JIFSAN Evaluation Report

FSMA Produce Safety Rule Remote Grower Training

2020 Online Evaluation Summary

Metrics Working Group
2021/07/10

This project was supported by the Food and Drug Administration (FDA) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award U01FD001418 totaling $3,739,565 to JIFSAN and 5U01FD006873-02 award to IICA with 100 percent funded by FDA]/HHS (50% from each Coop Agreement). The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by FDA/HHS, or the U.S. Government.

The FSMA Produce Safety Rule Remote Grower Training started in June, 2020 in four Latin American Countries (Chile, Dominican Republic, Honduras, and Mexico). The Chile and Dominican Republic trainings were delivered by IICA instructors and the Honduras and Mexico trainings were delivered by JIFSAN instructors. By the end of 2020, 27 courses were delivered.

JIFSAN Online Evaluation was designed to be deployed as part of the International FSMA Produce Safety Rule Remote Grower Training delivered by either IICA or JIFSAN. The Online Evaluation started in July, 2020. It was updated in September of the same year. Between July and December, 2020, the evaluation links were emailed to 374 participants in 23 courses. JIFSAN received 315 responses, including 285 pre-training evaluations and 234 post-training evaluations. 204 participants submitted both pre- and post-training evaluations, and 119 participants indicated that they were growers in both surveys.

The Online Evaluation consisted of a pre-training survey and a post-training survey. In the pre-training survey, training participants completed a background questionnaire and a multiple choice test on their produce safety knowledge. If participants indicated that they were growers, the evaluation directed them to additional grower survey questions on farm characteristics. In the post-training survey, participants saw the same multiple choice knowledge test. They were also asked to respond to questions on their learning experience, training satisfaction, and changes in confidence in applying produce safety knowledge after attending the training. If participants indicated that they were growers, they were given additional questions on change in attitudes towards produce safety practices as a result of the training.

The produce safety knowledge test was developed by the Southern Center at the University of Florida, the questionnaires were developed by JIFSAN. Instructors and staff from JIFSAN and IICA contributed to the Spanish translation. The Online Evaluations were distributed through Qualtrics with the help from the instructors.

This evaluation summary included all submitted responses. For example, analyses of pre-training evaluation questions included all 285 responses, regardless if we were able to match the pre-training evaluations to the participants' post-training evaluations. Analyses of pre-training evaluation grower survey questions included all 191 responses, regardless if the participants submitted matching post-training grower survey. However, analyses comparing pre- and post-training survey answers included only participants who submitted both pre- and post-training evaluations.

To reduce potential survey fatigue, increase response rate, and improve data quality, the evaluation questionnaires were simplified at the end of August. A number of questions asked in the July-August version were dropped in September-December. These included all questions in the Training Delivery Method section, three questions from the Grower Survey section (challenge to comply with the Produce Safety Rule, percentage of farm produce consumed raw, and percentage of farm produce processed), and four sets of questions on attitudes

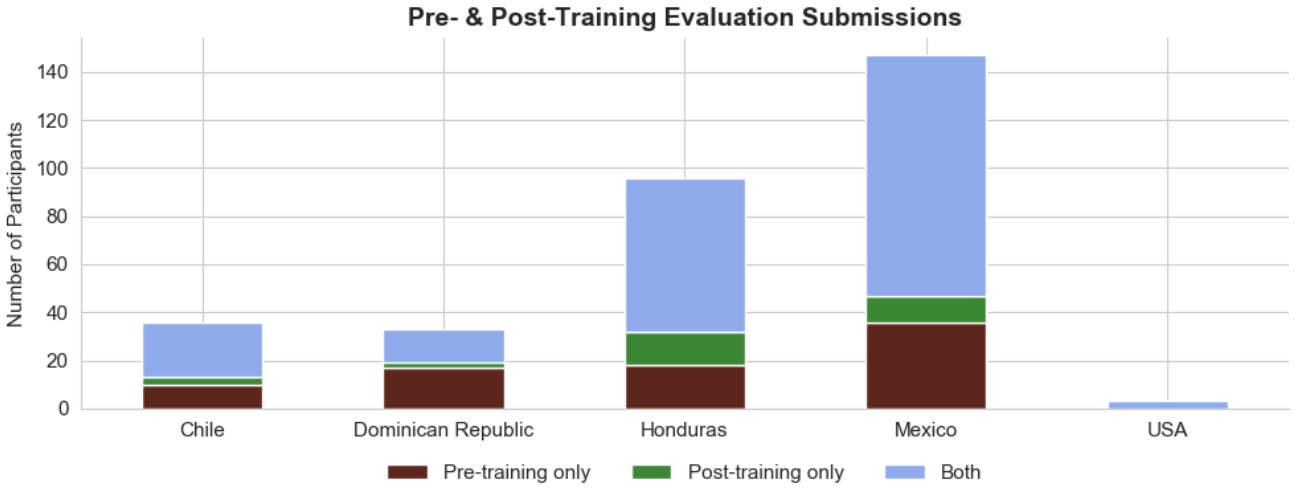
toward produce safety practices before and after training. A number of questions repeated in both the pre- and post-training evaluations were consolidated into questions on changes after attending training. These included self-assessments of knowledge level before and after training and three sets of questions on attitudes towards produce safety practices. Summary charts or lists to these questions were listed on separate pages for different evaluation versions. Only participants from July-August courses answered questions in the July-August version of Online Evaluation, and participants from September-December courses answered questions in the September-December version.

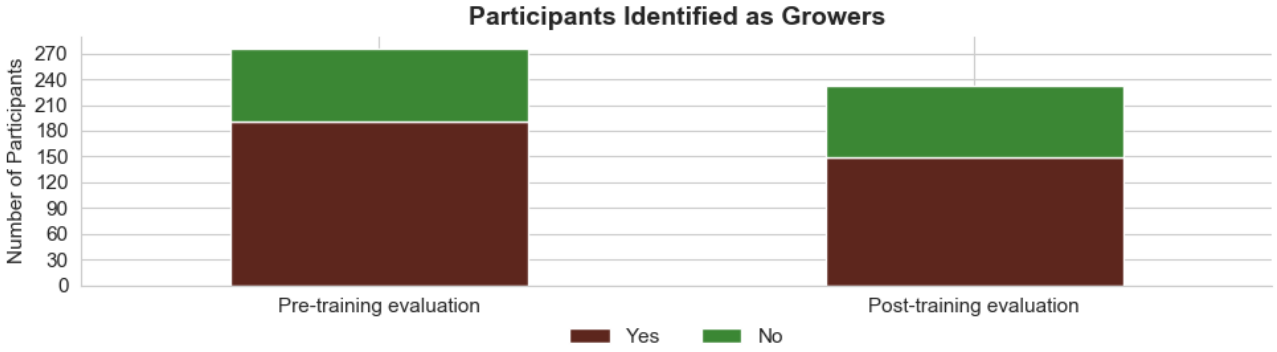
In addition, one question on suggestions to improve future training was updated by including two more options for respondents -- more hours each day for fewer days and fewer hours each day for more days. This question, together with the remaining unchanged questions, were summarized based on the full 2020 data set.

Despite our effort to improve the evaluation questionnaires, between September and December, 2020, the response rate was lower than expected in a few trainings. Unfortunately, we did not have sufficient information on the causes of the decreased response rate.

This report also includes a summary of PSA Grower Training Course Evaluation from 139 participants and 11 selected courses. The PSA evaluation's by-module questions offer unique insights into participants learning experience on specific topics.

