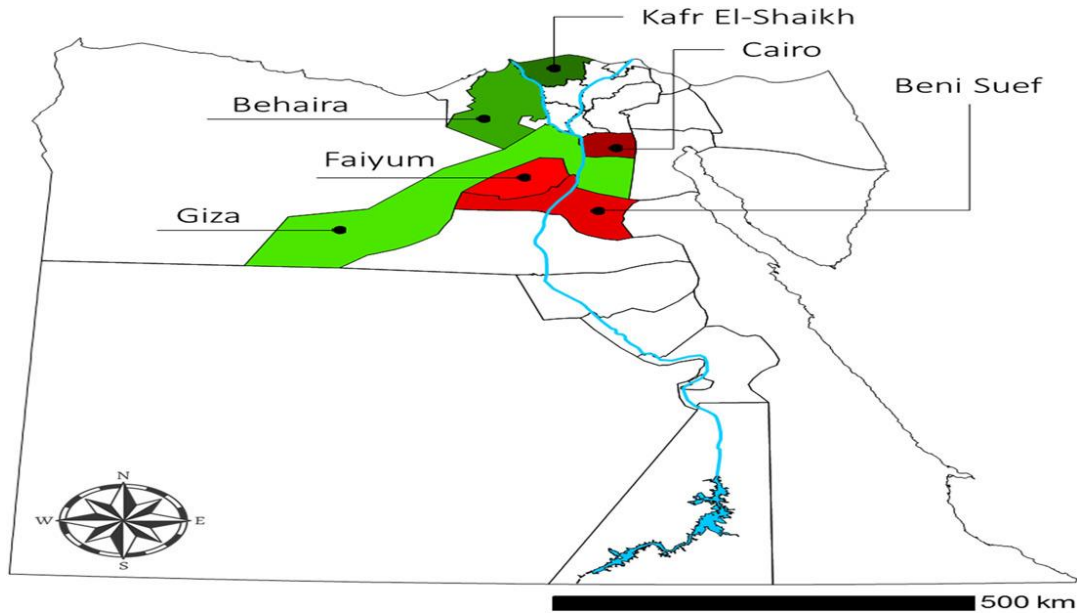


## Supplementary Document

### In the midst of the COVID-19 pandemic: Perceived risks, management strategies and emerging opportunities for small and medium agri-food enterprises in a developing country



**Figure S.1.** Study areas

*Note:* Areas highlighted in green represent newly reclaimed lands and desert areas (NRLDA), whereas those highlighted in red represent old lands in the Nile delta areas (OLNDA). Source: Abu Hatab et al. (2020)

**Table S.1.** List of the reviewed empirical literature<sup>1</sup> on internal migration in developing countries during the period 2019- 2020<sup>2</sup>:

Authors	Country	Food chain	Risk perception <sup>1</sup>	Mitigation Strategies	Risk-based opportunities	Mediation analysis
(Engidaw, 2022)	Ethiopia		✓			
(Hossain, et al., 2022)	Bangladesh		✓	✓		
(Caballero- Morales, 2021)	Unspecified			✓		
(Abu Hatab, et al., 2021)	Egypt	✓	✓			
(Dayour, et al., 2021)	Ghana			✓		
(Zaazou, et al., 2021)	Egypt		✓	✓		
(Klein, et al., 2021)	Unspecified		✓	✓	✓	
(Islam, et al., 2021)	Malaysia			✓		
(Burhan, et al., 2021)	Pakistan		✓	✓		
(Salamzadeh, et al., 2021)	Iran		✓			
(Wieczorek-Kosmala, et al., 2021)	Poland		✓			
(Mansor, et al., 2021)	Malaysia			✓		
(Mihajlovic, et al., 2021)	Serbia		✓		✓	
(Ziolkowski, 2021)	Poland		✓			
(Gómez-bayona, et al., 2021)	Colombia, Peru and Mexico		✓			
(Mahdich, 2021)	China, Korea and Japan			✓		
(Suglobov, et al., 2021)	Russia			✓		
(Bacha, 2021)	Unspecified		✓	✓		
(Sadiq, et al., 2021)	Pakistan			✓		
(Aguirre, et al., 2021)	Ecuador			✓		
(Abu-Mater, et al., 2021)	Jordan		✓			
(Abu Hatab, et al., 2021)	Egypt		✓	✓		
(Djimatey, 2021)	Ghana		✓			
(Gregurec, et al., 2021)	Unspecified		✓	✓		
(Grondys, et al., 2021)	Poland		✓			
(Kaberia, et al.,	Kenya		✓			

