

# COVID-19 LOCKDOWN EFFECT ON VEGETABLE FARMERS & URBAN CONSUMERS

## A Rapid Assessment

**A**mir Hossain, a farmer in Gaibandha sits in the scorching heat with his mountains of vegetables, his mountains of tomatoes and his mountains of bitter gourds. Unable to get a price of more than 2-3 Tk per kg, and unable to get many customers, he returns home and attempts to feed the crop of his long hard days and hopeful nights to his cattle, all the time wondering how can the same tomatoes sell for so much in Dhaka?

“but cows do not eat tomatoes, do they?” asks the desperate and helpless farmer, finally at his wit’s end.

**Nexel Research Ltd.**

and

**Part II**



*(Photo credit: The Daily Sun)*

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## Acknowledgements

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We are grateful to **Daily Star**, who believed our research findings to be important enough to be conveyed at a national level even before the final report was out<sup>1</sup>. Also, to the Department of Agriculture Extension (DAE) and Digital Green for farmers' database support. And finally, we would like to thank our telephone interviewers who aided us to collect the data in only two days, in absence of which the rapid assessment might not have been possible.

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<sup>1</sup> Please find the Daily Star article here: <https://www.thedailystar.net/opinion/news/eat-vegetables-save-farmers-1894291>

# Content Outline

- Foreword ..... 4
- Purpose of the Study ..... 4
- Sampling and Data Collection..... 5
  - Sample Survey (Online and Telephone)..... 5
  - Panel Discussion through Webinar ..... 6
  - Ethical considerations ..... 6
- Findings of the Study..... 7
  - Vegetable Farmers ..... 7
  - Urban Consumers in Dhaka City..... 7
- Limitations ..... 10
- Conclusion ..... 10

## Foreword

The current situation ushered in by the Covid-19 pandemic is responsible for creating a lot of shifts and downtrends in the world economy. Bangladesh has been in lockdown since the 18<sup>th</sup> of March 2020 to combat the health and mortality threat posed by the virus. However, this measure is having a serious impact on various economic activities and functional industries in the country and is perhaps most evident in the unsuspecting group of perishable goods producers. One of the sectors that have been hit hard is the agricultural sector, especially the ones who have ready marketable crops in the field at the moment.



During the lockdown, people usually stay home unless there's an emergency. Market places are shut down, kitchen markets and super-shops are open only for a few hours every day. As a result, people are compelled to buy less and consume less. During this extraordinary phase, two behavioral trends are noteworthy. Consumers try to be minimalistic in choosing their priority items and are less concerned with buying perishable agricultural products. Households are also wary of eating fresh vegetables and fruits due to the requirement of repeated visits to the market to acquire them and the necessity to thoroughly and sometimes painstakingly wash them to avoid health hazards. However, vegetables and local fruits that are grown to reach the urban consumers have very little shelf life and are becoming a distress point for farmers which would have normally brought them their livelihood for the period in question.

## Purpose of the Study

According to the Bangladesh Bureau of Statistics, 51.8 % of Bangladesh's population is directly engaged in agricultural work. 60% of these functional farmers are sharecroppers. While sustainability in farming is a major challenge in a fragile market like ours, farmers have been coping with this fragility by diversifying crop yields. Fresh vegetables and indigenous fruits such as banana, papaya, guava, watermelon, mango, and lychee are becoming increasingly popular for that purpose. The nature of Bangladesh's land is also favorable in size for vegetable farming. In the past few years, there has been a significant diversity in the cultivation of vegetables and farmers had been getting good prices from summer high value crops such as tomato and capsicum. The International Food and Policy Research Institute (IFPRI) found in a study (Desirable Dietary Pattern and Actual Food Intake) that during 2011/12 to 2015 average Bangladeshis have increased fruit and vegetable intake in their daily diet (fruits 35 g from 10 g, leafy vegetable 41 g from 38 g). The covid-19 situation is already hindering or even reversing this positive trend.

In the current scenario and lockdown situation, the supply of perishable items in the capital, consumers' current dietary behavior and access to the market of fresh vegetables have put producers at risk of economic distress and consumers at risk of nutrition deficiency. In order to shed more light on these issues, Nexel Research Ltd. in collaboration with PART II, have carried out an exploratory study focusing on both the consumers and the farmers with the hopes to paint a holistic picture of the situation. In this study we have set out to highlight the constraints facing both the groups with the view to informing the market actors and policymakers.



A farmer's crop of bitter gourd, ready to harvest  
(*Photo credit: Rafikul Islam, vegetable farmer, Jashore*)

The assessment covers the majority consumers' perception of shifting dietary patterns during this pandemic and how this will have a negative impact on their immunity, paired with the immediate challenges vegetable producers are facing over their harvest-ready crops.