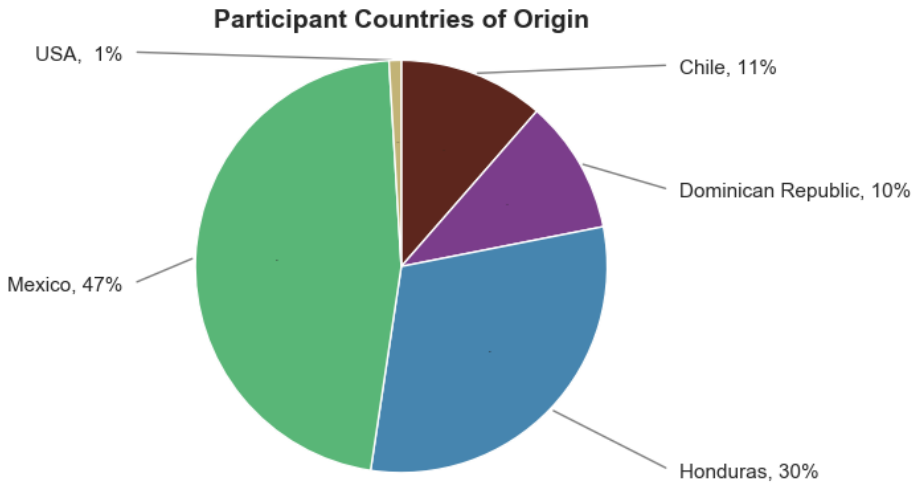
Evaluation Delivery and Submission

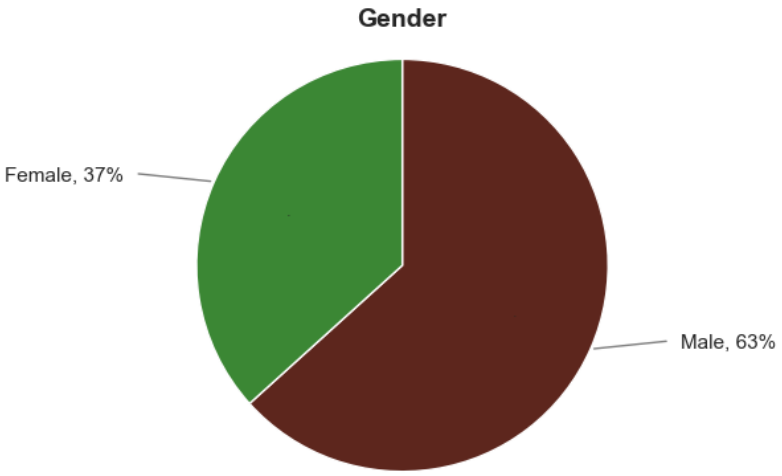


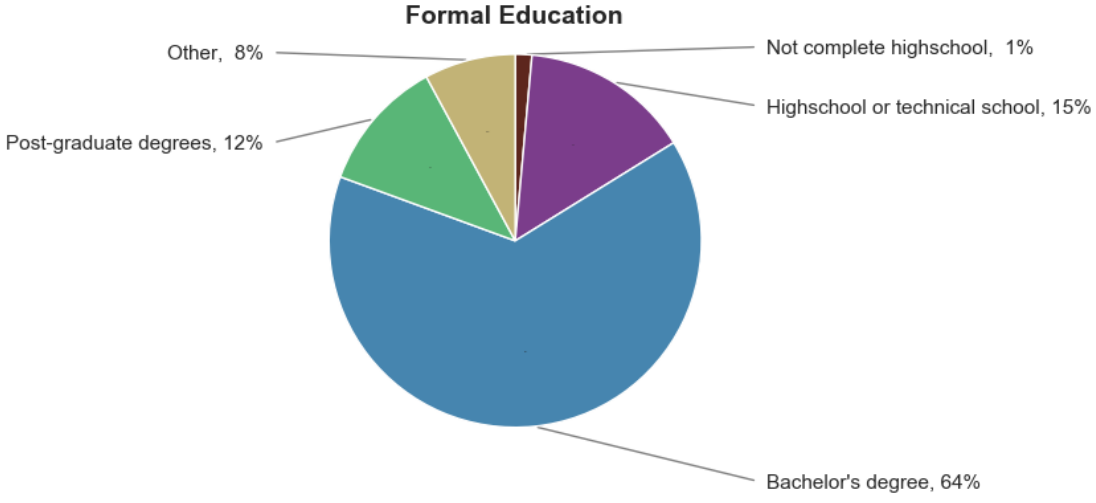


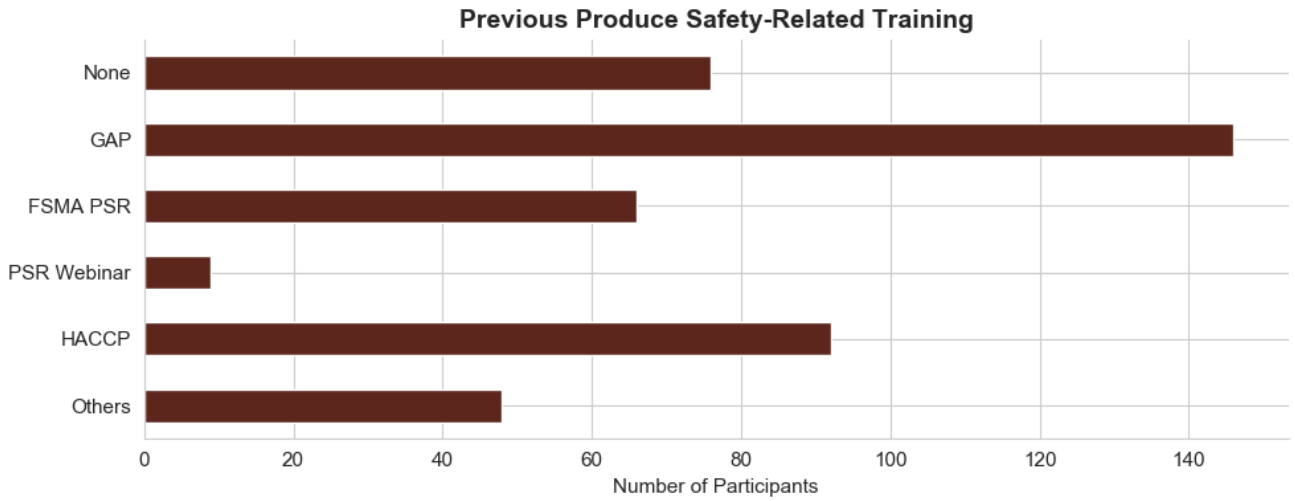
Note: Only participants who have identified themselves as growers will proceed to the Grower Survey section of the evaluations.

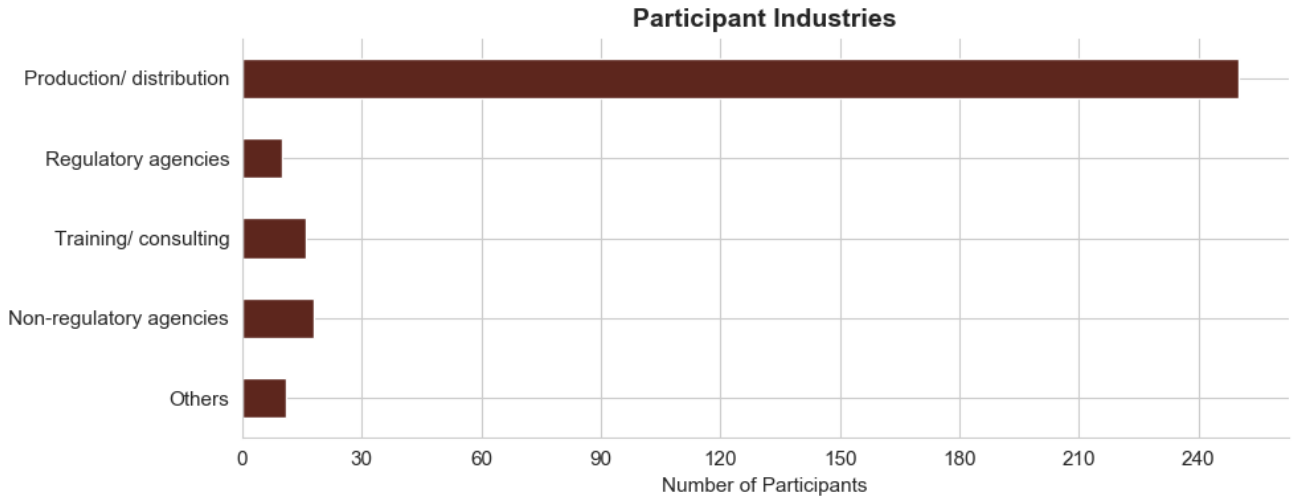
Participant Background

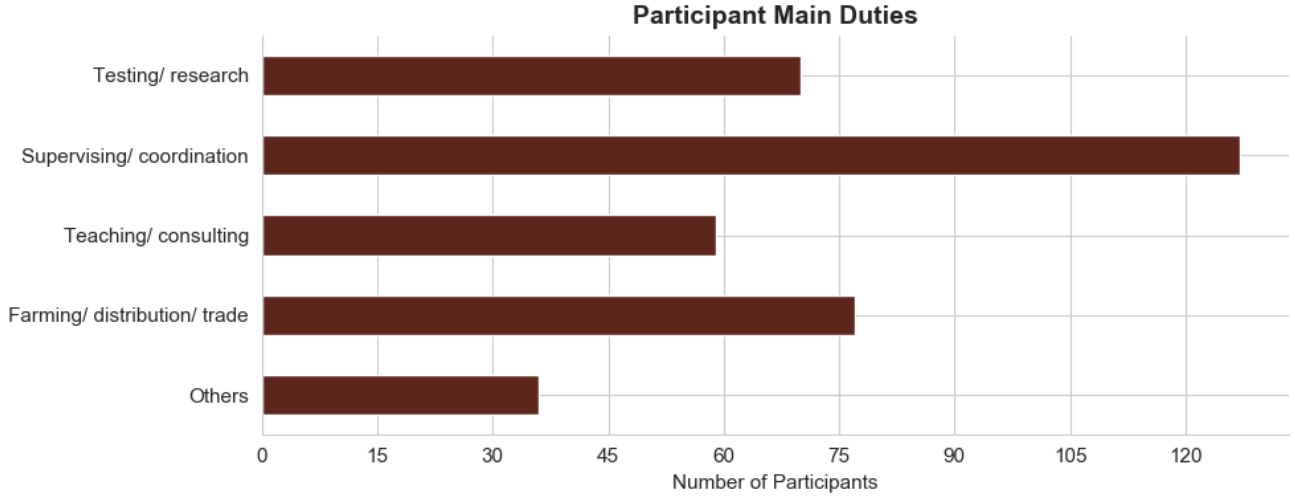


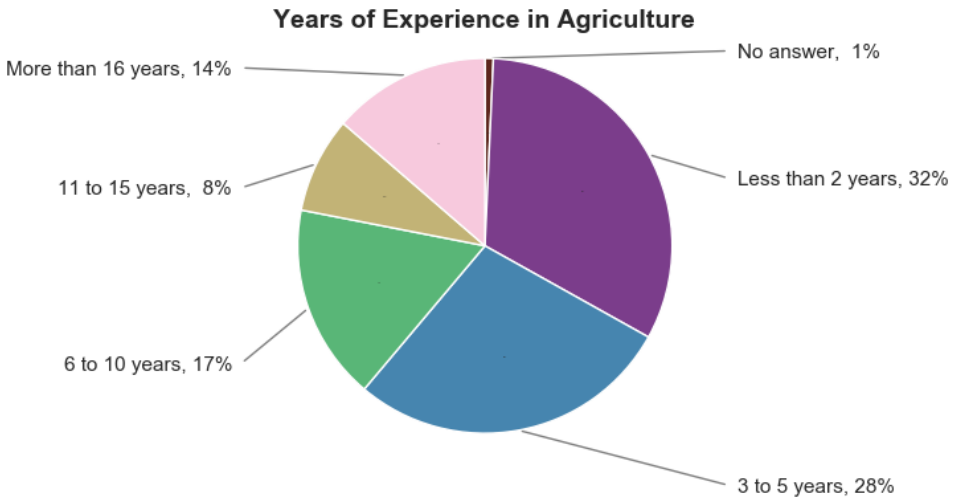


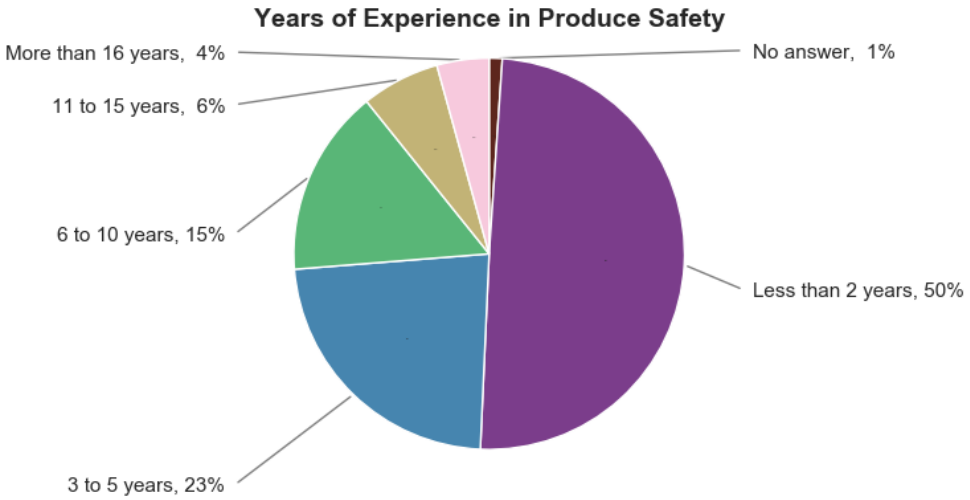


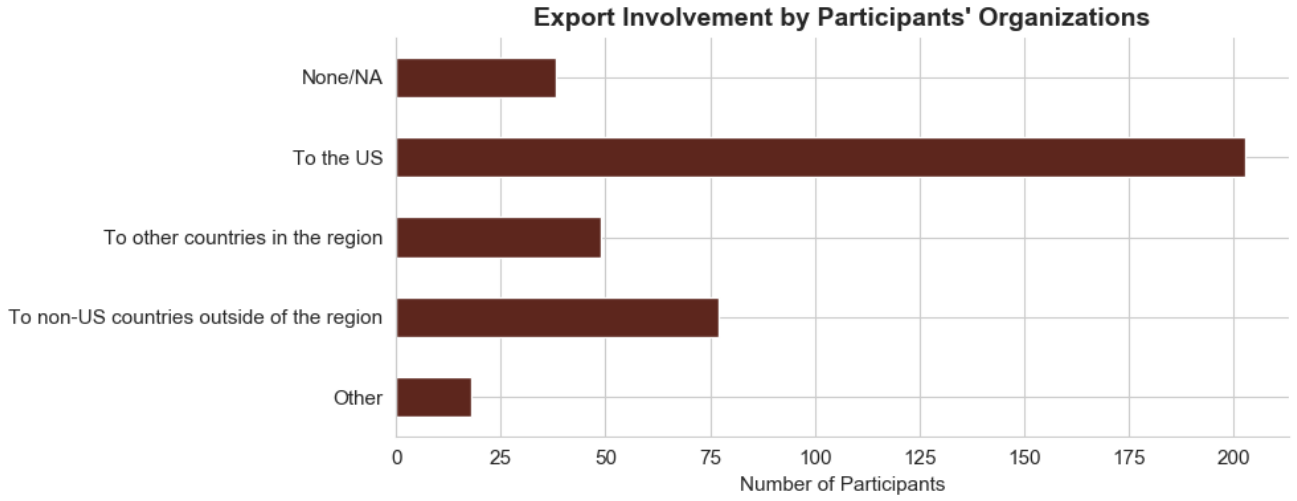

Previous Produce Safety-Related Training
None
GAP
FSMA PSR
PSR Webinar
HACCP
Others
0
20
40
60
80
100
120
140
Number of Participants