Authors	Country	Food chain	Risk perception <sup>1</sup>	Mitigation Strategies	Risk-based opportunities	Mediation analysis
2021)						
(Ali, et al., 2021)	Unspecified	✓		✓		
(Lu, et al., 2021)	China		✓			
(Baral, et al., 2021)	Unspecified			✓		
(Belitski, et al., 2021)	Unspecified		✓			
(Tavares, et al., 2021)	Portugal		✓			
(Miocevic, 2021)	Unspecified			✓		
(Salam, 2021)	Unspecified			✓		
(Pu, et al., 2021)	Bangladesh			✓		
(Zighan, et al., 2021)	Jordan			✓		
(Al-Doori, et al., 2021)	Iraq	✓	✓			
(Kumar, et al., 2021)	Unspecified		✓	✓		
(Ismael, et al., 2021)	Iraq		✓			
(Bai, et al., 2021)	Unspecified			✓		
(Durst, et al., 2021)	Peru			✓		
(Rodrigues, et al., 2021)	Portugal			✓		
(Chowdhury, et al., 2021)	Unspecified		✓	✓		
(Dyduch, et al., 2021)	Poland			✓		
(Polas, et al., 2021)	Bangladesh			✓		
(Reardon, et al., 2021)	Asia & Latin America	✓		✓		
(Lu, et al., 2020)	China		✓			
(Omar, et al., 2020)	Malaysia		✓	✓		
(Fitriasari, 2020)	Indonesia			✓		
(Razumovskaia, et al., 2020)	Russia			✓		
(Akpan, et al., 2020)	Un-specified			✓		
(James, et al., 2020)	Sri Lanka		✓	✓		
(Nseobot, et al., 2020)	Nigeria		✓			
(Eggers, 2020)	Unspecified			✓		
(Le, et al., 2020)	Vietnam		✓			
(Juergensen, et al., 2020)	Europe		✓	✓		
(Cepel, et al., 2020)	Czech and Slovak		✓			
(Anifowose, 2020)	Nigeria		✓			
(Castro, et al., 2020)	Un-specified			✓		

Authors	Country	Food chain	Risk perception <sup>1</sup>	Mitigation Strategies	Risk-based opportunities	Mediation analysis
(Aladejebi, 2020)	Nigeria		✓	✓		
(Priyono, et al., 2020)	Indonesia			✓		
(Zimon, et al., 2020)	Poland			✓		
(Papadopoulos, et al., 2020)	Unspecified			✓		
(Nyanga, 2020)	Zimbabwe		✓	✓		
(Shafi, et al., 2020)	Pakistan		✓			
(Al-Hyari, 2020)	Jordan		✓	✓		
(Cowling, et al., 2020)	United Kingdom		✓			
(Chowdhury, et al., 2020)	Bangladesh	✓	✓	✓		
(García-Villagrán, et al., 2020)	Mexico			✓		
(Effendi, et al., 2020)	Indonesia		✓	✓		
(Fabeil, et al., 2020)	Malaysia			✓		
(Irawan, 2020)	Indonesia		✓		✓	
(Ahmad, et al., 2020)	Malaysia			✓		
(Sanfelici, 2020)	Italy		✓	✓		
(Islam, et al., 2020)	Bangladesh			✓		
(Liguori, et al., 2020)	Unspecified			✓		

<sup>1</sup> More details are given in the reference list in the end of this document.