## Sampling and Data Collection

The study has been designed to look at some of the basic focal points for the aforementioned two groups that leaves an opportunity for elaboration in the future.

### Sample Survey (Online and Telephone)

The first part includes reaching out to farmers through phone interviews. The assessment team interviewed the farmers randomly from four major vegetable growing regions: Jessore, Bogra-Sirajganj, Narshingdi, and Manikganj following a set of predetermined questions. The primary list was prepared from different farmers' groups and consisted of a total of 37 farmers. The interviews were conducted on the 13th and 14th April.

The second part of the study focused on the consumers' point of view; to what extent they are concerned about this particular food type that could strengthen their immune system at this crucial time. A set of questions were asked to dwellers of Dhaka city through an e-questionnaire. The sample consisted of 142 individuals representing households from 27 areas in Dhaka City. The average age of the respondents is 39 years and 54.5 % are female. Since the participants are all able to use the internet and electronic communication tools using English it can be assumed that they represent the educated middle class or higher.

## Panel Discussion through Webinar<sup>2</sup>

On 15th April a panel discussion was conducted by Mr. Nazbul H Khan, Founder & CEO, Part II, to validate the data derived from the quantitative assessment. The panel consisted of farmers who participated in the study, and also farmers not in the study from the aforementioned regions. A Nutrition Expert (Dr. Shaiqa Siraj, Country Director, Nutrition International) joined as one of the panelists to provide her professional views. This panel discussion was broadcasted live on Facebook for about an hour to make it inclusive and validate the findings and the trends. This initiative proved to be very effective when participants and Facebook users expressed their concerns about the issues of farmers.

**Ethical considerations:** We have utilized our online and telephonic resources for this study in order to avoid placing anyone in harm's way, as face to face survey in these circumstances would be extremely risky, unethical and to some extent illegal.

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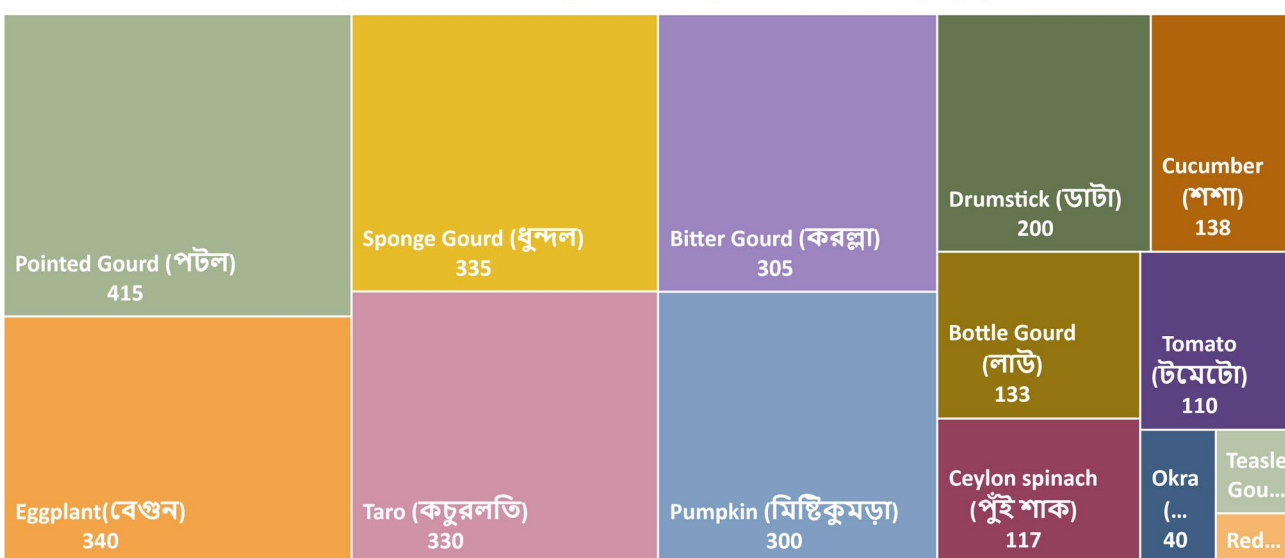
<sup>2</sup> Link to the panel discussion: <https://web.facebook.com/nazbul/videos/10158001725395049>

## Findings of the Study

### Vegetable Farmers

The average turnover from vegetables this season last year was around BDT 76K per farmer. The farmers were asked about the crops that need to be harvested during the next four weeks in a row. It is found that on average a single farmer produces 415 kgs pointed gourd, 16 kgs red amaranths, 117 kgs of bottle gourd, 305 kgs of bitter gourd, 340 kgs of eggplant, 200 kgs of tomatoes and so forth. On an average in the span of the four upcoming weeks, they will have more than 2500 kgs of different harvest-ready vegetables on the farm.

