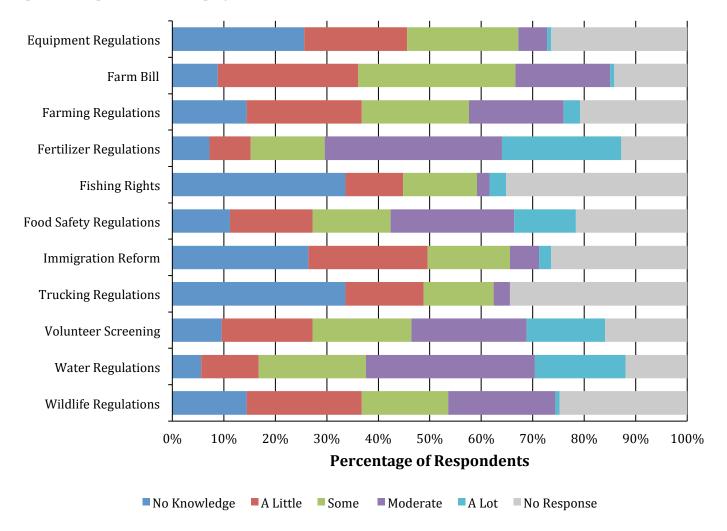
Figure 9: Frequency of Addressing Policy with Clientele



Knowledge of Policies and Regulations

Respondents were asked to identify their level of knowledge of policies and regulations (Figure 10). Respondents identified having the most knowledge about fertilizer and water regulations followed by food safety regulations and volunteer screening. Respondents indicated having the least knowledge about equipment regulations, immigration reform, and trucking regulations.

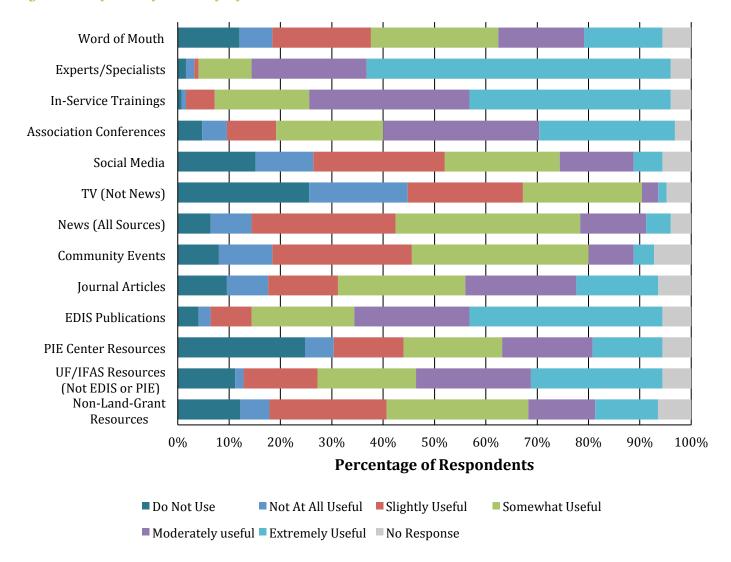
Figure 10: Respondent Knowledge of Policies



Sources of Information on Policies and Regulations

Respondents were asked to indicate how useful or not useful different sources of information were in learning about policies and regulations (Figure 11). Experts/specialists, in-service trainings, association conferences, and EDIS publications were identified as being the most useful sources of information for learning about policies and regulations affecting clientele. TV (not news), social media, and community events were identified as being the least useful sources about policies and regulations.

Figure 11: Usefulness of Sources of Information on Policies



Sharing Information on Policies and Regulations

Respondents were asked to select their level of agreement or disagreement with statements on how they select information on policies and regulations to share with clientele (Figure 12). Source reliability played a role in information selection for nearly all (99%) of respondents. What other agents were sharing however, had relatively less agreement on its use in selecting information.

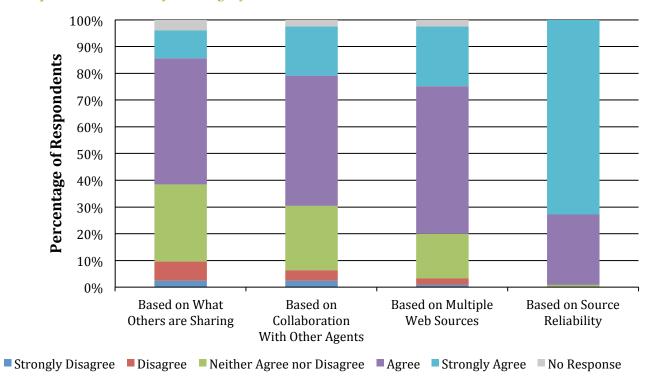


Figure 12: Respondents' Methods of Selecting Information to Share on Policies

Attitudes on Communicating about Policies and Regulations.