<sup>2</sup> **Note on the rapid scoping review methodology:** A rapid scoping review methodology, based on Arksey and O'Malley (2005), was used to review the scholarly literature published between 2019 and 2021 on internal migration in developing countries. Scoping reviews can be a particularly useful approach when evidence on a certain topic has not been comprehensively reviewed or is complex and diverse. The objective of our rapid scoping review was to identify the streams of the existing evidence regarding the determinants and welfare impacts of internal migration and to survey how the research was conducted. The review was carried out by searching Google Scholar and Scopus bibliographic databases with the following eligibility criteria: included studies must have been published as peer-reviewed articles, published in English, published from 2019 to 2021, and applied an empirical quantitative methodology. It should be noted that rapid and less-formal methodology adopted in scoping reviews is a clear limitation and it is possible that some key elements of integrated care or important implementation issues were not captured. Therefore, the list of studies in Table S1 is not comprehensive, nor is it intended to be.

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**Table S2.** Descriptive statistics of selected characteristics and performance indicators of the surveyed enterprises

	Years in business	Number of employees	% export/total sales	Total assets Million EGP	Turnover Million EGP
Mean	9,78	20,79	63,79	2,14	2,81
Std. Deviation	7,25	12,78	38,87	1,32	1,26
Minimum	1	3	0	1	1
Maximum	54	90	100	6	5
Percentiles					
25	5	12	25	1	2
50	10	18	80	2	3
75	12	26,25	100	3	4
N	166	166	166	166	166

**Table S.3.** Descriptive statistics of the indicators of Covid-19 risk perception

Variable	Definition	Not at all a problem	Minor problem	Moderate	Serious problem	Very serious
Plummet productivity	Plummeting Employee Productivity: employees are unable to commute to work (e.g. lockdown)	4 (2.41)	28 (16.87)	73 (43.98)	54 (32.53)	7(4.22)
Loss skilled labor	Loss of skilled labor as experienced employees with valuable information and knowledge and/or contacts leave the firm	6(3.61)	51 (30.72)	76 (45.78)	24 (14.46)	9 (5.42)
Reduced working days	Reduction in the number of working days (open days)	2 (1.2)	41 (24.7)	47 (28.31)	45 (27.11 )	31 (18.67)
High absenteeism	High rates of work absenteeism	-	40(24.1)	42 (25.3)	59 (35.54)	25 (15.06)
Preventive measure cost	Cost of implementing preventative measures at the workplace	4(2.41)	18 (10.84)	51 (30.72)	66 (39.76)	27 (16.27)
High loan interest	Increased cost of obtaining loans (interest rate)	22(13.25)	29 (17.47)	55 (33.13)	54 (32.53)	6 (3.61)
Transport restriction	Restrictions on transportation and disruptions in distribution channels to markets	41(24.7)	30 (18.07)	50 (30.12)	27 (16.27)	18 (10.84)
Reduced service delivery	Reduced capacity of public and private institutions to provide services to SMEs	10(6.02)	18 (10.84)	47 (28.31)	73 (43.98)	18 (10.84)
Delayed port operations	Delayed port operations and increased pressure on internal transport	5(3.01)	7 (4.22)	79 (47.59)	57 (34.34)	18 (10.84)
Produce shortage	Shortage of the quantities of agricultural produce to meet the demands	10(6.02)	18 (10.84)	47 (28.31)	73 (43.98)	18 (10.84)
Reduced quality	Reduced quality of agricultural produce to meet the market demands	11(6.63)	20 (12.05)	56 (33.73)	55 (33.13)	24 (14.46)
High commodity cost	The cost of commodities sold by the firm increased	-	4 (2.41)	28 (16.87)	21 (12.65)	113 (68.07)
High input cost	The cost of inputs and (e.g. labor, fertilizer) increased	-	11 (6.63)	26 (15.66)	51 (30.72)	78 (46.99)
Uncertain corporate tax	Policy uncertainty with regard to corporate tax	8(4.82)	11 (6.63)	65 (39.16)	71 (42.77)	11 (6.63)
Uncertain salary cuts	Policy uncertainty with regard to cutting employees' numbers and salaries	6 (3.61)	24 (14.46)	70 (42.17)	56 (33.73)	10 (6.02)
Uncertain policy rate	Policy uncertainty with regard to (central) bank's interest rate policies	18 (10.84)	23 (13.86)	58 (34.94)	41 (24.7)	26 (15.66)
Reduced receivables	Loss of revenue from purchasing delays and reduced collection of receivables	1 (0.6)	-	43 (25.9)	77 (46.39)	45 (27.11)
Reduced bank credit	Banks and financial sector organizations are unwilling to provide credit to SMEs	28(16.87)	21 (12.65)	58 (34.94)	53 (31.93)	6 (3.61)
Increased credit default	Inability to pay back my loans	30 (18.07)	32 (19.28)	43 (26.5)	46(27.71)	14 (8.43)
Kaiser-Meyer-Olkin measure of sampling adequacy				0.76		
Scale reliability coefficient				0.81		