### Expected Average Yield per Farmer (Kgs)



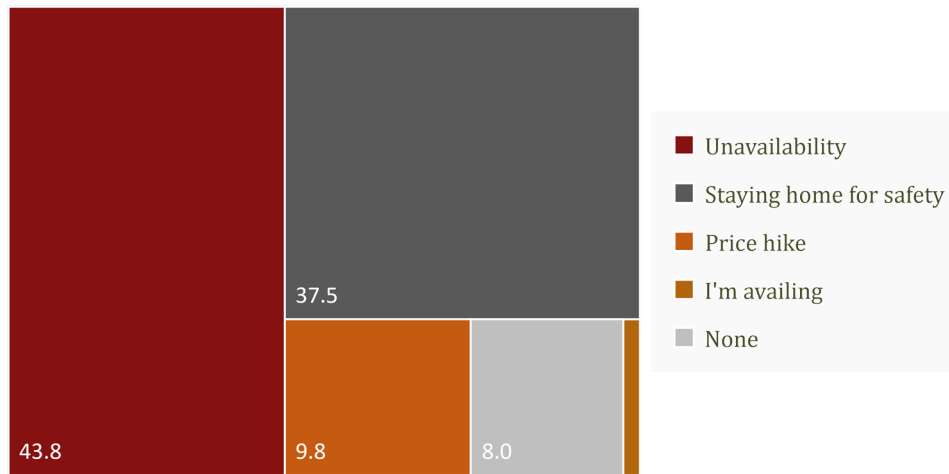
Qualitative data from the live webinar discussion panel brought into light two important issues:

- Due to the disruption of the supply chain, regional intermediaries and wholesalers (aaratdar) are being encouraged to sell the purchased vegetables to the local retailers. By doing so, small farmers who sell their commodities directly in the local market are facing a different level of competition.
- Since many city dwellers have returned to their area due to lockdown, there have been some increase in demand at the local markets. However, that volume is not equal to the national supply.

### Urban Consumers in Dhaka City

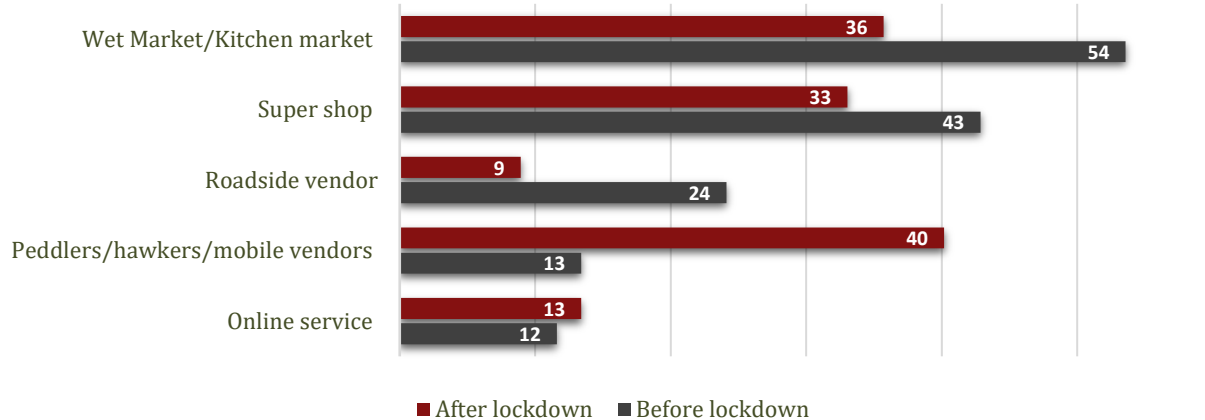
The data confirms the assumption that fewer consumers are buying vegetables, and also buying less vegetables. An astounding 45.5 % of the respondents mention they cannot avail fresh vegetables from their preferred channels.

### Reasons for not availing fresh vegetables (% respondents)



43.8 % list unavailability as the reason, while 37.5 % list staying at home as the main reason.