Respondents were given a semantic deferential scale and asked to indicate their attitude about the phrase: "Communicating about agriculture and natural resource regulations and policies with clientele is..." (Table 2). Respondents indicated positive attitudes feeling that communicating policies and regulations is important, essential, meaningful, and encouraged; however had a more negative attitude about its difficulty and complexity.

Table2: Respondent Attitudes on Communicating Policies

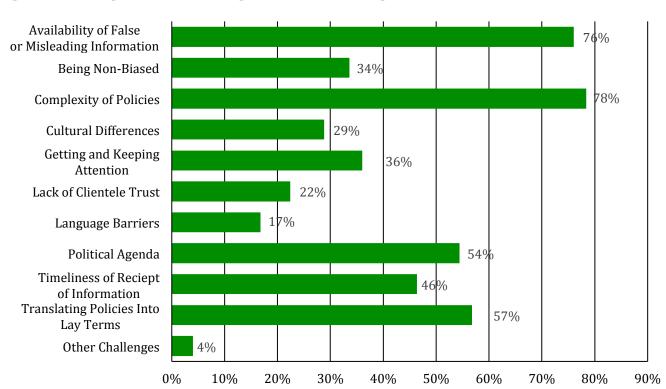
Statement	n	M	SD	
Unimportant : Important*	118	4.45	0.76	
Optional : Essential*	120	4.28	0.80	
Meaningless : Meaningful*	119	4.24	0.74	
Discouraged : Encouraged*	120	3.87	0.95	
Difficult : Easy*	120	2.94	1.06	
Complex : Simple	120	1.87	0.90	

Note: Responses based on semantic differential scale from 1 to 5 with the word on the left being equal to 1 and the word on the right being equal to 5.

^{*}Reverse-coded item

Challenges in Communicating about Policies and Regulations

Respondents were asked to identify what challenges they faced when attempting to communicate policies and regulations with clientele in a check all that apply question (Figure 13). The availability of false or complexity of policies (78%), and misleading information (76%) were the most commonly reported challenges facing respondents followed by translating policies into lay terms (57%), and political agendas (54%). Lack of clientele trust (22%) and language barriers (17%) were the least commonly reported challenges. Other challenges reported included clientele frustration and providing age appropriate information.



Percentage of Respondents

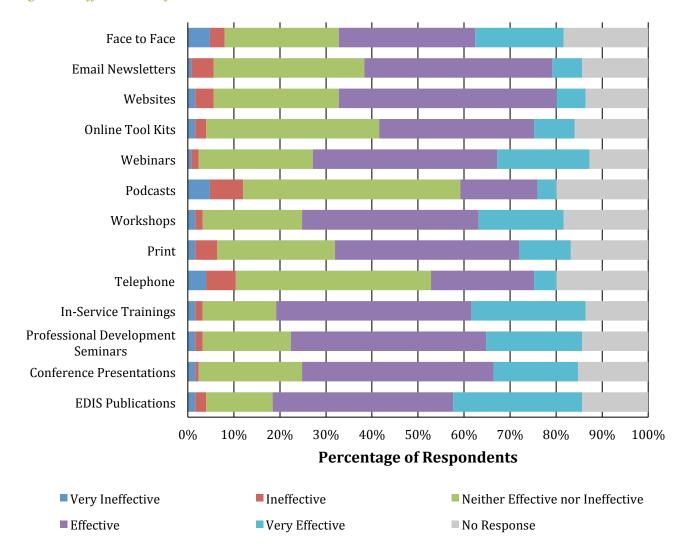
Figure 13: Challenges in Communicating About Policies and Regulations

PIE Center

PIE Center Communication Channels

Respondents were asked to identify the effectiveness of communication channels that the PIE Center uses to communicate (Figure 14). Over 50% of respondents identified websites, webinars, workshops, print, in-service trainings, professional development seminars, conferences presentations, and EDIS publications as being effective or very effective means of communication for the PIE Center. In contrast only 27% found telephone, and 21% found podcasts as being effective or very effective modes of communication for the PIE Center.