**Table S.4.** Descriptive statistics of the indicators of mitigation strategies

Variable	Definition	Completely disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely agree
Procure local inputs	We will procure inputs in local markets	4(2.41)	7 (4.22)	56 (33.73)	87 (52.41)	12 (7.23 )
Firm networking	We will network with other firms to help prevent risky transactions	1 (0.6)	4 (2.41)	36 (21.69)	55( 33.13)	70 ( 42.17 )
New market channels	We will seek new procurement and marketing channels	2( 1.2)	8 (4.82)	27 (16.27)	54 (32.53)	75 (45.18)
Preventive measures	We will implement preventive measures and maintain a safe workplace	5 ( 3.01)	9 ( 5.42)	16 ( 9.64)	42 ( 25.3)	94( 56.63)
Commercial bank loans	We will have to seek loans by commercial banks	12 (7.23)	6 ( 3.61)	19 ( 11.45)	48( 28.92)	81 (48.8 )
Government assistance	We will have to apply for government assistance programs	45 (27.11)	27( 16.27)	27 (16.27)	52 (31.33)	15( 9.04 )
Microfinance loans	We will apply for loans by microfinance companies or private individuals	13(7.83 )	9 ( 42)	55( 33.13)	66( 39.76)	23( 13.86)
Bank negotiations	We will negotiate with lenders/banks to avoid withdrawing loans	20 (12.05)	19 (11.45)	34 ( 20.48)	70( 42.17)	23 ( 13.86 )
Identify new business	We will shift our operation to new businesses	2 (1.2)	16 ( 9.64)	48 ( 28.92)	72( 43.37)	28 ( 16.87)
Product new products	We will shift our products towards other markets rather than traditional markets	23 (13.86)	30 (18.07)	47 ( 28.31)	57( 34.34)	9 ( 5.42)
Innovative services	We will innovate new products and services	18 (10.84)	31 (18.67)	64 ( 38.55)	44 (26.51)	9 ( 5.42 )
New customers	We will introduce new customer delivery options	5 ( 3.01)	9 ( 5.42)	27 (16.27)	84 ( 50.6)	41 ( 24.7)
Quality improvement	We will focus on maintaining and improving quality of goods sold	2 ( 1.2)	5 ( 3.01)	25 ( 15.06)	43 ( 25.9)	91( 54.82)
Outsourcing	We will outsource orders	32 (19.28)	43 ( 25.9)	57 ( 34.34)	27 (16.27)	7 ( 4.22 )
Local market	We will sell to local markets	4 (2.41)	7 ( 4.22)	56( 33.73)	87( 52.41)	12( 7.23 )
Kaiser-Meyer-Olkin measure of sampling adequacy				0.81		
Scale reliability coefficient				0.80		