Participant Industries
Production/ distribution
Regulatory agencies
Training/ consulting
Non-regulatory agencies
Others
0
30
60
90
120
150
180
210
240
Number of Participants

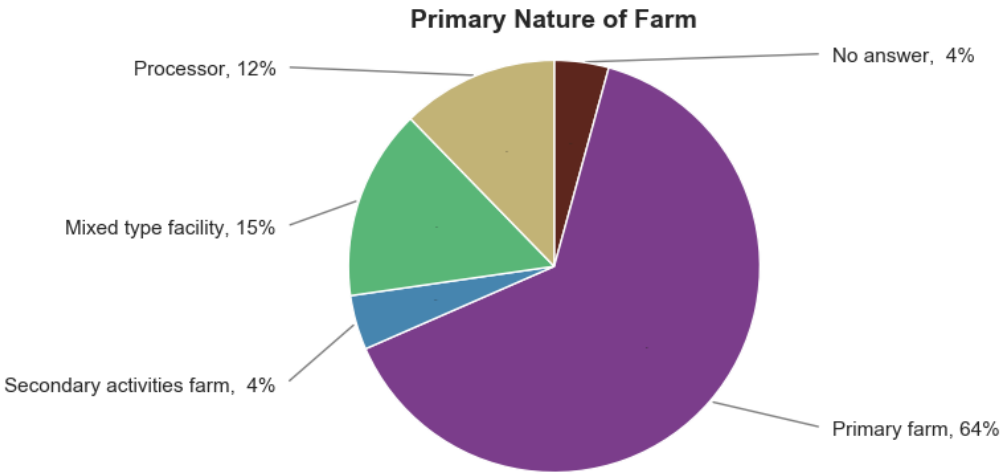

Participant Main Duties
Testing/ research
Supervising/ coordination
Teaching/ consulting
Farming/ distribution/ trade
Others
0
15
30
45
60
75
90
105
120
Number of Participants

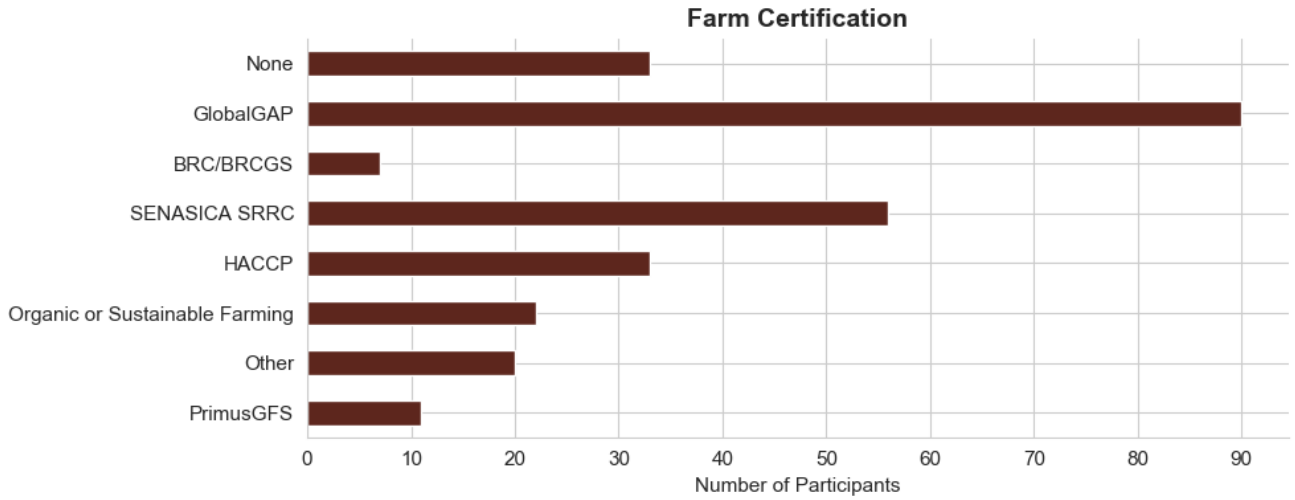

Years of Experience in Agriculture
More than 16 years, 14%
No answer, 1%
11 to 15 years, 8%
Less than 2 years, 32%
6 to 10 years, 17%
3 to 5 years, 28%

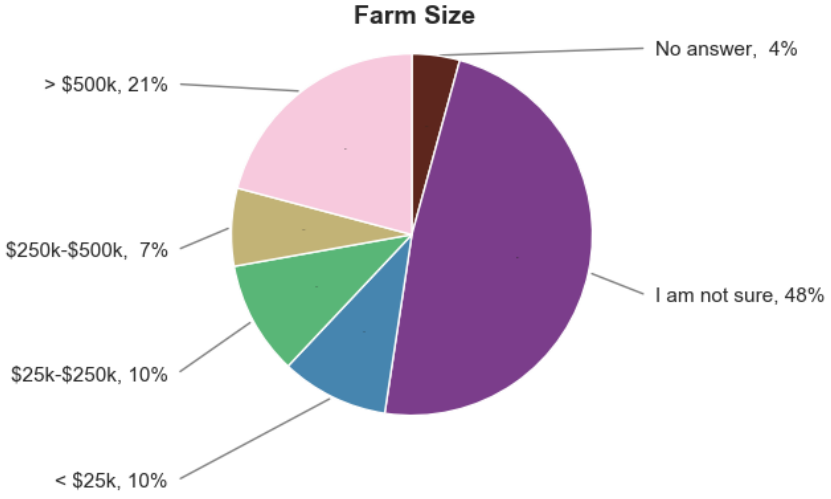

Years of Experience in Produce Safety
More than 16 years, 4%
No answer, 1%
11 to 15 years, 6%
6 to 10 years, 15%
Less than 2 years, 50%
3 to 5 years, 23%


Export Involvement by Participants' Organizations
None/NA
To the US
To other countries in the region
To non-US countries outside of the region
Other
0
25
50
75
100
125
150
175
200
Number of Participants

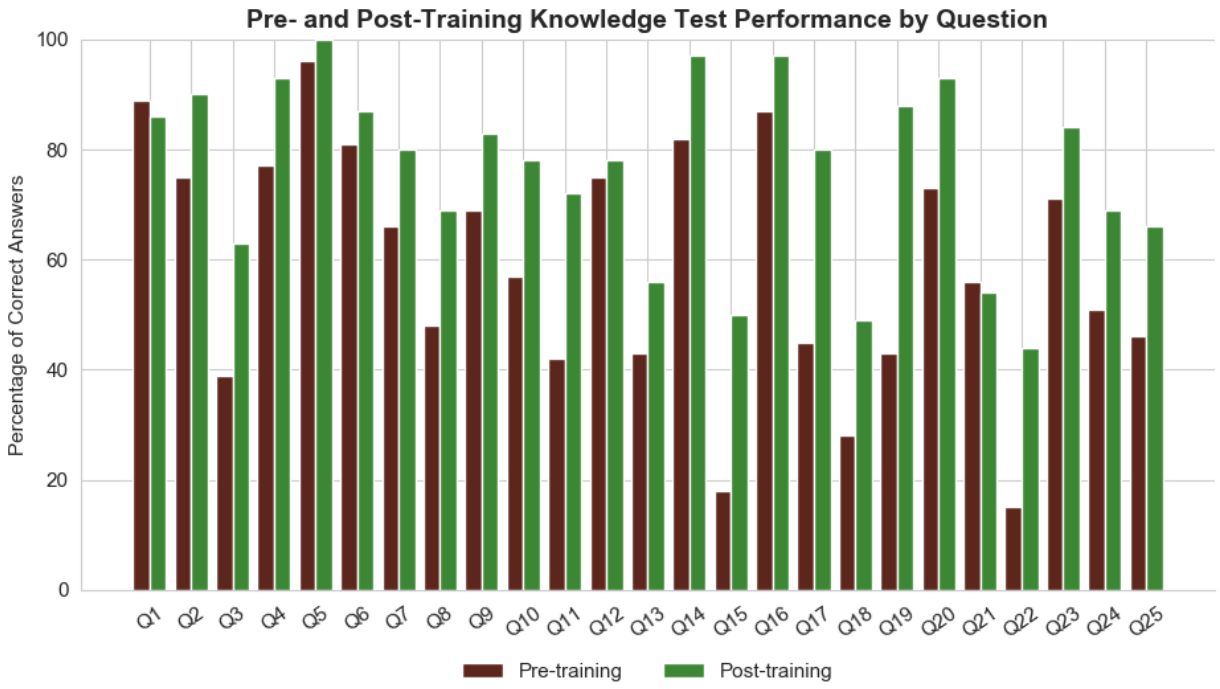
Grower Survey



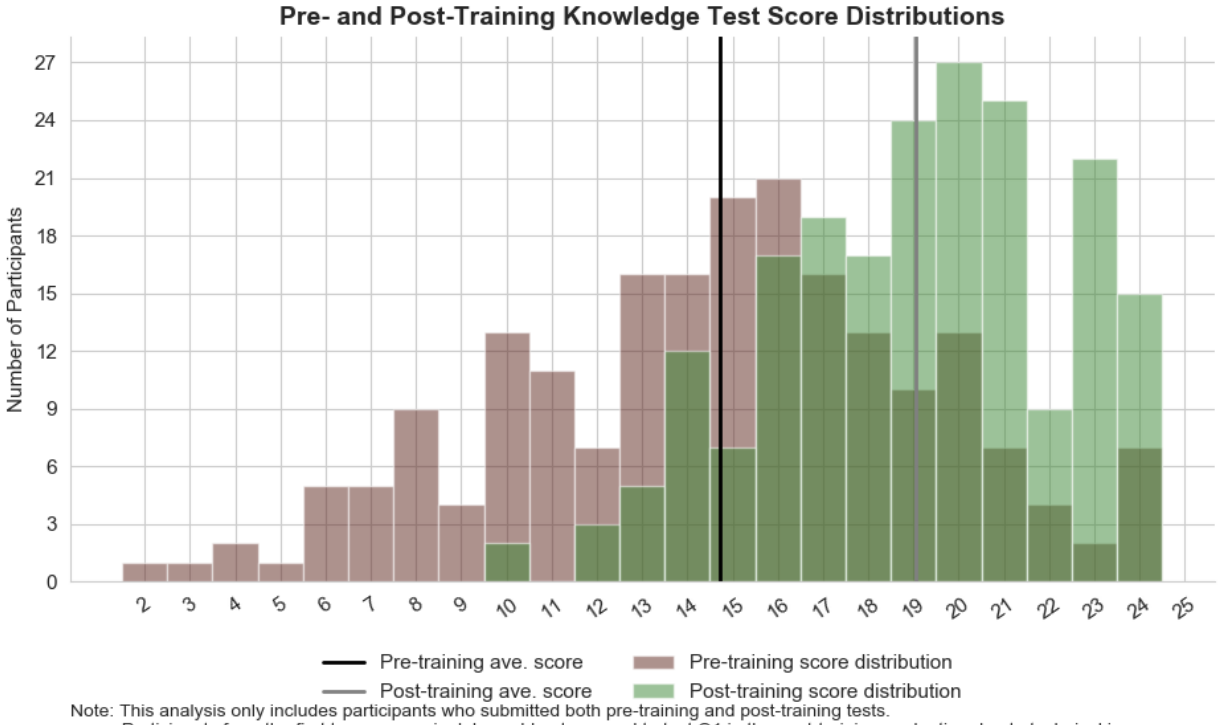




Knowledge Test Results



Note: This analysis only includes participants who submitted both pre-training and post-training tests.
Participants from the first two courses in July could not respond to test Q1 in the post-training evaluation due to technical issues.
Therefore, they did not have Q1 score in the post-training test.



