

## Survey Overview

*The content in italics is my own annotation and will not be a part of the final survey.*

**Survey content can be categorized as below:**

1. *Questions designed to understand farm operations prior to the pandemic*
  - a. *To serve as a baseline and form basic understanding*
  - b. *To understand how small farms operate in comparison to larger farms*
2. *Questions to understand how they adapted after the pandemic hit*
  - a. *Conditions that prompted adaptation, if any*
  - b. *The kinds of adaptations they adopted*
  - c. *Constraints to adaptation*
3. *Questions to understand access to social capital*
  - a. *Different forms of capital – bonding, bridging, linking – and the influences of each (although in some cases, these terms seem to have some overlap)*
  - b. *Nature of bridging capital in particular. Here, the nature of farmer organizations, knowledge sharing etc.*
4. *Questions to evaluate potential for and gauge interest in a follow-up interview; demographic questions*

*Each question is color coded according to the type of question and required questions are marked with an asterisk (\*)*

	<i>Multiple choice question with one selection to be made</i>
	<i>Multiple choice question with multiple selections that can be made</i>
	<i>Short answer questions</i>

*In the survey, when I use the term ‘adaptation’, I mean atypical changes in the operations of smallholder farmers that were prompted specifically by the pandemic and would not constitute their usual operation.*

***The questions on social capital were mainly adapted from the following sources but changed to suit this context:***

*Gómez-Limón, J. A., Vera-Toscano, E., & Garrido-Fernández, F. E. (2012). Farmers’ Contribution to Agricultural Social Capital: Evidence from Southern Spain.*

*Grootaert, C., Narayan, D., Jones, V. N., & Woolcock, M. (2004). Measuring social capital. In World Bank Working Papers (Vol. 18). <https://doi.org/10.1177/0020764006065147>*

*Poli, E. (2015). Can Social Capital Help Indian Smallholder Farmers? Analysis of Its Impact on Rural Development, Agricultural Efficiency, Production and Risk.*

***Target audience:*** *Vegetable producers only in Broome, Madison, and Washington counties.*

***Survey administration:*** *Through CCE’s farmer lists.*

***Incentives:*** *20 Amazon gift cards of \$10 each from personal funds.*

## Section 1: Introduction

### *Objectives*

*Goals of this section are to (i) Introduce survey takers to the purpose of the survey; (ii) Convey how data will be used; (iii) Inform them of any benefits of participation.*

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Hello

We are glad that you have volunteered to participate in our survey!

Let us give you a brief overview of the goals of our research and express our gratitude for your valuable input: We are researchers at Cornell University attempting to understand how your farming and marketing operations as a producer of vegetables in the food network of Upstate New York have been impacted by the pandemic; and any role that your social connections – be it fellow farmers, the groups you are a member of, your consumers, or local government – played in the way you adapted to changing conditions. We believe that this will help us understand the implications of economic shocks to local food security and envision ways in which we can strengthen community and policy responses to future food systems.

Responses that you provide here will be anonymized and the data aggregated as part of our analysis. All identifying information that you provide will remain entirely confidential and available only to researchers participating in this project. For the purposes of collaboration on related research, any aggregated data that is shared outside the immediate research group will be anonymized using current scientific standards to ensure that no one will be able to identify you by the information we share. We anticipate that your participation in this survey presents no greater risk than everyday use of the Internet.

As a follow-up to this survey, you might be requested to participate in an interview to better understand a product value chain. As always, your participation is entirely voluntary. This survey should take approximately 15 minutes to complete. As a small way to thank you for your time, your name will be entered into a drawing, where twenty randomly selected participants will be awarded Amazon gift cards worth \$10 each.

The main researcher conducting this study is Shriya Rangarajan, a doctoral student at Cornell University. If you have any questions or difficulties with participation, you may contact Shriya at [sr2248@cornell.edu](mailto:sr2248@cornell.edu) or at 607-279-6902. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) for Human Participants at 607-255-5138 or access their website at <http://www.irb.cornell.edu>. You may also report your concerns or complaints anonymously through Ethicspoint online at [www.hotline.cornell.edu](http://www.hotline.cornell.edu) or by calling toll free at 1-866-293-3077. Ethicspoint is an independent organization that serves as a liaison between the University and the person bringing the complaint so that anonymity can be ensured.

Thank you once again for your participation!