**Table S.5.** Descriptive statistics of the indicators of emerging opportunities

Variable	Definition	Completely disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely agree
Improved efficiency	Improved our efficiency in terms of resource use (e.g. labor)	3(1.81)	10 ( 6.02)	41(24.7)	54( 32.53)	58 (34.94)
New customer services	Allowed us to introduce new customer services and delivery options	7 (4.22)	19 (11.45)	28( 16.87)	49 (29.52)	63 ( 37.95)
Enhanced risk preparedness	Enhanced our preparedness for future risks	1 (0.6)	5 ( 3.01)	17 (10.24)	32 (19.28)	111 (66.87)
Improved returns	Improved our ability to realize return on investment	7 (4.22)	12 ( 7.23)	35( 21.08)	58( 34.94)	54 ( 32.53)
New local opportunities	Offered new opportunities in local markets	14 (8.43)	13 ( 7.83)	69 ( 41.57)	59 ( 35.54)	11 ( 6.63)
New regional markets	Offered new opportunities within regional markets in Egypt	16 (9.64)	13 ( 7.83)	69 (41.57)	59( 35.54)	9 ( 5.42)
Export opportunity	Offered new opportunities in the international market	29 (17.47)	19( 11.45)	42 (25.3)	68( 40.96)	8 ( 4.82)
Access government programs	Improved our access to government assistance programs	16 (9.64)	10 ( 6.02)	27 ( 16.27)	87 ( 52.41)	26( 15.66 )
Access bank services	Facilitated our access to bank loans and financial services	18 (10.84)	19 ( 11.45)	40 (24.1)	5 ( 34.34)	32 ( 19.28)
High market prices	Increased market prices for sold commodities	27 (16.27)	33 ( 19.88)	47 ( 28.31)	40 ( 24.1)	19 ( 11.45)
New product identification	Enabled us to introduce new products	33 (19.88)	50 ( 30.12)	35 ( 21.08)	32 ( 19.28)	16 ( 9.64 )
New operational strategies	Allowed us to adopt new operational strategies to diversify products and penetrate markets	11 (6.63)	13 ( 7.83)	55 ( 33.13)	70 ( 2.17)	17 ( 10.24 )
Innovative new services	Allowed us to adopt new operational strategies to innovate new services	10 (6.02)	13 ( 7.83)	51 ( 30.72)	57 ( 34.34)	35 ( 21.08)
Kaiser-Meyer-Olkin measure of sampling adequacy				0.87		
Scale reliability coefficient				0.81		

**Questionnaire**  
**“Risk Management Strategies in Egypt's Small & Medium-Sized Agrifood Firms amidst the COVID-19 outbreak”**

Dear Respondent,

We are conducting a survey to identify the impacts of COVID-19 on the business performance of Egyptian agrifood SMEs and examine the risk management strategies that these firms have adopted and plan to adopt to cope with the pandemic impacts. The research team for this survey is made up of researcher scientists from Egyptian and Swedish universities.

You have received this invitation because your firm is registered as Agrifood SMEs. As a firm manager, we would like to invite you to participate in our study. This survey takes approximately 25 minutes

**Your participation and your answers are very important to provide a good understanding of the situation for Egyptian agrifood SMEs!**

**Please be noted** that the information gathered in this survey will be treated confidentially and will be used for scientific research purposes **ONLY**. The responses provided will not be linked to individual names or addresses. All information that might indirectly identify respondents or firms will be eliminated from the data file before it is made available. Publications based on the data will never contain information that can identify individual respondents.

If you have inquiries, please feel welcome to contact Dr. XXX.

We would like to say thank you in advance for your participation.

Yours faithfully,

<b>For Research team use only</b>	
<b>Form Number</b>	
<b>Date of the Interview</b>	
<b>Interviewer's Name</b>	

**1. RESPONDENT'S CHARACTERISTICS**

**1.1. Gender**

Female ( ) Male ( )

**1.2. Into which age range do you fall? (Please tick one only)**

18-24 ( ) 25-34 ( ) 35-44 ( ) 45-54 ( ) 55-64 ( ) 65-74 ( ) 75+ ( ) Would rather not say ( )

**1.3. Level of education**

No formal schooling ( ) Primary school ( ) Secondary school ( ) Technical qualification ( )  
University degree ( ) Higher degree, MSc/Ph.D ( )

**1.4. Position held at the firm**

(a) Chairman of the Board (b) General Manager (c) Director or Deputy General Manager (d) Head of Finance or Accounting (e) Head of Operations (Sales) (f) Technical Director (g) Other: \_\_\_\_\_