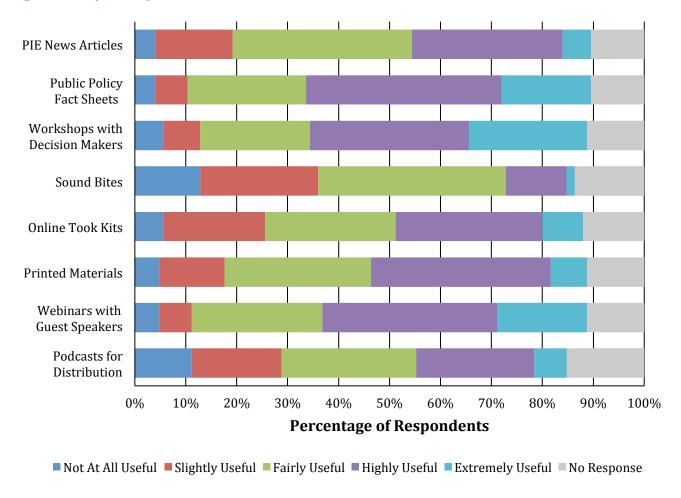
Figure 14: Effectiveness of PIE Center Communication Channels



PIE Center Resources

Respondents were asked to identify how useful or not useful they felt current and future PIE Center resources would be (Figure 15). Respondents indicated they would find public policy fact sheets, workshops with decision makers, and webinars with guest speakers to be the most useful resources coming from the PIE Center. Respondents also indicated that they felt sound bites would be the least useful resource offered. Other potential resources mentioned included a website with portals to special interest groups with credible information on contentious issues, information on alternative energy technology, mock discussion workshops to build confidence working with contentious groups, district meetings, modules for presentations, emails on emerging hot topics, and short video clips for sharing on social media sites.

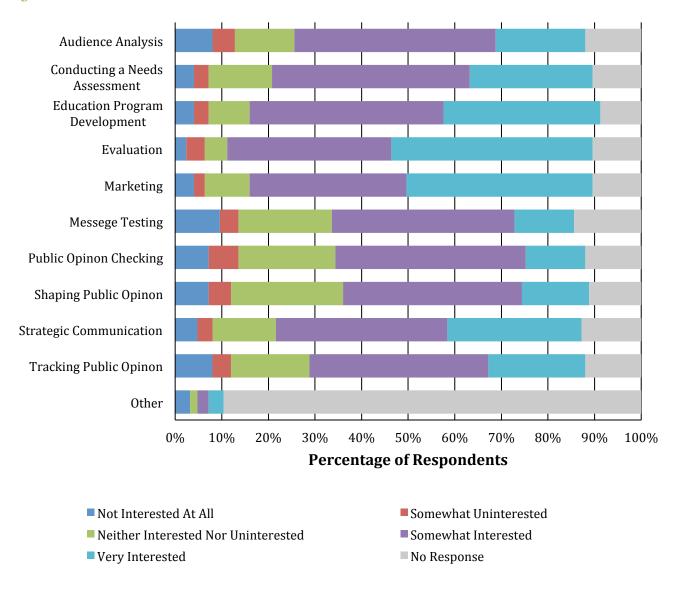
Figure 15: Usefulness of PIE Center Resources



Level of Interest in PIE Center Services

Respondents were asked to indicate their level of interest in various services offered by the PIE Center (Figure 16). Respondents indicated the highest level of interest in evaluation services with 78% indicating at least some interest. This was followed closely by educational program development (76%) and interest in marketing (74%). Relatively less interest was shown in public opinion checking (54%), message testing (53%), and shaping public opinion (52%) services. Other services suggested included a branching out into youth development and more information on volunteer screening and civic engagement.

Figure 16: Interest in PIE Services



Future use of PIE Products

Respondents were asked to identify how likely they would be use potential PIE Center Products (Figure 17). All potential PIE products were fairly well received. A certificate in Public Issues Education was reported as the least likely to be used with only 49% of respondents indicating they were likely or very likely to use that product, while short videos of speakers (67%) were the most likely to be used.

100% 90% Percentage of Respondents 80% 70% 60% 50% 40% 30% 20% 10% 0% Ready To Use Short Videos of Online In-Service PIE Certificate Curriculum **Speakers** Training for Extension Distribution Undecided ■ Very Unlikely ■ Unlikely Likely Very Likely ■ No Response

Figure 17: Use of PIE Products

General Impressions

Respondents to the survey were provided with several opportunities to provide categories or details more pertinent to themselves with the "other" option or in open-ended questions. Upon review of these responses it becomes clear that not all respondents were familiar with what constitutes a contentious or public issue, or what the PIE Center does. Some respondents cited issues such as "Cost of Inputs" or "4-H" as being a contentious issue affecting their clientele indicating a misperception of what a contentious issue is. Similarly, the PIE Center seemed to have some misperceptions or lack of knowledge as to what their role is in regard to Extension. One individual asked for information about "alternative energy technologies coming to market," while others stated they had no knowledge of the PIE Center or what it offers. One individual stated "You have made the assumption that we even know what you have to offer..." another suggested "Maybe it is a branding issue... where I don't immediately recognize PIE as being the provider of the information I am using in my work." Some individuals indicated time as being a factor in their lack of knowledge such as this individual said:

Frankly, I have very little time to devote to looking at or utilizing PIE Center information and resources. I do believe the PIE Center provides a good service for agents, from what I hear, but day to day responsibilities and workshops leave little to no time to invest.