Shriya Rangarajan (Advisors: Professors Kieran Donaghy, Shorna Allred, and John Carruthers)

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## Section 2: Role in the local food and agriculture sector (pre-pandemic)

*This section aims to understand the general role that the survey respondent plays in agricultural production in the local area and their ordinary operations before the pandemic hit.*

1. \*Please select the county your farm operations are located in. (Dropdown menu)
  - 1b. If there is a second county that your farm operates in, please choose from the dropdown menu.
  
2. \*What are the main food products you produce? Please list all of them alongside the relevant categories. *This is the classification I found in some of the NY State Agriculture Department reports and is similar to the US Census of Agriculture.*
  - a. Dairy \_\_\_\_\_
  - b. Vegetables, melons, potatoes and sweet potatoes \_\_\_\_\_
  - c. Fruits, tree nuts, or berries \_\_\_\_\_
  - d. Grains, dry beans, and dry peas \_\_\_\_\_
  - e. Livestock, poultry, and their products \_\_\_\_\_
  
3. How would you classify the scale of your farm operations?
  - a. \*By land holding size under cultivation
    - <10 acres
    - 11-25 acres
    - 26-100 acres
    - 101-250 acres
    - 250-500
    - 500+
  
  - b. \*For your farm operation, what is the number of full-time employees (from outside your immediate household) or full-time equivalent employees (if hiring part-time labor)?
    - 0
    - 1-2
    - 3-5
    - 6-10
    - 11-20
    - 20+
  
4. \*What venues do you use to sell your products? Could you please indicate the approximate percentage of your sales that comes from each source?

Marketing Channel	Estimated number of venues/customers	Estimated percentage of total sales
<b>Direct to consumer</b>		
a. Farmers Markets		
b. On Site Farm Stand or Store		
c. Off Site Farm Stand or Store		
d. Community Supported Agriculture		
e. Online Marketplaces		
f. Other direct to consumer marketplaces		
g. Commodity sales or operations with sales		
h. Value-added sales or operations with value-added sales		
<b>Direct to market</b>		

a. Supermarkets or supercenters		
b. Restaurants or caterers		
c. Commodity sales or operations with market sales		
d. Value-added commodity sales or operations with value-added market sales		
<b>Direct to institutions</b>		
a. Schools		
b. Other institutions		

5. Do you sell outside the primary (and secondary) county where your farm is located?

Yes

No

5b. If you answered yes to Question 3(f), please tell us where you sell outside the county? \_\_\_\_\_

6. Are there any other sales avenues you use? \_\_\_\_\_

7. \*How long have you been running your farm for outside sales?

- a. <2 years
- b. 2- 5 years
- c. 6- 10 years
- d. 11-20 years
- e. 20+ years

8. \*How much do you agree with the following statements?

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree	Not applicable
The local government is supportive of my operations as a farmer						
The local government is open to ideas for economic/business development of my farming operations						
The local community understands the value of foods I produce						
The foods that I produce are affordable						
The foods that I produce are healthier than grocery store alternatives						
The foods I produce are environmentally sustainable						
The local community appreciates environmentally sustainable foods						

9. What farmer programs, loans, and other opportunities have you availed of in the last two years? \_\_\_\_\_

*Checklist of most common programs to be included*

### Section 3: Impact of the pandemic

The purpose of this section of the questionnaire is to understand how the pandemic impacted your operations and to understand the changes you made in response to the pandemic.

#### 10. \*How have the following operations been disrupted by the COVID-19 pandemic?

	Not disrupted	Mildly disrupted	Moderately disrupted	Severely disrupted	Shut down operations
Raw material sourcing					
Production					
Labor availability					
Labor effectiveness					
Access to institutions for financial support					
Access to institutions for technical support					

#### 11. How has demand for your products in each of these categories shifted since February 2020 to present?

Marketing Channel	Sharp increase (>35%)	Moderate increase (10 to 35%)	Somewhat the same (-10% - 10%)	Moderate decrease (-10 to -35%)	Sharp decrease (> 35%)	NA
<b>Direct to consumer</b>						
i. Farmers Markets						
j. On Site Farm Stand or Store						
k. Off Site Farm Stand or Store						
l. Community Supported Agriculture						
m. Online Marketplaces						
n. Other direct to consumer marketplaces						
o. Commodity sales or operations with sales						
p. Value-added sales or operations with value-added sales						
<b>Direct to market</b>						
e. Supermarkets or supercenters						
f. Restaurants or caterers						
g. Commodity sales or operations with market sales						
h. Value-added commodity sales or operations with value-added market sales						
<b>Direct to institutions</b>						

c. Schools						
d. Other institutions						

The following three questions might be shifted to an interview.

