



Overview of Disaster Incidences in May 2016

In the month of May, quite a large number of disaster in terms of both natural and manmade hit Bangladesh including the destructive Cyclone “Roanu”. Like the previous month, Nor’wester, Lightning, Heat Wave, Tornado, Boat and Trawler Capsize, Riverbank Erosion, Flash Flood, Embankment Collapse, Hailstorm, Earthquake were the natural incidents that occurred in this month. Fire Incidents were the only manmade disaster occurred in this month.

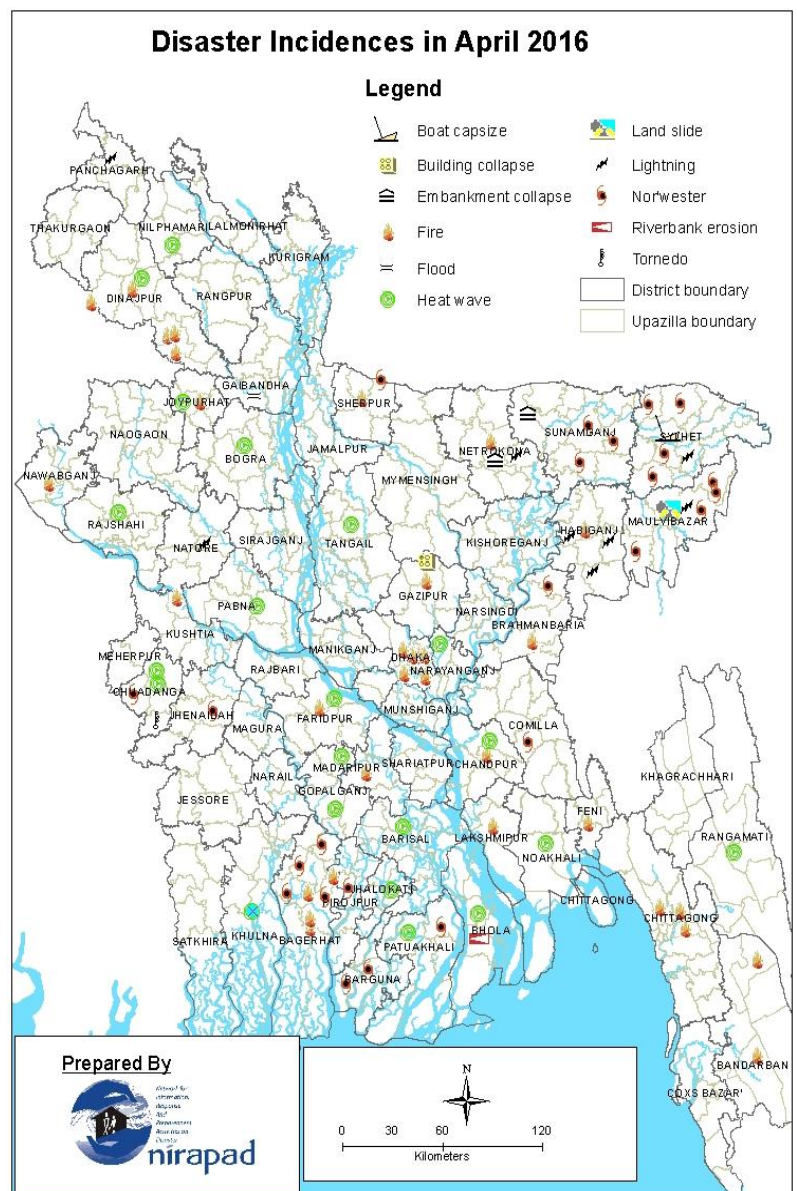
May-16						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Two Incidents of Nor’wester affected 11 districts on 2nd and 6th of May and. Lightning occurred in 17 districts on 2nd, 6th, 7th, 14th, 15th, 17th and 31st of this month.

In this month, four incidents of boat capsizes occurred on 2nd and 29th in individual places. In addition, three incidents of embankment collapse in Satkhira, Khulna and Netrokona were reported, respectively.

On 8th May, flash flood occurred in Sylhet and Moulvibazar districts. An incident of hailstorm in Lalmonirhat district on 6th May, a death incident of heatwave at Joypurhat district on 2nd May, a riverbank erosion incident on 17th May at Saghata and Fulchari of Gaibandha, and three incidents of storm at Barisal, Jhenaidah and Panchgarh district also reported in the national dailies.