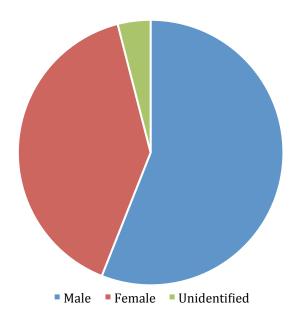
Findings

Description of Respondents

Sex

Approximately 56% of respondents were male, while 40% of respondents indicated they were female. Approximately 4% of respondents chose not to answer.

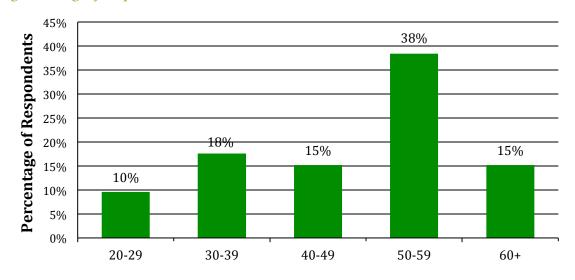
Figure 18: Sex of respondents



Age

The majority of respondents for this survey were ages 50 and over (53%), while agents under the age of 30 only comprised 10% of respondents (Figure 18). There were 4% of respondents who chose not to answer.

Figure 19: Age of Respondents



Number of Years in Extension

Respondents to this survey were fairly well distributed in their number of years in Extension (Figure 19). There were however a larger number of respondents reporting 1-5 years in Extension (26%), and a smaller number reporting having 21-25 years in extension (7%) compared to other categories. There were also 5% of respondents who chose not to answer.

Percentage of Respondents 26% 25% 20% 18% 15% 15% 15% 14% 10% 7% 5% 0% 1-5 6-10 11-15 16-20 21-25 26+

Figure 20: Respondents Number of Years in Extension

Role in Extension

Respondents were asked to identify what role(s) they fulfill in Extension in a check all that apply question (Figure 20). The majority of respondents indicated that they were a county agent (71%) while no respondents indicated being a District Extension Director.

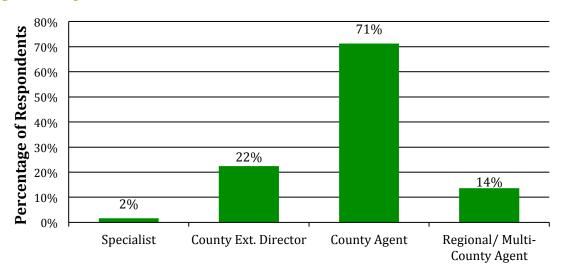


Figure 21: Respondents Role in Extension

Area of Specialty

Respondents were asked to identify their area(s) of specialty in a check all that apply question (Figure 21). The majority of respondents were either agriculture (40%), or horticulture (33%) agents. The breakdown of respondent specialties was similar to that of the population.

45% 40% 33% 17% 14% 14% 10% 6% Agriculture Natural 4-H Community Family & Horticulture Sea-Grant Resources Development Consumer

Figure 22: Respondents Area(s) of Specialty

Association Membership

Respondents were asked to identify what professional association(s) they belonged to check all that apply question (Figure 22). Respondent choices included: Florida Association of County Agricultural Agents (FACAA), Epsilon Sigma Phi (ESP), the Florida Association of Natural Resources Extension Professionals (FANREP), the Florida Association of 4-H Agents (FA4-HA), the Florida Extension Association of Family and Consumer Sciences (FEAFCS), & Other. Other agents respondents belonged to included: the Florida State Horticulture Society, the Florida Turf-grass Association, the National Association of Community Development Extension Professionals, the American Registry of Professional Animal Scientists, and the American Society of Horticulture.