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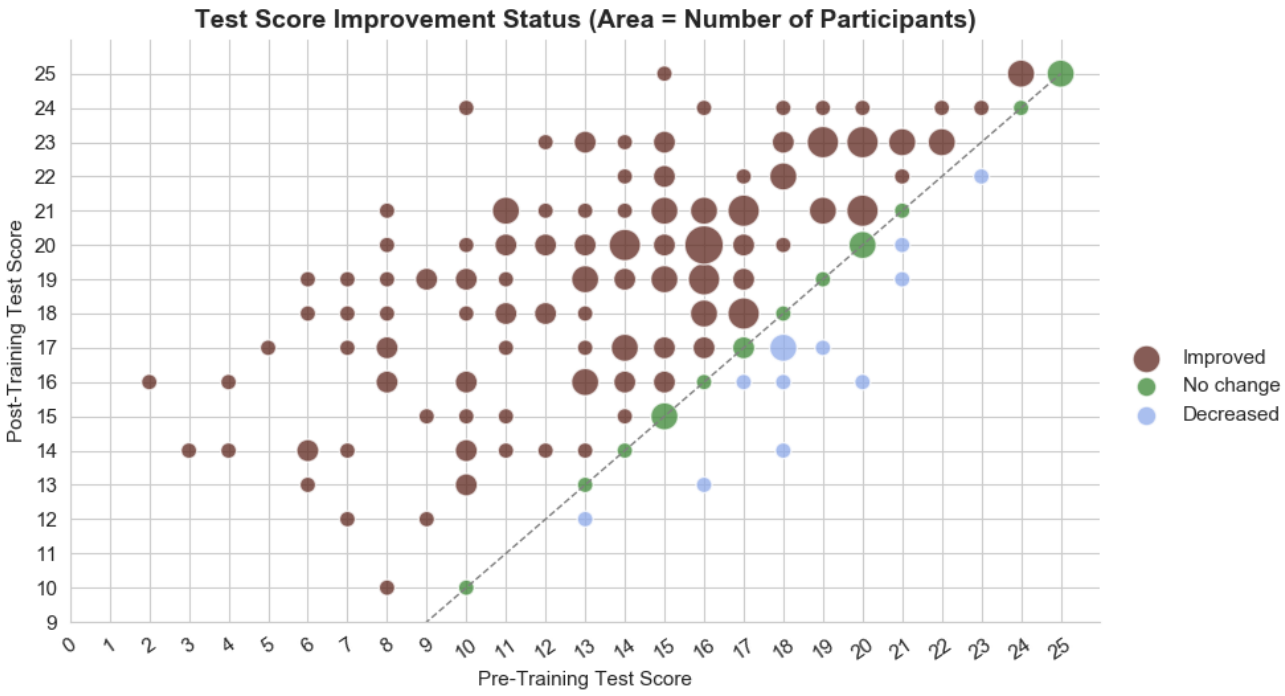

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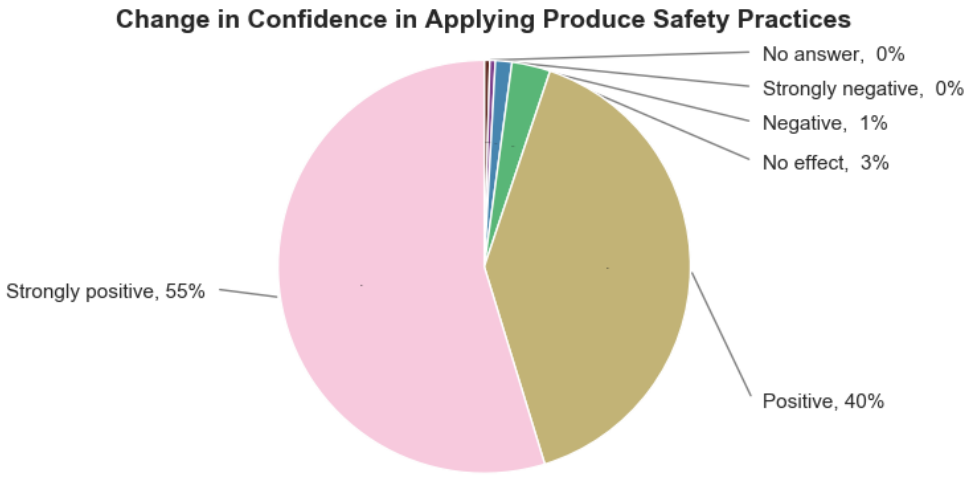
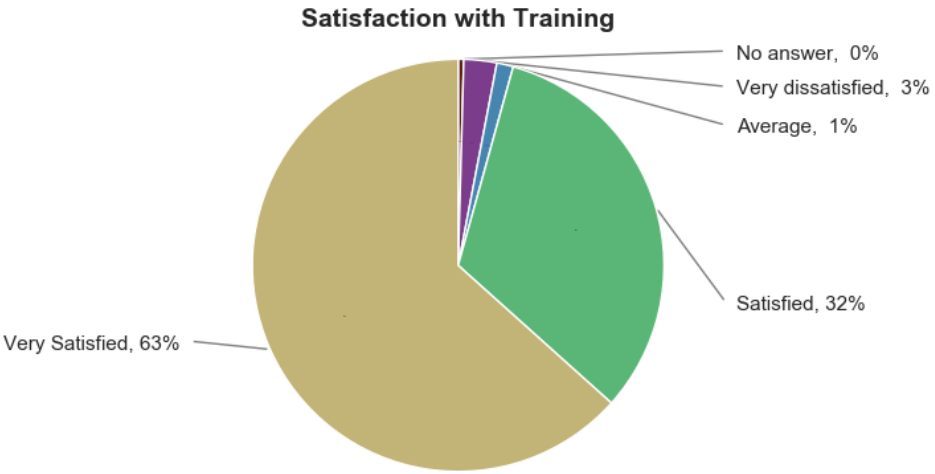
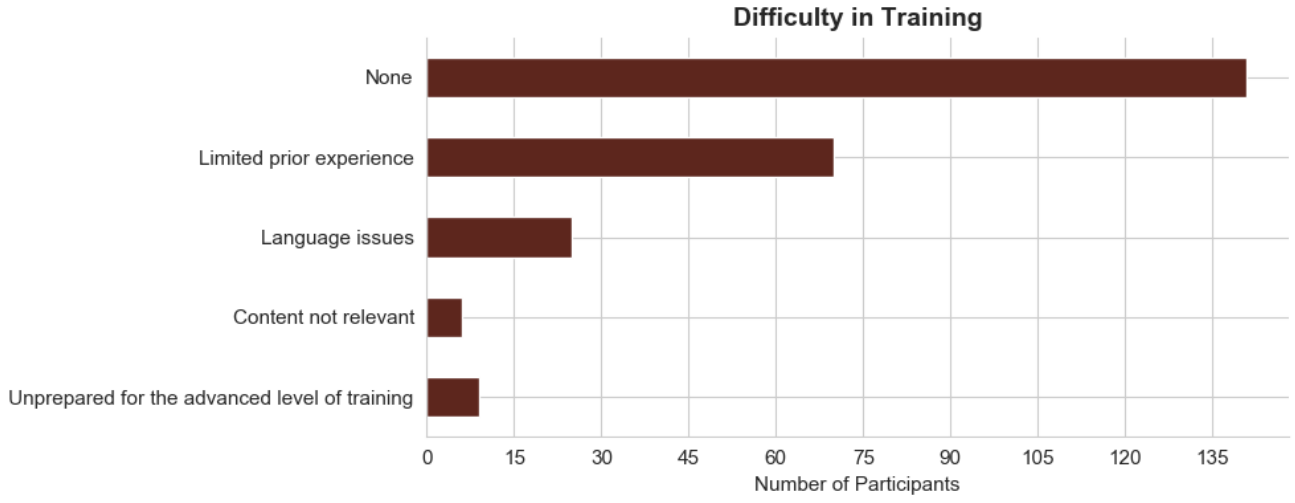
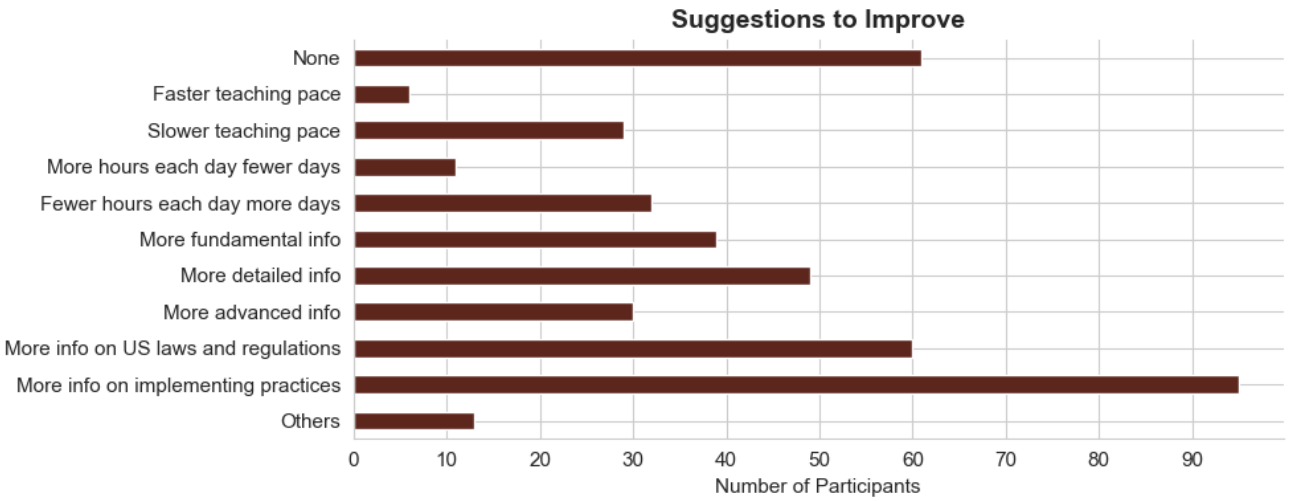
Assessment of Training