Furthermore, a Cyclone named “Roanu” made landfall in the southern coastal region of Bangladesh on 21st of this month. The storm brought heavy rain, winds and affected 18 coastal districts of which Chittagong, Cox’s Bazar, Bhola, Barguna, Lakshmipur, Noakhali and Patuakhali were severely affected. Beside these, 14 fire



incidents were occurred in 8 districts, six of them were occurred in Dhaka.

Description of the Events in May 2016

Cyclone

On May 21, 2016, a cyclone named “Roanu” hit the south and southeast regions of Barisal and Chittagong especially hard damaging hundreds of houses and causing landslide. It is the first tropical cyclone of the annual cyclone season originated from a low pressure area that formed south of Sri Lanka. It gradually drifted north and intensified into a cyclonic storm on 19 May.

With average 80 mile-per-hour winds and downpours of more than a foot in some areas, Cyclone Roanu hit the south and southeast regions of Barisal and Chittagong especially hard damaging hundreds of houses and causing landslides, made landfall over Bangladesh coast on the evening. The tropical storm had crossed north of Chittagong coast around 5:30 pm. Some places were inundated by a storm surge that was 0.9 to 1.2 meters (3 to 4 feet) above normal tide height. The tropical cyclone gradually defused after being roared over Bangladesh

Around 1 lakh houses were damaged, 150000 families were effected and thousands of people rendered homeless in several upazilas of Chittagong, Cox’s bazar and Bhola districts of Bangladesh. It killed total 21 people, ruined crops and washed away the fish farm.

It was reported that 7 killed at Banskhali, 4 in Chittagong city, 2 in Sitaundu, 2 in Kutubdia, 3 in Nokhali, 1 in Feni, 1 Lakshmipur, 3 in Bhola and 1 in Patuakhali in the cyclone (Table 1). Food supplies worth one billion taka (\$12.5 million) was damaged (AFP, May 22, 2016). Flights were suspended at Chittagong airport in the southeast while the Bangladesh Inland Water Transport Authority imposed restrictions on the movement of all ships and ferries. Disaster authorities have shut down sea and river ports and ordered fishing trawlers not to go out, while the meteorological department warned of landslides in southeastern hill districts. Around 500,000 people were evacuated to shelters.

The storm disrupted power and road communications in many parts of the country. Some 80,000 tin-and-mud-built homes were damaged by the storm in the coastal regions including 23,000 homes which were completely knocked down (AFP, May 22, 2016) Over 80 villages in Barisal were flooded after a rain-swollen dam burst and forced residents to flee, the *Daily Star* newspaper said on Sunday. At Chittagong division (Chittagong, Feni, Noakhali, Cox’s bazar) around 4.83 lakh people in 104 unions in different upazilas were effected. Around 103,000 families were affected, of which 19437 were severely and 83660 were partially effected. 400 hectares seedbed of Aush paddy, 360 betel leaf orchard, and 3100 hectares of vegetables land were damaged.

Location		Death and Injury	Remark
District	Upazila		
Chittagong	Bashkhali	<ul style="list-style-type: none"> Total 9 killed 1 killed by wall collapse at Chonuya union 6 floated away and killed at 7 no. ward 2 floated away and killed at 1 no. ward 	<ul style="list-style-type: none"> Several unions remain inundated with seawater. 3000 people inundated at Premshia union. More than 1000 houses damaged. 2km of 3 embankments were broken in different places and about 30 km were damaged due to tidal surge. Salt fields were inundated, mud houses were damaged, trees uprooted, ponds and fish enclosures washed away
	Chittagong	<ul style="list-style-type: none"> 1 child killed at Sholoshohor 	<ul style="list-style-type: none"> About 200 shops and warehouses and Patenga beach inundated At least 4 wards of 2 unions damaged severely.
	Anwara		<ul style="list-style-type: none"> Embankment collapsed, Juidondi and Raypur union inundated. A number of Shrimp Hachari washed away.
	Sitakunda	<ul style="list-style-type: none"> 3 including 2 child killed 	<ul style="list-style-type: none"> 3 unions inundated by a storm surge of 7 to 8 feet above normal tide height.
	Sandwip	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 2km of 6 embankments were broken and about 40km were damaged local people are trying to repair. Two unions were inundated, some mud houses were damaged, many trees uprooted, ponds and fish enclosures washed away
Cox's bazar	Kutubdia	<ul style="list-style-type: none"> 4 killed by house collapse, trawler capsize and tree fall 14 injured 	<ul style="list-style-type: none"> At least 29,000 houses were damaged and 22,128 families were affected. 71 unions of 8 upazilas were affected. Tidal surge ravaged 2117 shrimp enclosure 7 upazilas. Estimated loss BDT 13 crore 20 villages flooded More than hundreds of fish harbor and houses damaged. Local trades in Kutubdia incurred a loss of about BDT 200 crore 18 km stretch of the embankment collapsed. Estimated loss BDT 200 crore