Science

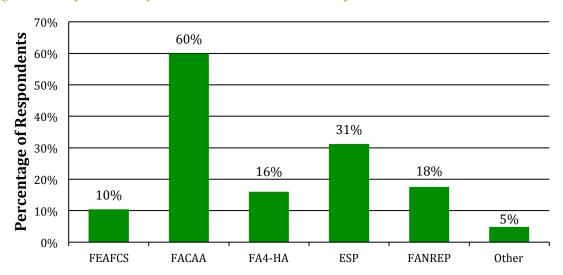


Figure 23: Respondent Professional Association Membership

Key Findings

Contentious Issues

- Food safety, management of invasive species, and water quality were the most commonly identified and addressed contentious issues.
- Food security, immigration, and management of endangered species were the least commonly identified and addressed contentious issues.
- Respondents reported having the most knowledge on issues of crop diseases, water quality, and water quantity, and the least knowledge about immigration and management of endangered species.
- Experts/specialists in a particular field, EDIS publications, and in-service trainings were identified as the most useful methods to learn about contentious issues.
- One-on-one in person, phone calls, emails, group meetings, and workshops were identified as the most useful methods for communicating with clientele about contentious issues.
- Source reliability was a factor in determining what information to share for all agents.
- Respondents felt that communicating about contentious issues was important, essential, encouraged, and meaningful, but found it to be difficult and complex.
- Respondents reported that the availability of false or misleading information, and complexity of issues were the biggest challenges in communicating with clientele about contentious issues.

Policies and Regulations

- Fertilizer and water regulations were the most commonly identified and addressed policies and regulations.
- Fishing rights, immigration reform, equipment regulations, and trucking regulations were the least commonly identified and addressed policies and regulations.
- Respondents indicated having the most knowledge of fertilizer and water regulations, but the least knowledge on immigration reform, equipment regulations, and trucking regulations.
- Experts/specialists in a particular field, in-service trainings, EDIS documents, and association conferences were reported to be the most useful methods for learning about policies and regulations.
- Source reliability was a factor in nearly all respondents decisions in what information they share
- Communicating policies and regulations was generally seen to be important, essential, encouraged, and meaningful, but respondents found it to be difficult and complex.
- The availability of false or misleading information, and the complexity of policies were the most commonly reported challenges in communicating with clientele about policies and regulations.

PIE Center

- Respondents found websites, webinars, workshops, print, in-service trainings, professional development seminars, conference presentations, and EDIS publications to be the PIE Center's most effective modes of communication.
- Respondents felt that public policy fact sheets, workshops with decision makers, and webinars with guest speakers would be the most useful PIE Center resource.
- Sound bites were thought to be the least useful PIE Center resource.
- Interest in PIE center services was generally high with evaluation, marketing, and educational program development services having the most interest.
- Interest in potential PIE Center products was generally high with the most interest being in short videos of speakers.

• Some respondents had misconceptions of what constitutes a public issue, what the PIE Center is, and a lack of knowledge about what the PIE Center offers.

Recommendations

For Extension

- A lack of Extension coverage in immigration provides a valuable opportunity to expand clientele base to include an underserved population.
- Extension could play a valuable role in public issues education, however in order to accomplish this programs must be established and agents must gain knowledge in deficient areas such as food security and immigration.
- Partnership with agricultural educators could allow extension to make an even bigger impact on tough
 contentious issues such as food security through the establishment of partnerships with local high school
 agriculture programs to teach people how to grow their own fruits and vegetables or by bolstering large programs
 to be capable of assisting with area food supply issues.
- In-service trainings focusing on contentious issues and crisis communication could allow agents to become more comfortable with complex nature of the subjects and how to communicate in highly charged environment.
- Experts and specialists were identified as a very effective way to learn about both contentious issues and policies, as such Extension should strive to ensure that agents in the field are easily able to identify and contact appropriate university faculty when questions arise.
- Programs specifically designed to teach clientele about determining reliability and bias of information could assist in dispelling the challenge of the plethora of false or misleading information.

For the PIE Center

- Development and distribution of promotional materials to inform Extension of the Center's mission, goals, and services could benefit the partnership between the PIE Center and Extension in the field.
- Continued efforts to increase brand visibility could help insure Extension is aware of PIE Center contributions.
- Focusing on further development of EDIS publications, in-service trainings, and professional development seminars can help spread word of PIE Center research as well inform Extension on dealing with contentious issues in agriculture and natural resources.
- Seeking out partnerships with field agents to develop programs to work in underserved issues such as food
 security and immigration can benefit both Extension and the PIE Center by expanding clientele bases, and making
 impact as change agents.
- Partnerships with field agents could further increase visibility of the PIE Center in not only the Extension arena, but also in industry through participation in Extension activities such as workshops, field days, and conferences.
- Continued development of public policy fact sheets, workshops with decision makers, and webinars with guest speakers could prove valuable as respondents felt such services would be useful.
- Expanding public policy fact sheets to also cover segments of contentious issues could prove a valuable source to provide information in areas where knowledge is lacking.
- Workshops and webinars could also be developed to partner not only with decision makers, but also special interest groups on different sides of contentious issues.