

**Pandemic or Environmental Socio-Economic Stressors  
Which Have Greater Impact on Food Security in the  
Barishal Division of Bangladesh: Initial Perspectives  
from Agricultural Officers and Farmers**

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**Supplementary Materials**

**Table S1: Previous cyclone frequencies in Barishal region since 2007**

Name	Date of occurrence	Specification	Affected dsitriacts of Barishal division	Agricultural damages
Amphan	20 May, 2020	Wind speed 165 km/h, heavy rainfall, 3.6 m tidal surge	Barguna, Bhola, Patuakhali, Pirojpur.	176,007 hectares of crops and vegetable affected in 19 coastal districts.
Bulbul	10 November, 2019	Wind speed of 155 Km/h, torrential rain, tidal surge of 2 m	Barguna, Bhola, Patuakhali, Pirojpur.	117,000 hectares of crops affected in different coastal districs.
Fani	4 <sup>th</sup> May, 2019	wind speed up to 90-110 km/h in gusts/ squalls, heavy rainfall and 1.5 m feet tidal surge water	Barguna, Barishal, Bhola, Patuakhali, Pirojpur.	63,062 hectares of crop land damaged in 35 different districts in whole Bangladesh.
Roanu	21 May , 2016	Winds of over 100km/h, heavy rain and storm surges peaking at 2.7 m.	Barguna, Bhola, and Patuakhali.	400 hectares seedbed of Aush paddy, 360 hectares betel leaf orchard, and 3100 hectares of vegetables land were damaged in different coastal districts.  Around 3451 hectares of Standing crops flooded in 8 upazilas in Patuakhali district.  About 2200 hectares cropland damaged in Barguna district.
Mahasen,	16 May, 2013	Wind speed 85 km/h, rainfall and tidal surge of 1.1 m.	Bhola, Barguna, Patuakhali.	46% cuktivated lands in Patuakhali, 57% in Barguna and 28% cultivated lands in Bhola got damaged by Mahasen.
Aila	25 May, 2009	Wind speed of 120 km/h, rainfall and tidal surge of 3m.	Barisal, Bhola, Barguna, Patuakhali, Pirojpur.	120,000 hectares crop damaged in 11 coastal districts. 650 hectares standing crop damaged in Barishal, 323 hectares in Bhola,
Sidr	15 November, 2007	Wind speed 215 km/h, rainfall and tidal surges of 5m.	Barguna, Patuakhali, Pirojpur	920,000 hectares completely destroyed. 551 000 hectares partially affected,

(Source: [NAWG](http://NAWG.org); [reliefweb.int](http://reliefweb.int))

Table S2: Time frame of the survey within the cropping period of Bangladesh during the pandemic COVID 19