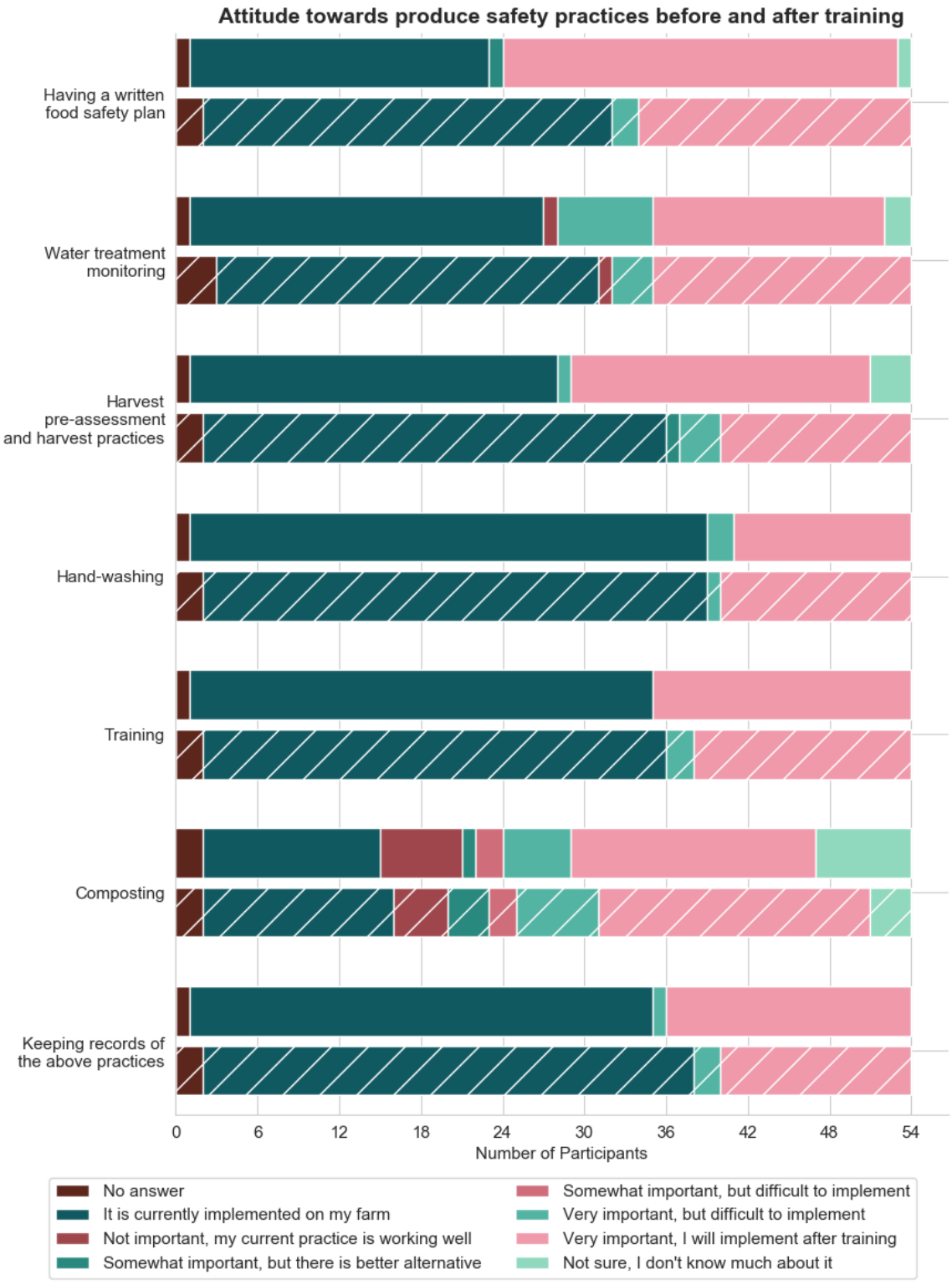







Suggestions to Improve
None
Faster teaching pace
Slower teaching pace
More hours each day fewer days
Fewer hours each day more days
More fundamental info
More detailed info
More advanced info
More info on US laws and regulations
More info on implementing practices
Others
0
10
20
30
40
50
60
70
80
90
Number of Participants

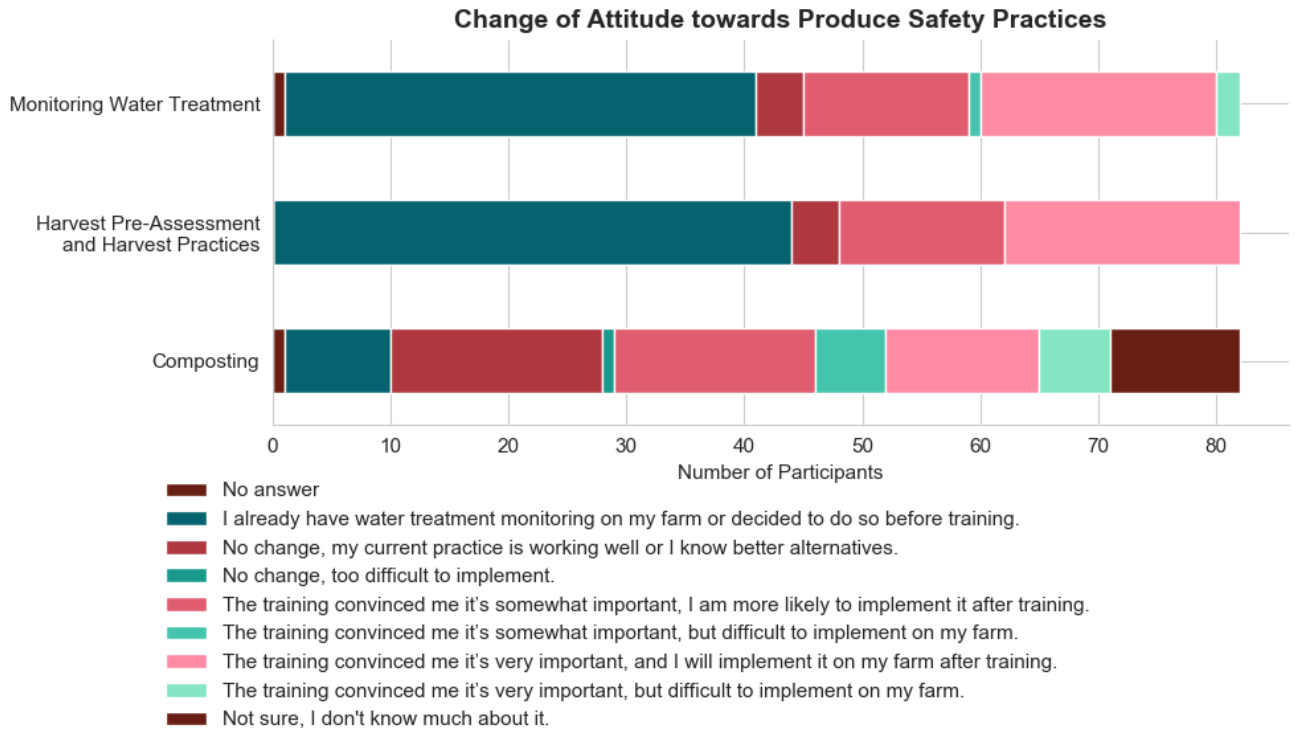
Attitude Outcomes (2020 July-August)



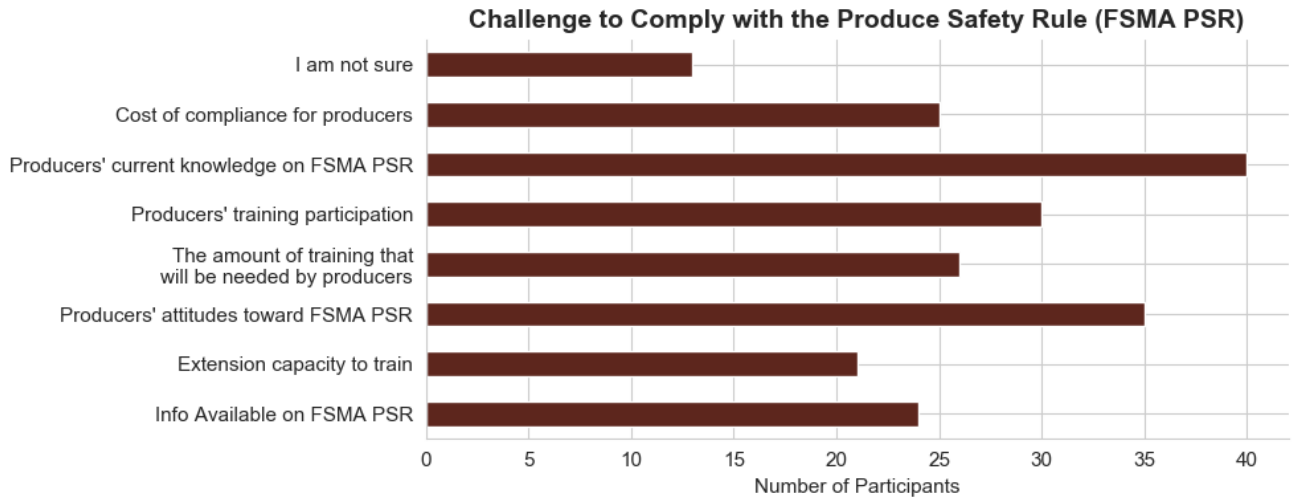
Note 1: The hatched bars summarize responses from post-training evaluations.

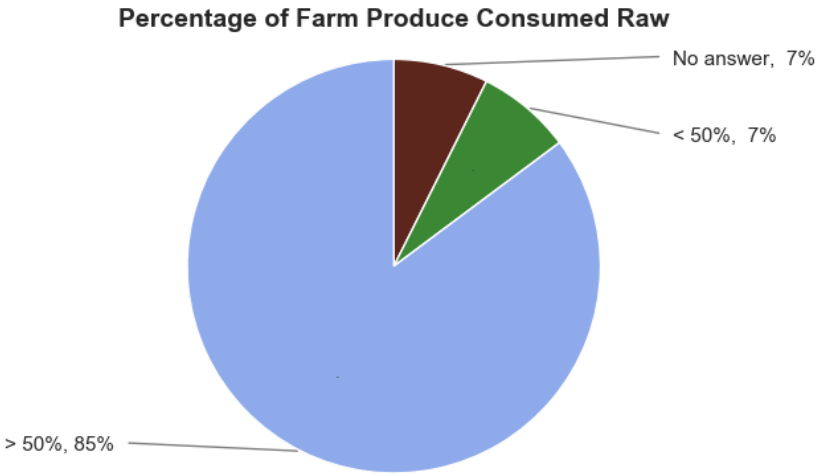
Note 2: This graph only includes responses from participants who submitted grower sections from both the pre-training and post-training evaluations.

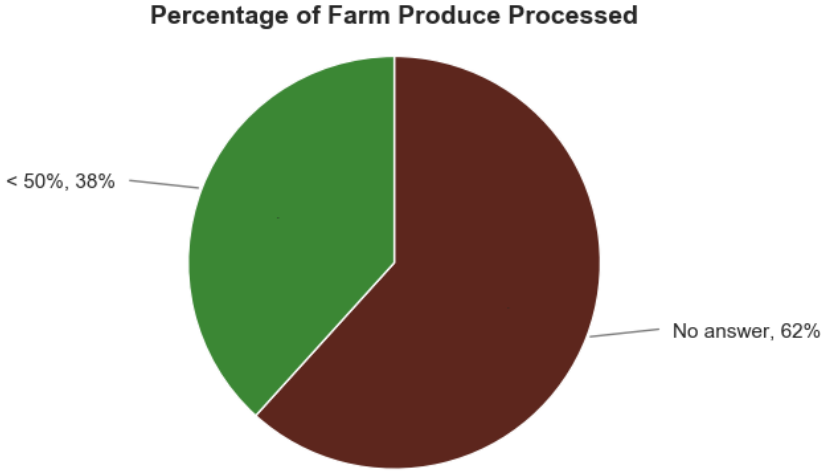
Attitude Outcomes (2020 September-December)