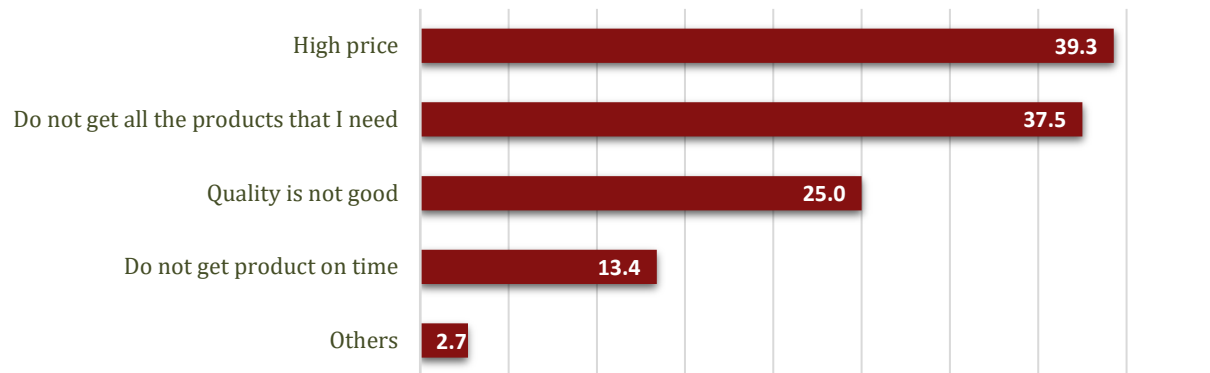
### Vegetables sourcing channels (% Respondents)



As the chart above shows, there has been a decrease in the proportion of people buying fresh vegetables from wet/kitchen markets (18 percentage points), roadside vendors (15 pp) and super shops (10 pp), and an increase in buying from peddlers, hawkers and mobile vendors (27 pp). Some increase can also be seen for online purchases.

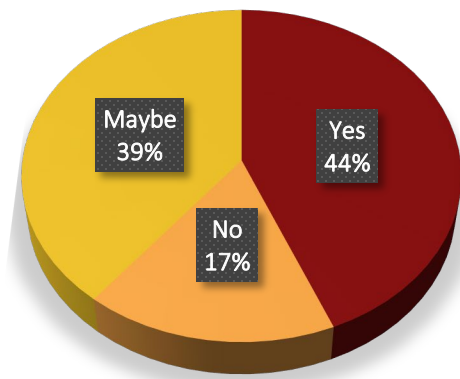


## Experience/perception of the channels during lockdown (% Respondents)



When asked about the experience and/or perception of the products procured from the channels, 39.3% mentioned a hike in price and 37.5% of the respondents said that they are not finding their preferred items through the existing channels. 25% also mention that the quality of the fresh produce is not as good.

## Concern about nutritional deficiency



We were also interested in finding out the nutritional aspect due to the lack of vegetable consumption, and asked the consumers if they were concerned about the reduced nutrition. 44% replied positively, while 39% are on the fence regarding this.

22.3% of the respondents feel that a lack of fresh vegetables in their diet might contribute to reduced nutrition, while 40.2% feel fruits and vegetables with Vitamin C are the major contributors. As confirmed by Dr. Saiqa in the discussion panel, seasonal vegetables and fruits are essential to fight with any outbreak of that season.

## Limitations

As with all rapid assessments, our study too was constrained by the time factor. On top of this we were also dependent on online and telephonic channels for data collection due to the lockdown and our own ethical concerns.

We were not able to include a wider range of supply chain actors such as wholesalers, goods transportation workers and retailers/vendors due to the aforementioned reasons, which could be an important area for future studies.

In this study we did not include fruit producers, mainly due to the exclusion of Rajshahi where many farmers cultivate both fruit and vegetables. However, since the selection of farmers were random from the four chosen clusters, there is no guarantee that we would have automatically chosen the ones who also harvest fruits. Fresh fruits could also be an important inclusion in further studies.

## Conclusion

The findings from the rapid assessment are quite alarming. During this covid-19 crisis, while half of the urban consumers are unable to buy their preferred fresh vegetables, or are seeing a price hike, the farmers in distant villages are worried about inability to sell or transport good with huge harvest-ready crops in the field.

The assessment, conducted within a short period, confirms a couple of further assumptions. Firstly, fresh vegetables and fruits are one of the most dependable options for nutrition and immunity, and the farmers of Bangladesh are ready with the supplies. Secondly, there is no risk if these fresh vegetables and fruits are consumed by maintaining proper hygiene. Dr. Saiqa mentioned the WHO guidelines that vegetables should be washed with soapy water at least for 30 seconds. She remarked that the way Bangladeshi cuisines are prepared (temperature) vegetables are perfectly safe.

We would urge the consumers to rethink, and plan their meals around some fresh produce. We also believe if the demand is established, getting these perishable items to the consumers' table at a reasonable cost is not too difficult. Many innovative entrepreneurs have begun to work out alternate ways to achieve this during this period of social distancing.

To reduce the health risks, consumers are encouraged to eat fresh vegetables and thereby also reduce the economic risk for the farmers. And of course, innovative technology and techniques for an efficient supply chain for the agriculture sector will pave new avenues for the future, not just limited to this time of crisis.