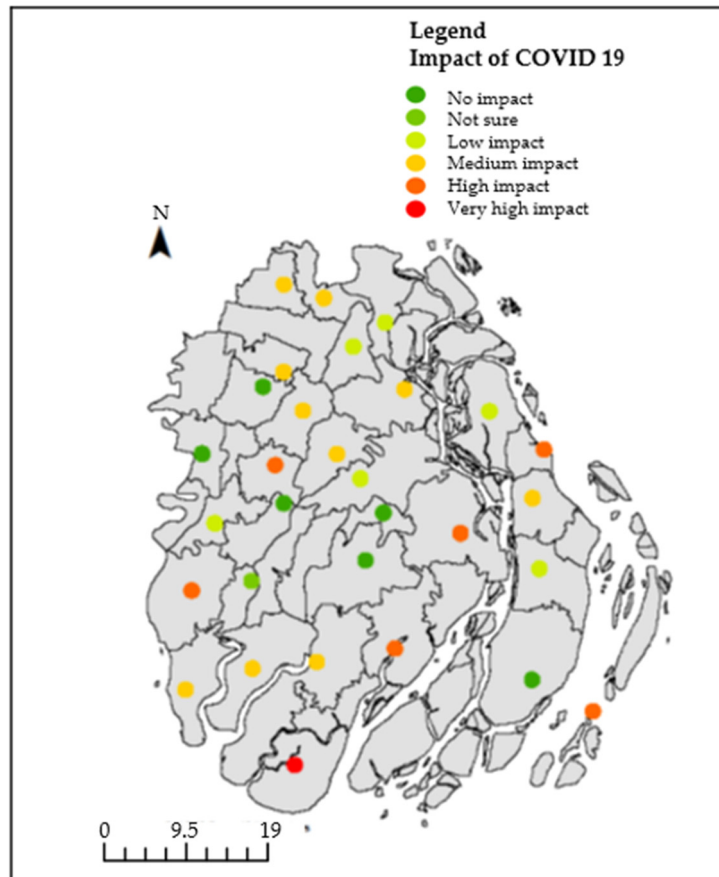
Year	Month	Pandemic	Survey	Dry season/winter crops			Wet season crops		
				<u>Boro</u> (Winter rice)	Vegetables	Fruits	Transplanted <u>aman</u> (Wet season rice)	Vegetables	Fruits
2019	December	Detected in Wuhan, China							
2020	January								
	February								
	March	Infection spreading in Bangladesh							
	April								
	May								
	June								
	July								
	August								
	September								
	October								
	November								
2020	December								
2021	January								

**Table S3: Common fruits grown in Barishal**

English name	Bengali name	Latin name	English name	Bengali name	Latin name
Coconut	নারিকেল,	<i>Cocos nucifera</i>	Jackfruit	কাঁঠাল	<i>Artocarpus heterophyllus</i>
Guava	পেঁয়রা,	<i>Psidium guajava</i>	Papaya	পেঁপে	<i>Carica papaya</i>
Hog plum	আমড়া	<i>Spondias mombin</i>	Lemon	লেমু	<i>Citrus lemon</i>
Watermelon	তরমুজ	<i>Citrullus lanatus</i>	Jujube	কুল / ঝড়ই	<i>Ziziphus jujuba</i>
Mango	আম	<i>Mangifera indica</i>	Litchi	লিচু	<i>Litchi chinensis</i>
Sweet orange	কমলা	<i>Citrus sinensis</i>	Dragon fruit		<i>Hylocereus undatus</i>
Banana	কলা	<i>Musa acuminata</i>			

**Table S4. Common vegetables grown in Barishal.**

English name	Bengali name	Latin name	English name	Bengali name	Latin name
Arum	কচু	<i>Arum maculatum</i>	Bottle gourd	লাউ	<i>Lagenaria siceraria</i>
Okra	টেঁড়স	<i>Abelmoschus esculentus</i>	Bitter gourd	করলা	<i>Momordica charantia</i>
Sweet potato	মিষ্টি আলু	<i>Ipomoea batatas</i>	Ridge gourd	ঝিঞ্জি	<i>Luffa actuangula</i>
Potato	আলু	<i>Solanum tuberosum</i>	Spinach	পালং	<i>Spinacia oleracea</i>
Brinjal	মেগুন	<i>Solanum melongena</i>	Red amaranth	লাল শাক	<i>Amaranthus cruentus</i>
Cabbage	পাঁধাকপি	<i>Brassica oleracea var. capitata</i>	Green amaranth	সবুজ শাক	<i>Amaranthus viridis</i>
Cauliflower	ফুলকপি	<i>Brassica oleracea var. botrytis</i>	Pumpkin	মিষ্টি কুমড়া	<i>Cucurbita</i>
Long bean	বরটি	<i>Vigna unguiculata</i>			



**Figure S1.** The COVID 19 pandemic impacted Upazilas of Barishal Division



**Figure S2: Floating bed agriculture practised in Barishal**





**Figure S3: Sorjan (Ditch and dyke) practised in Barishal**