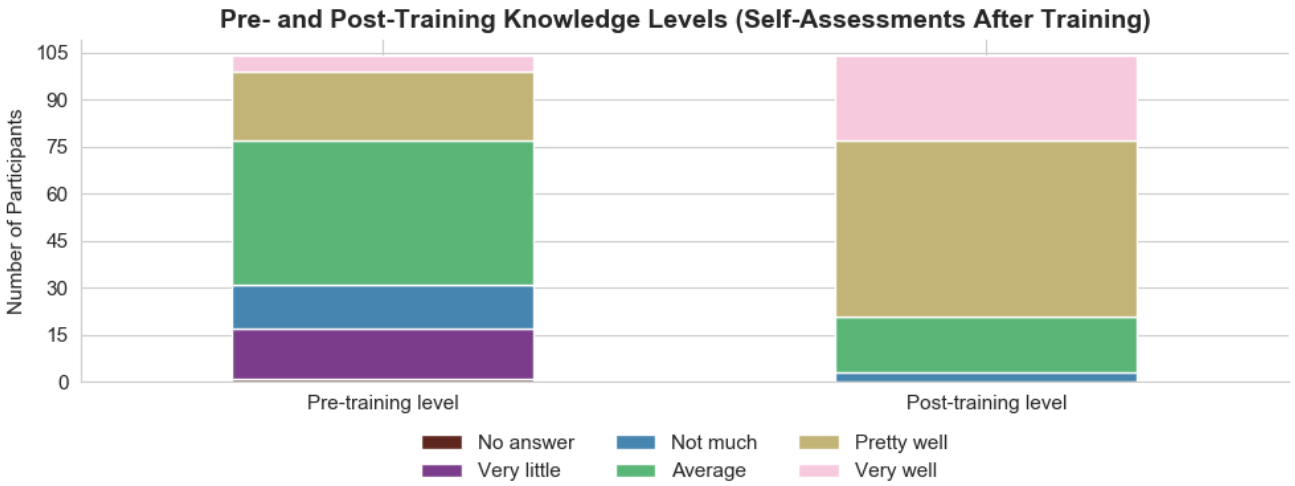


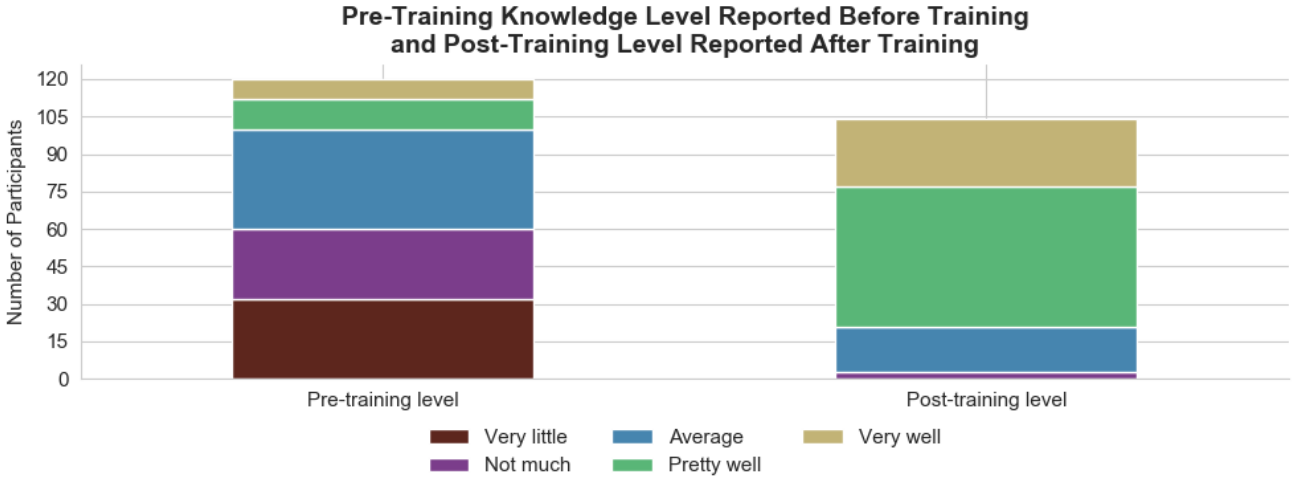
Additional Charts (2020 July-August)



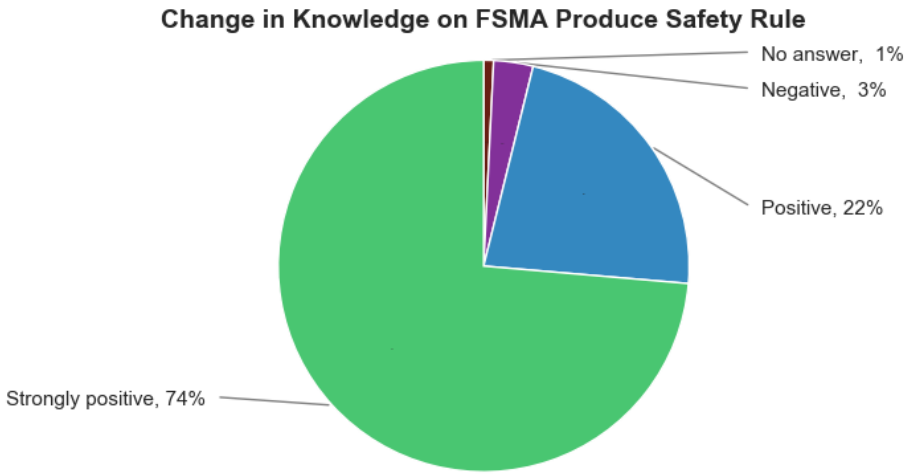




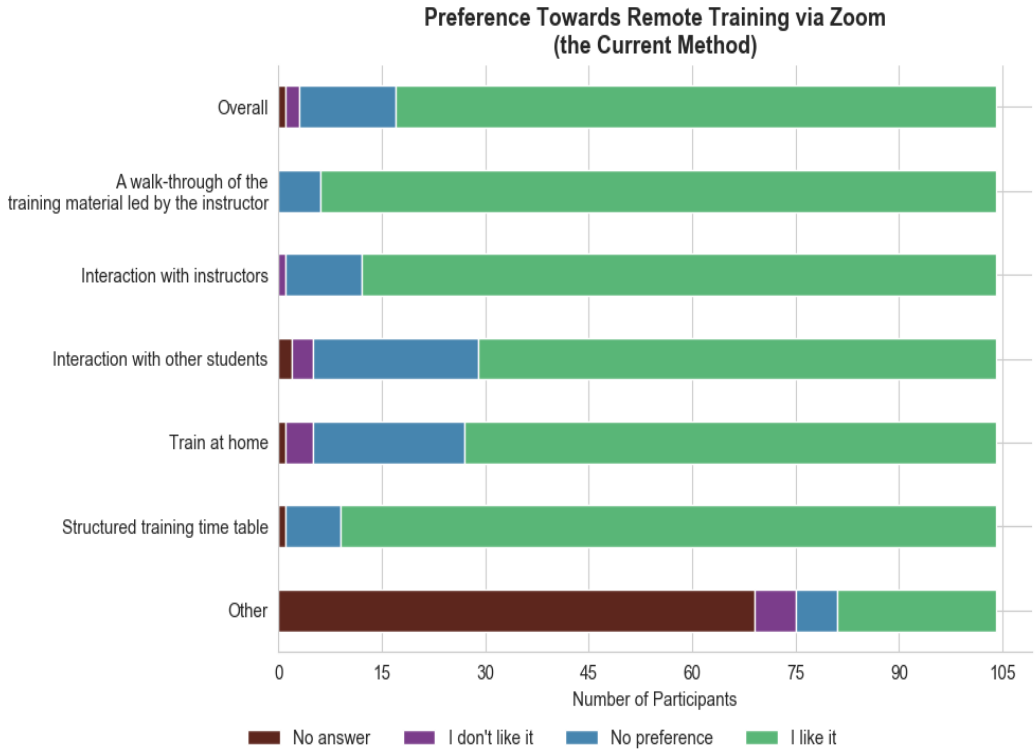

Pre- and Post-Training Knowledge Levels (Self-Assessments After Training)
Number of Participants
105
90
75
60
45
30
15
0
Pre-training level
Post-training level
No answer
Very little
Not much
Average
Pretty well
Very well

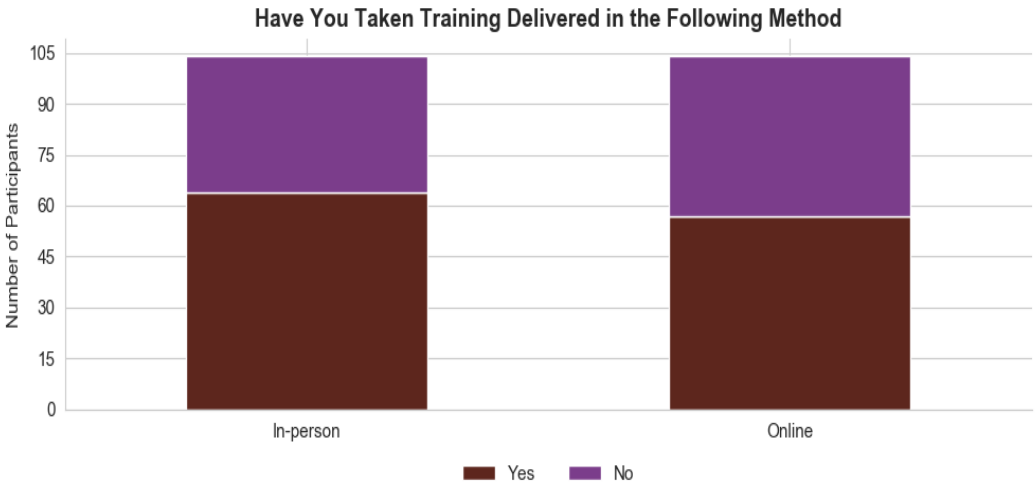

Pre-Training Knowledge Level Reported Before Training
and Post-Training Level Reported After Training
Number of Participants
120
105
90
75
60
45
30
15
0
Pre-training level
Post-training level
Very little
Not much
Average
Pretty well
Very well

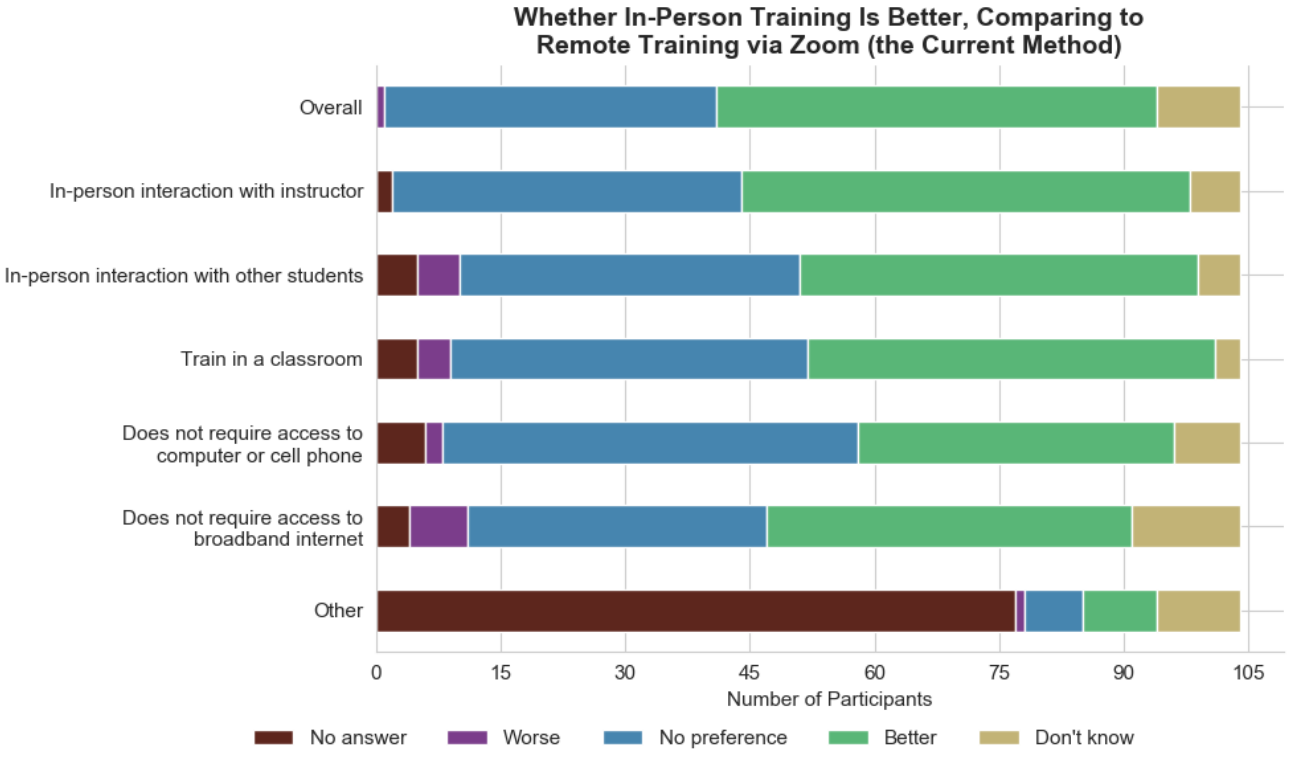
Additional Charts (2020 September-December)