**1.5. How many years have you held your current position within the company?**

**1.6. In which governorate is the firm located?** ( dropdown menu including a list of 27 Egyptian governorates)

**1.7. Ownership type**

- Domestic investment
- Foreign Investment
- Joint investment

**1.8. Which one of the following best describes the area where the firm is located?(Please tick one only)**

- Rural
- Suburb (peripheral areas)
- Urban
- Industrial zone
- Other (please specify)\_\_\_\_\_

**1.9. Does your firm has any other branches in other locations?**

**1.10. If yes, How many and where are they located?**

Branches	Location

**1.11. How many years has your firm been working in the agricultural and food business?**

**1.12. Size of the Firm: Please indicate the number of people currently employed by your firm.**

**1.13. Firm Specialization: What are the major agrifood exports of your firm? And, what is the current percentage (%) of domestic demand and export share of the firm's product in total output or production?**

Firm Specialization				
Domestic		International %		
% of total sales	Main products	% of total sales	Main products	Main markets

**1.14. Total assets: Into which of the following categories does the value of total assets of your firm fall?**

- Less than 3000 000 EGP
- 3000 000 to 5000 000 EGP
- 5000 000 to 10 000 000 EGP
- 10 000 000 to 15 000 000 EGP
- 15 000 000 to 20 000 000 EGP
- Over 20 000 000 EGP

**1.15. Total annual sales: Into which of the following categories does the value of the annual sales of your firm in 2019 fall?**

- Less than 1000 000 EGP
- 1000 000 to 3000 000 EGP
- 3000 000 to 5 000 000 EGP
- 5 000 000 to 10 000 000 EGP
- Over 10 000 000 EGP

**1.16. Please indicate which of the following certification standards your company have at the moment (you can choose as many as you have).**

Certificate	Company Certified to System
GLOBAL GAP	
ISO 90001:2008	
ISO 14001	
HACCP	
SA 8000	
BRC	
BASC	
IFS	
SQF2000/2001	
TESCO	
LEAF	
GMP	
ISO 22000	
Others	
Others	
Others	

**1.17. Does the firm Keep financial records?**

- Yes
- No

**1.18. Does the firm has a specialized department/unit to deal with risk management?**

- Yes
- No

**1.19. Does the firm has internal "written" guidelines for risk management?**

- Yes
- No

**2. PERCEIVED IMPACTS SO FAR**

**2.1. At this point, what are the main business problems your firm is currently facing due to the pandemic?**

- (a) Reduction of sales
- (b) Inability to deliver existing orders
- (c) Increased difficulty of financing
- (d) Existing loans cannot be extended
- (e) Disruption of logistics
- (f) Upstream and downstream chain disruptions
- (e) other:

**2.2. At this point, how does the total revenue of your company during April 2020 compare to April 2019?**

- (a) Increase by more than 10%
- (b) Increase, but less than or equal to 10%
- (c) Same as last year
- (d) Decrease of less than or equal to 10%
- (e) Decrease of more than 10%
- (f) Unable to judge

**2.3. At this point, how would you evaluate the cost of your company's raw materials and total operating costs in April 2020 compared to April 2019:**

- (a) Increase by more than 10 percent
- (b) Increase, but less than or equal to 10 percent
- (c) Be the same as last year
- (d) Decrease by less than 10 percent
- (e) Decrease by more than 10 percent
- (f) Unable to judge

**2.4. Because of the epidemic, what is the percentage of your company's employees who are unable to come to work at present?**

- (a) 0%
- (b) 1-10%
- (c) 11-20%



- (d) 21-30%
- (e) More than 30%
- (f) Unable to judge

2.5. **Please choose the most significant financial problems for your company during this period.**

- (a) Staff wages and social security charges
- (b) Rent
- (c) Repayment of loans
- (d) Payments of invoices
- (e) Other expenses
- (f) No specific problem

2.6. **If your company currently considering layoffs, or has already done some because of the epidemic, what percentage of staff are you expecting to (or have already) cut?**