12. What are other ways in which your operations were disrupted? \_\_\_\_\_

13. \*Since the pandemic, what kinds of changes have you seen in the food behaviors of your consumer base?  
\_\_\_\_\_

14. How did you adapt to these changes? What did you try differently? \_\_\_\_\_

15. \*What were the biggest barriers to adaptation? Select all that apply.

- a. No impediments
- b. Financial resources
- c. Labor
- d. Infrastructural limitations
- e. Lack of support groups
- f. Lack of knowledge or resources
- g. Other \_\_\_\_\_

16. Have you sought any financial support or assistance for pandemic related farm issues?

- a. Government aid \_\_\_\_\_
- b. Non-governmental aid \_\_\_\_\_

17. \*Have you availed of any of the following federal and state assistance programs?

Program Name	Unaware	Aware of program but unaware of eligibility	Ineligible	Eligible but not applied	Applied but not received	Applied and received
General Coronavirus Food Assistance Program (CFAP)						
Small Business Administration's (SBA) Economic Injury Disaster Loan (EIDL)						
SBA Paycheck Protection Program						
Other						

18. Are there any other COVID relief programs (government or non-government) that you have utilized?  
\_\_\_\_\_

## Section 4: Social Capital

*In this section, I am trying to determine what kinds of social capital individual producers have. The forms I expect this to take are: (i) Connections to their local consumer base either directly or through social/informal groups (bonding and bridging capital); (ii) Connections to other farmers through social networks; (iii) Connections through farming/producer groups for knowledge sharing, marketing etc. (bridging capital); (iii) Connections to local government, financial aid etc. (linking capital)*

**(i) Connections to their consumer base**

19. How did you learn changes in consumer needs? Check all that apply.

- a. It didn't change
- b. Through previous sales avenues
- c. Through direct contact with consumers
- d. Through other farmers
- e. Through farming groups
- f. Other \_\_\_\_\_

20. How do you learn about opportunities for your business? Check all that apply.

- a. Farming groups
- b. Suggestions from consumers or business connections
- c. Friends and relatives
- d. Print media sources – newspapers, magazines, internet sites
- e. Broadcast media sources – television, radio, etc.
- f. Other \_\_\_\_\_

**(ii) Connections to other farmers**

*Questions to be included.*

**(iii) Connections to professional and social groups**

21. \*Are you a part of any formal or informal groups or organizations that work in the food and agriculture industry?

- a. Yes
- b. No

*I will use survey branching where appropriate.*

22. \*If no, why not? Select all that apply.

- a. There are no groups that suit my needs
- b. I don't believe I would gain from membership
- c. I don't believe I fit in to those groups
- d. There are financial or structural barriers to entry
- e. I don't believe that the groups function well
- f. I don't know of any groups
- g. Other \_\_\_\_\_

In the following questions, our goal is to understand your participation in the two groups that you believe have been most valuable to your farm operations.

*If they selected 'Yes' in Question 20 above, then all Group 1 questions are required and Group 2 questions are optional.*

### Group 1

23. \*Name of the group \_\_\_\_\_

24. \*How would you best classify this group? Select all that apply.

- a. Producer cooperative
- b. Marketing association
- c. Trading or business association
- d. Trade or labor union
- e. Neighborhood or community groups

- f. Non-profit or civic organization
- g. Finance, credit, or savings group
- h. Political group, advocacy group or movement
- i. Education group
- j. Health or nutrition group
- k. Environmental group
- l. Other \_\_\_\_\_

25. \*How long have you been a member?

- a. Less than a year
- b. 1-3 years
- c. More than 3 years

26. What are the main activities this group undertakes in their meetings? (Short answer) \_\_\_\_\_

27. \*What kinds of benefits have you derived from this group? Check all that apply

- a. Technical knowledge
- b. Collective marketing
- c. Collective bargaining
- d. Risk sharing
- e. Financial benefits
- f. Social connections
- g. Communications
- h. Other \_\_\_\_\_

28. \*How would you evaluate levels of the following in terms of this group?