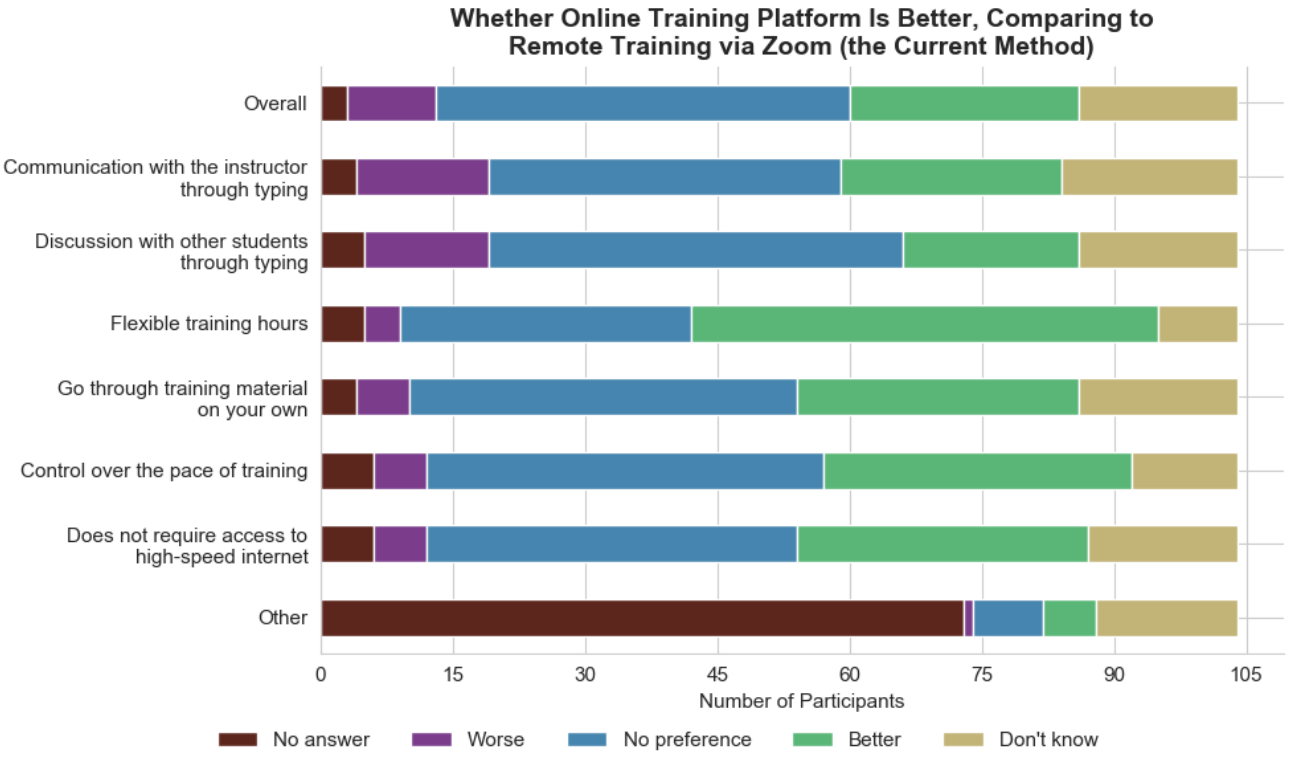


Training Delivery Method Feedback (2020 July-August)






Whether In-Person Training Is Better, Comparing to Remote Training via Zoom (the Current Method)
Overall
In-person interaction with instructor
In-person interaction with other students
Train in a classroom
Does not require access to computer or cell phone
Does not require access to broadband internet
Other
0
15
30
45
60
75
90
105
Number of Participants
No answer
Worse
No preference
Better
Don't know


Whether Online Training Platform Is Better, Comparing to Remote Training via Zoom (the Current Method)
Overall
Communication with the instructor through typing
Discussion with other students through typing
Flexible training hours
Go through training material on your own
Control over the pace of training
Does not require access to high-speed internet
Other
0
15
30
45
60
75
90
105
Number of Participants
No answer
Worse
No preference
Better
Don't know

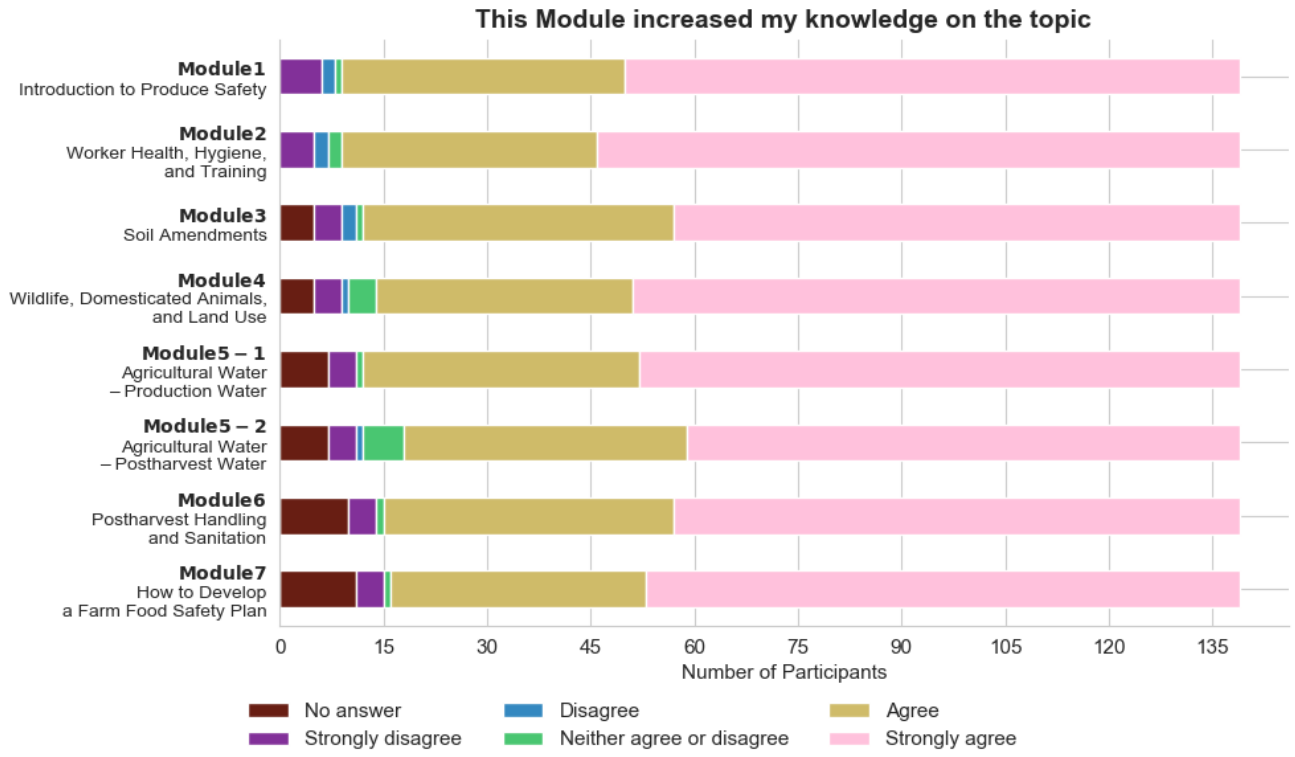
Suggestions to Improve Training

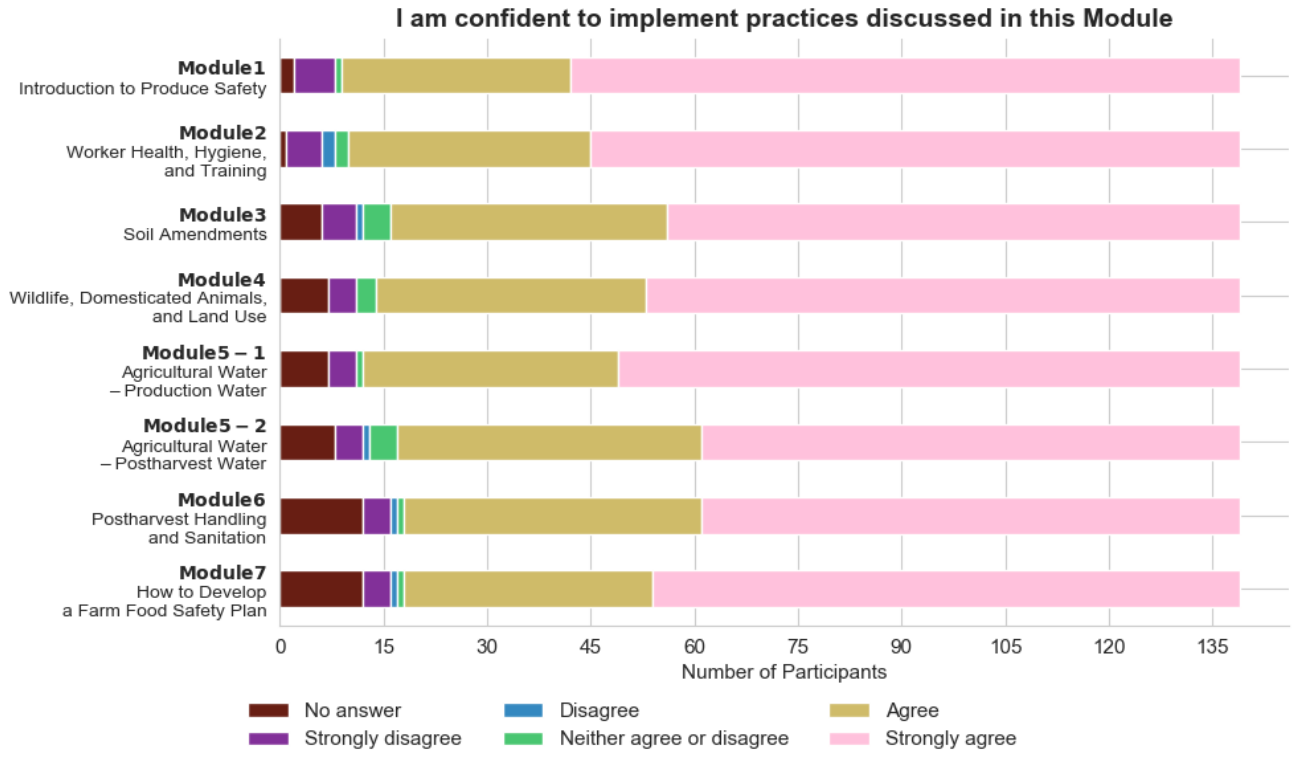
1	Videos, and case studies
2	one of the instructors be a little more emphatic in each module that corresponds to him and not just read the word quickly
3	For virtual courses it is essential that instructors can ensure a good internet connection
4	More practical language and real experiences of problems and solutions
5	Practices of various topics, especially the SOPs
6	greater fluency by the drs. exhibitors. It is tiring for so many hours in front of slow people who go off topic to give personal experiences that are not adequate.
7	Dynamism in the exhibitions, my congratulations to [instructor], the lady from FDA (I don't remember the name) and [instructor], but there were other exposures that made me slow and zero dynamics ... that makes learning difficult in my case particular.
8	chemical cleaning and disinfection products
9	As a topic that can be put into practice is discussed
10	Extend the time; since, it is a lot of and very relevant information.
11	Trainings more often the more you listen the more you learn
12	Explain real examples about the application, monitoring and consequences of the PSR FSMA effect
13	Face-to-face training, online training has disadvantages for example, keeping the listener attentive always in the presentation