- (a) 0%
- (b) 1-10%
- (c) 11-20%
- (d) 21-30%
- (e) More than 30%
- (f) Unable to judge

2.7. **How long can your company's current cash flow maintain the company's operation?**

- (a) Less than 1 month
- (b) 1-3 months
- (c) 4-5 months
- (d) 6 months or more

2.8. **Have you had any consignments rejected during the last three months because of Covid-19?**

2.9. **If yes, how frequently are consignments rejected?**

- Very frequently
- Frequently
- Neither frequently nor infrequently
- Infrequently
- Very infrequently

### 3. SOURCES OF RISK TO FIRMS' OPERATIONS

**Note to the enumerator:** Please provide example to the respondents on how to answer this part of the survey.

3.1. COVID-19 represents **unprecedented** situation for most of Egyptian agrifood SMEs. We are now interested in knowing how you expect the coronavirus to impact your business during the period from today until the end of this year.

Type	Source of risk	1. How <u>severe</u> is the <u>impact</u> of this source on your firm performance?					2. What do you think is the <u>likelihood</u> that your firm will be <u>affected</u> by the source of the risk?						3. <u>When in the future</u> do you think you will notice any harmful impact of the source of risk to your firm performance?				
		Not at all a problem	Minor problem	Moderate	Serious problem	Very serious	None	Very low	Low	Medium	High	Very High	Directly	Within a week	Within a 3 months	After longer time (end of 2020)	Not at all
Revenue/sales	Decrease in total value of monthly DOMESTIC sales																
Revenue/sales	Decrease in total monthly EXPORT sales																
Revenue/sales	Loss of revenue from purchasing delays and reduced collection of receivables																
Revenue/sales	Reduced purchasing power: consumers may have less money available to purchase food																

Supply Chains	Shipment of fresh produce grounded at airports and ports because travel has stopped			
Supply Chains	Restrictions on transportation and disruptions in distribution channels to markets			
Supply Chains	Market rejections: commodities were refused by the importer/retailer			
Supply Chains	Failure to deliver contracted sales to partners due to lockdown			
Supply Chains	Delayed port operations and increased pressure on internal transport			
Labor	Plummeting Employee Productivity: employees are unable to commute to work (e.g. lockdown)			
Labor	loss of skilled labor as experienced employees with			

	valuable information and knowledge and/or contacts leave the firm			
Labor	Reduction in the number of working days (open days)			
Labor	High rates of work absenteeism			
Cost	The cost of commodities sold by the firm increased			
Cost	SMEs cannot afford investments for market and technological development			
Cost	The cost of inputs and (e.g. labor, fertilizer) increased			
Cost	Increased the losses and waste			
Cost	Cost of implementing preventative measures at the workplace			
Institutions	Reduced capacity of public and private institutions			

	to provide services to SMEs			
Institutions	Policy uncertainty with regard to corporate tax			
Institutions	Policy uncertainty with regard to cutting employees' numbers and salaries			
Institutions	Policy uncertainty with regard to (central) bank's interest rate policies			
Institutions	Economic recession or political instability			
Institutions	Difficulty to access emergency support introduced by government departments.			
Finance	Increased cost of obtaining loans (interest rate)			
Finance	Banks and financial sector organizations are unwilling to provide credit to SMEs			

Finance	Inability to pay back my loans			
Suppliers	Shortage of the quantities of agricultural produce to meet the demands			
Suppliers	Reduced quality of agricultural produce to meet the market demands			

#### 4. RISK/IMPACT MANAGEMENT STRATEGIES

4.6. The following table includes a list of potential actions/strategies that may be relevant for agrifood SMEs to respond to the impacts of the pandemic. To what extent are these relevant to your firm?