	Very low	Moderately low	Medium	Moderately High	Very high
Benefits you derive from membership in this group					
Your level of participation in this group					
Your trust in other group members					
Cooperation within the group					

## Group 2

29. Name of the group \_\_\_\_\_

2. How would you best classify this group? Select all that apply.

- a. Producer cooperative
- b. Marketing association
- c. Trading or business association
- d. Trade or labor union
- e. Neighborhood or community groups
- f. Non-profit or civic organization
- g. Finance, credit, or savings group
- h. Political group, advocacy group or movement
- i. Education group
- j. Health or nutrition group
- k. Environmental group
- l. Other \_\_\_\_\_



30. How long have you been a member?

- d. Less than a year
- e. 1-3 years
- f. More than 3 years

31. What are the main activities this group undertakes in their meetings? (Short answer) \_\_\_\_\_

32. What kinds of benefits have you derived from this group? Check all that apply

- a. Technical knowledge
- b. Collective marketing
- c. Collective bargaining
- d. Risk sharing
- e. Financial benefits
- f. Social connections
- g. Communications
- h. Other \_\_\_\_\_

33. How would you evaluate levels of the following?

	Very low	Moderately low	Medium	Moderately High	Very high
Benefits you derive from membership in this group					
Your level of participation in this group					
Your trust in other group members					
Cooperation within the group					

**(iv) Connections to local government and financial aid during the pandemic**

34. How much do you agree with the following statements?

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree	Not applicable
I am aware of government programs and services in agriculture						
I know which organizations and government departments I need to approach to participate in farm programs						
I have connections that will help me find the information I need						

The following questions are to assess individual levels of initiative and participation in the local community.

35. \*How much do you agree with the following statements?

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree	Not applicable

Farmers help each other in the event of an emergency						
I am willing to provide financially to assist someone in need						
I am an active member of my local community						
I believe that local economy initiatives matter more than state or national ones						
I believe that my racial/ethnic/gender identity influences my success as a farm owner						
I believe that my racial/ethnic/gender identity influences the support that I receive from the local community						
I believe that my racial/ethnic/gender identity influences the support that I receive from local government						
I actively seek opportunities to grow and expand my farm operations						

**Section 5: Demographic questions and follow-up**

36. Is agriculture your primary occupation?

- a. Yes
- b. No

37. If you answered no, what proportion of your time do you dedicate to agriculture? \_\_\_\_\_

38. Are you the...

- a. Farm owner
- b. Family member of the owner
- c. Farm manager
- d. Other employee

39. Do you identify as...

- a. Male
- b. Female
- c. Non-binary
- d. Decline to answer

40. Do you identify as...

- a. White
- b. Black
- c. Asian
- d. American Indian or Alaska Native
- e. Other
- f. Decline to answer

41. Are you either Hispanic or Latino?

- a. Yes
- b. No
- c. Decline to answer

42. What is the highest level of education you have completed?

- a. Up to 8<sup>th</sup> grade (Middle school)
- b. Up to 12<sup>th</sup> grade (High school)
- c. Vocational training
- d. College (Associate degree)
- e. College (Undergraduate degree)
- f. Graduate degree
- g. Doctoral degree
- h. Other (please specify)

*Should I ask multiple questions on household income/farm gross income/profit?*

43. What is your average annual household income?

- a. < \$15,000
- b. \$15,001 - \$25,000
- c. \$25,001-\$40,000
- d. \$40,001-\$75,000
- e. \$75,001 - \$120,000
- f. \$120,000+
- g. Decline to answer

44. What is your average gross annual income derived from farming?

- a. < \$5,000
- b. \$5,001 - \$20,000
- c. \$20,001-\$50,000

- d. \$50,001 - \$100,000
- e. \$100,000 - \$250,000
- f. \$250,000+
- g. Decline to answer

We recognize that time is valuable, and we greatly appreciate you taking the time out to respond to this survey. We would like to conduct (paid) follow-up interviews with select participants to understand your operations in greater detail. As always, participation is entirely voluntary and the information you provide will be held to similar standards of data privacy as this survey.

45. Would you be willing to participate in a follow-up (paid) interview?  
 a. Yes                      b. No

46. If you answered yes to the above question, can you please provide a phone number/email address we can reach you at and times of the day that are convenient for a phone call?

Phone number \_\_\_\_\_  
 Email \_\_\_\_\_

Day of the week	Morning (9 AM – 12 PM)	Afternoon (12 PM – 3 PM)	Evening (3 PM – 6 PM)
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

47. If you have any additional thoughts, questions, or concerns, about this research we would love to hear from you.

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