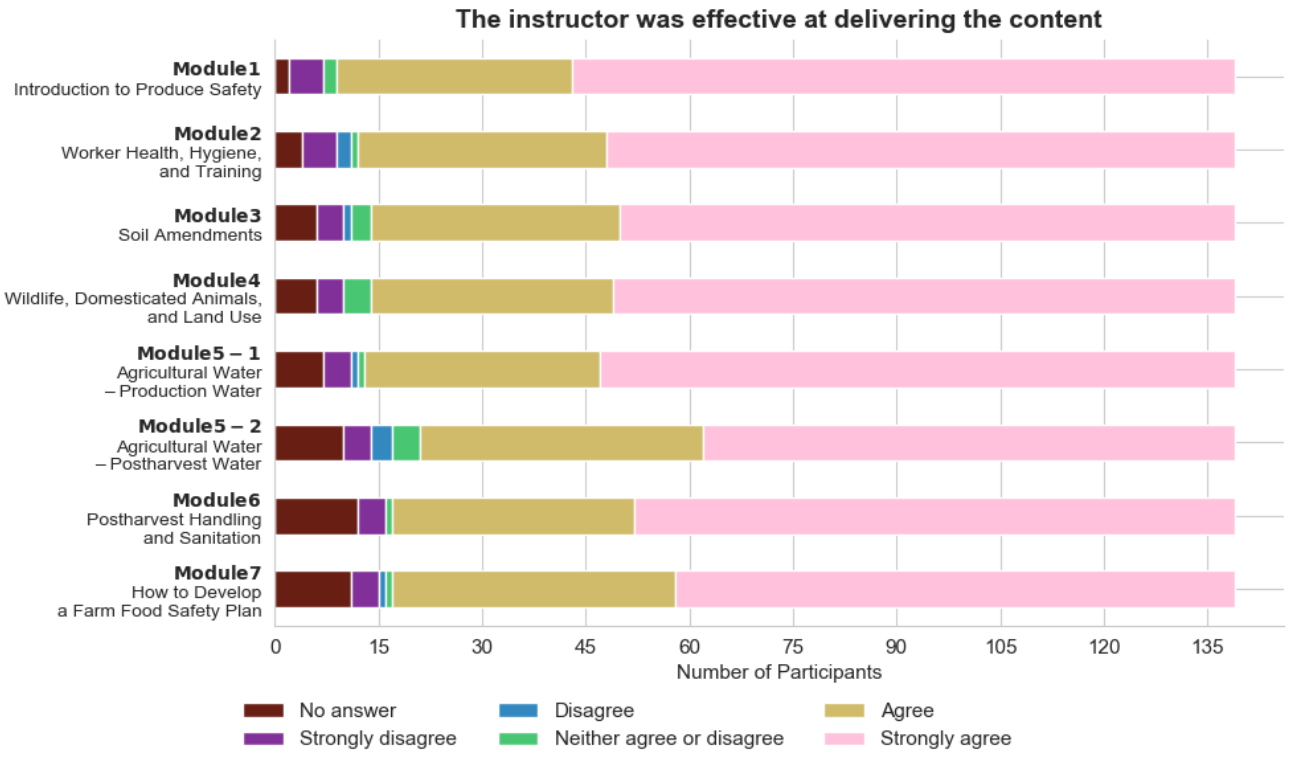
Suggestions on Training Delivery Method (via Zoom, 2020 July-August)

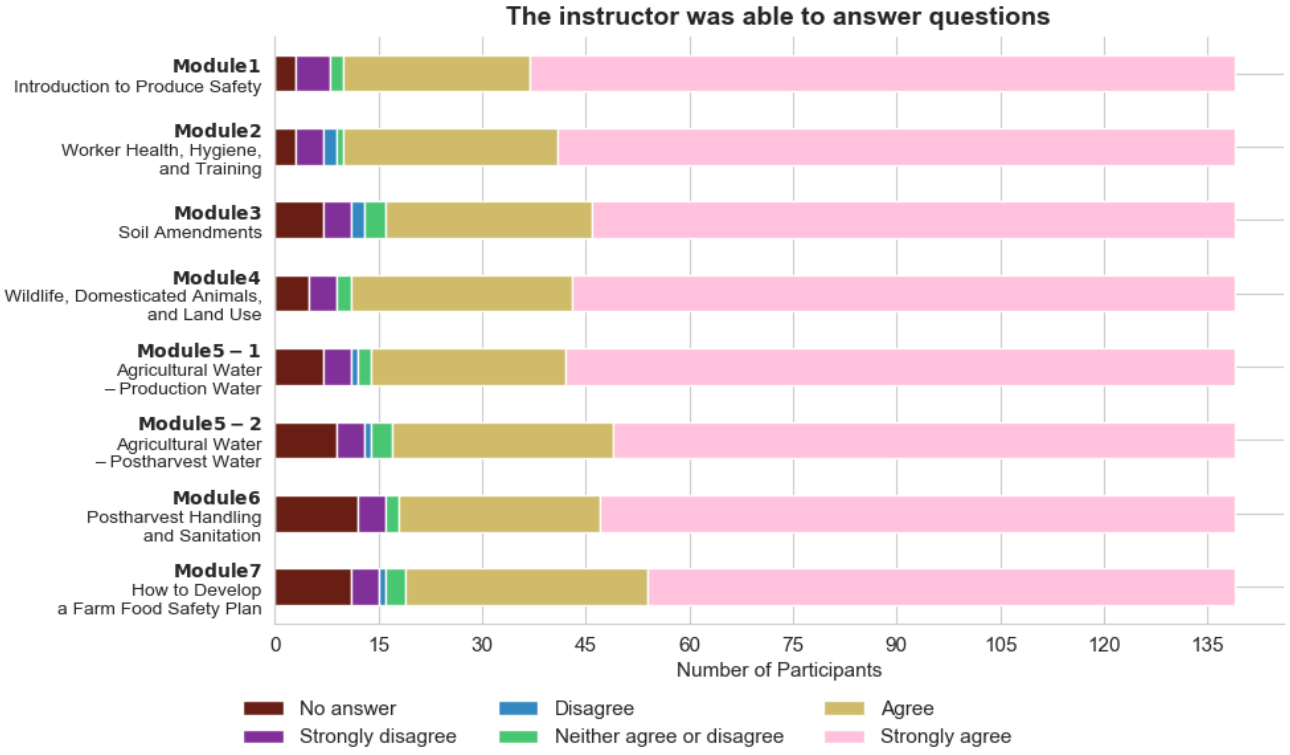
1	However, take into account that the presentations of some facilitators should allow the student to know their experience because just reading the slides is not enough.
2	At the end of this problem of the pandemic, take a field practice
3	fantastic
4	Permanent assistance in case of any inconvenience.
5	Whenever possible field practice is important
6	Give real examples, from daily life and that occur in the work area
7	Include some companion videos
8	Internet service
9	video material
10	Bad internet connection
11	Course planning

PSA Grower Training Evaluation

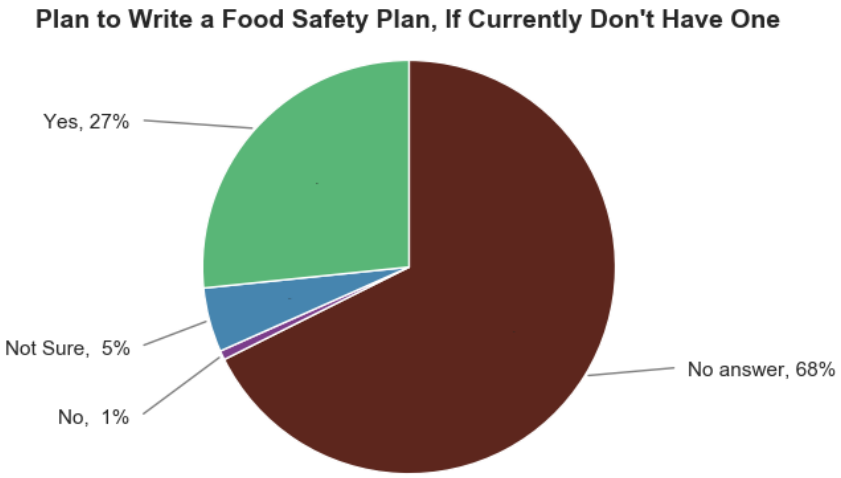


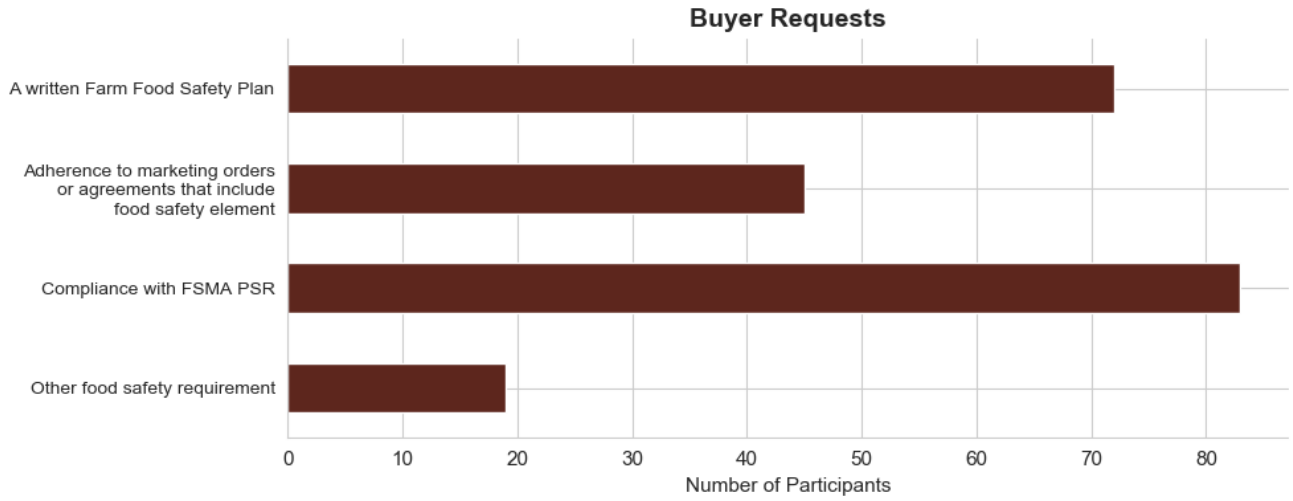



The instructor was effective at delivering the content
Module1
Introduction to Produce Safety
Module2
Worker Health, Hygiene, and Training
Module3
Soil Amendments
Module4
Wildlife, Domesticated Animals, and Land Use
Module5 – 1
Agricultural Water – Production Water
Module5 – 2
Agricultural Water – Postharvest Water
Module6
Postharvest Handling and Sanitation
Module7
How to Develop a Farm Food Safety Plan
0
15
30
45
60
75
90
105
120
135
Number of Participants
No answer
Strongly disagree
Disagree
Neither agree or disagree
Agree
Strongly agree


The instructor was able to answer questions
Module1
Introduction to Produce Safety
Module2
Worker Health, Hygiene, and Training
Module3
Soil Amendments
Module4
Wildlife, Domesticated Animals, and Land Use
Module5 – 1
Agricultural Water – Production Water
Module5 – 2
Agricultural Water – Postharvest Water
Module6
Postharvest Handling and Sanitation
Module7
How to Develop a Farm Food Safety Plan
0
15
30
45
60
75
90
105
120
135
Number of Participants
No answer
Strongly disagree
Disagree
Neither agree or disagree
Agree
Strongly agree


Training and Food Safety Practices
The training was well organized
I have a manual at the start of training
I have audio and/or video problems
Other educational materials should be included
Training level sufficient to guide me in implementing regulatory requirements
Attended GAP or produce safety training before
Currently have a farm Food Safety Plan
Participated in a third-party audit for food safety practices
0
15
30
45
60
75
90
105
120
135
Number of Participants
No answer
No
Yes


Plan to Write a Food Safety Plan, If Currently Don't Have One
Yes, 27%
Not Sure, 5%
No, 1%
No answer, 68%


Buyer Requests
A written Farm Food Safety Plan
Adherence to marketing orders or agreements that include food safety element
Compliance with FSMA PSR
Other food safety requirement
0
10
20
30
40
50
60
70
80
Number of Participants