Type	Means/Strategy	Level of agreement				
		Completely disagree	Somewhat Disagree	Neutral/not relevant	Somewhat agree	Completely agree
<b>Finance/cash shortage</b>						
	We will have to seek loans by commercial banks					
	We will have to apply for government assistance programs					
	We will apply for loans by microfinance companies or private individuals					
	We will negotiate with lenders to avoid withdrawing loans					
	We will add new shareholders or increase capital of shareholders					
	We will reduce operating costs (e.g. layoffs and salary reductions)					
	We will buy insurance to cover unexpected events					
	No cash flow shortfalls problem, so no action					
<b>Fulfilling contracts</b>						
	We will negotiate our contracts to settle them by mutual agreement					
	We will seek legal settlement for our unfulfilled contracts					

	We will have to make payments of liquidated losses					
	We will procure through loyal suppliers					
	We will reach out to vendors and ask for payment term extensions					
	No contractual performance issues, so no action					
<b>Supply chain</b>						
	We will shut down operations or segments of operations					
	We will change the operation strategies (production, marketing)					
	We will procure inputs in local markets					
	We will network with other firms to help prevent risky transactions					
	We will outsource orders					
	We will increase the prices					
	We will seek new procurement channels					
	We will have to delay products" delivery					
	We will innovate new products and services					
	We will introduce new customer delivery options					
	We will focus on maintaining and improving quality of goods sold					
	We will shift our products towards other markets rather than traditional markets					
	We will shift from selling our traditional products to products					
	No supply chain issues, so no action					
<b>Labor/work environment</b>						



	We will reduce payroll costs by cutting down the number of employees					
	We will reduce workweek (working days)					
	We will apply salary cutbacks for personnel					
	We will promote work-from-home options					
	We will implement preventive measures and maintain a safe workplace					
	We will increase wages to prevent employees leaving the firm					
	No labor issues, so no action					
<b>Other strategies</b>						

**5. EMERGING OPPORTUNITIES (BENEFITS)**

**5.6. To what extent would you agree with the following statements regarding the positive changes and opportunities that the pandemic may have offered to your firm's business?**

<b>Items</b>	<b>Completely disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral/not relevant</b>	<b>Somewhat agree</b>	<b>Completely agree</b>
Improved our access to government assistance programs					
Facilitated our access to bank loans and financial services and					
Increased market prices for sold commodities					
Improved our efficiency in terms of resource use (e.g. labor)					

Offered new opportunities in local markets					
Offered new opportunities within regional markets in Egypt					
Offered new opportunities in the international market					
Enabled us to introduce new products					
Allowed us to adopt new operational strategies to diversify products and penetrate markets					
Allowed us to adopt new operational strategies to innovate new services					
Allowed us to introduce new customer services and delivery options					
Enhanced our preparedness for future risks					
Improved our ability to realize return on investment					

## 6. LONG-RUN IMPACTS

**7.1. How would you estimate the cost of adaptation to the risks and challenges posed by the pandemic, as a percentage in your total earnings in 2020?**

Less than 5 %

5-10%

10-20%

20-30%

30-40%

40-50%  
50-60%  
More than 60%

**7.2.If your company is an export-oriented enterprise, how do you expect the epidemic to affect your company's export volume?**

- (a) Increase by more than 10%
- (b) Increase, but less than or equal to 10%
- (c) Same as last year
- (d) Decrease of less than or equal to 10%
- (e) Decrease of more than 10%
- (f) Unable to judge

**7.3.What is the expected time for the firm's business recovery?**

- (a) 1 month to 3 months
- (b) 3 -6 months
- (c) 6-9 month
- (d) 9-12 months
- (e) more than a year
- (f) Inability to judge

**7.4.How adequate do you consider your own capacity for adapt to the challenges posed by the pandemic?**

Totally adequate  
Somewhat adequate  
Neither adequate nor inadequate  
Somewhat inadequate  
Totally inadequate

**7.5. How does your capacity to adapt to the challenges posed by the pandemic compared to that of other Egyptian agrifood SMEs?**

Much higher  
Higher  
Same lower  
Much Lower

## **8. FUTURE FOLLOW-UP**

**8.1. What is the full name of your company? (Optional)**

**8.2. We would greatly appreciate your participation in a follow up survey in a few months. If you'd like to participate, please leave your contact details (optional, mobile, email or landline number).**

*Thanks for your Time and Cooperation*