	Maheshkhali	<ul style="list-style-type: none"> 1 killed 	
Noakhali	Hatia	<ul style="list-style-type: none"> 3 killed by house collapse 20 injured 	<ul style="list-style-type: none"> Around 20 village inundated 200 houses damaged Nona Bandh' a newly constructed embankment, has breached at 10/12 points due to tidal surge.
Feni	Sonagazi	<ul style="list-style-type: none"> 1 killed by house collapse 	
Lakshmipur	Lakshmipur sadar	<ul style="list-style-type: none"> 1 killed at Bablatali union as tree fell on him 	
Bhola	Monpura		<ul style="list-style-type: none"> 50 thousand people inundated
	Tazimuddin	<ul style="list-style-type: none"> 2 killed at Chandpur union, 	<ul style="list-style-type: none"> Around 10000 people were running short of food at Tazimuddin upazila More than 100 shops damaged About 100 injured,
	Daulatkhan	<ul style="list-style-type: none"> 1 killed at Joynagar union, 	<ul style="list-style-type: none"> 1000 houses destroyed.
Patuakhali	Dashmina	<ul style="list-style-type: none"> 1 killed as house collapsed, about 50 people injured, 	<ul style="list-style-type: none"> Around 3451 hectares of Standing crops flooded of 8 upazilas. 20-25 houses damaged 2 embankments breached, inundation occurred.
	Golachipa		<ul style="list-style-type: none"> 2 embankments breached, inundation occurred.
	Kolapara		<ul style="list-style-type: none"> 4 embankments breached, inundation occurred
	Rangabali		<ul style="list-style-type: none"> 1 embankment breached, inundation occurred.
Barguna	Bamna, taltoli, Amtali		<ul style="list-style-type: none"> About 2200 hectares cropland damaged 44 villages inundated
Jhalkathi	Kathalia		<ul style="list-style-type: none"> 12 villages inundated as embankment collapsed

Source: The Daily Star, The daily Prothomalo, Bdnews24.com, The Daily Jugantor, May 22-24,2016 and DDM Report, May 26, 2016, JNA phase 1 report on cyclone Roanu, May 26, 2016

Overview of JNA findings						
District	Total assessed population	Affected population	Affected household	Percentages of assessed population affected	Displaced	Number of affected Union
Barguna	963631	124400	30030	13%	23820	30
Bhola	1900702	94600	19857	5%	3800	36
Chittagong	2154135	335755	67307	16%	33900	54
Cox's Bazar	1927941	531282	97373	28%	154940	37
Lakshmipur	1570540	48000	10131	3%	11	20
Noakhali	1062183	115000	22648	11%	300	24
Patuakhali	1206087	47973	10920	4%	-	43
	10,785,220	1297010	258266	12%	216771	244

Source: JNA phase 1 report on cyclone Roanu, May 26, 2016

Nor'wester

In April, Nor'wester hit 11 districts e.g. Pirozpur, Barguna, Brahmanbaria, Comilla, Patuakhali, Moulvibazar, Sylhet, Bagerhat, Chuadanga, Jhinaidah, and Sunamganj. 22 destructive Nor'westers took place on 1st, 2nd, 4th, 5th, 6th, 7th, 8th, 16th and 29th of this month resulting huge damage to the melon grains, betel field, corn, banana, eggplant, chili, snake beans and other crops especially affects the Boro paddy enormously on a vast tracts of land. More than 1,000 acres of crop land were destroyed and more than 100 fruitful trees were uprooted. There were four Nor'westers stricken in Sylhet and Moulvibazar, three in Bagerhat, two in Barguna, Chuadanga and Sunamganj and one in rest of the districts.

On 5th April, traffic movements on Khulna-Barisal and Jessor-Jhinaidah highway were suspended for hours due to Nor'wester. Also, train services of Sylhet with the other parts of the country were stopped for 10 hours at Kamalganj in Moulvibazar on 7th April as trees fell on tracks during the storm. Electricity was disrupted continuously in these 11 districts during the storms as many electric poles were uprooted.

More than 3,730 houses and 13 educational institutes were damaged, 2 boats were capsized, 2 people were killed, 68 people were injured during the Nor'wester. Estimated losses were about more than BDT 6 crore.

Table 1: Loss and damage by Nor'wester in April 2016

Date	Location		Impact	Source	Remark
	District	Upazila			
2-May	Narshingdi	Narshingdi sadar	1 killed	<i>The Daily Star, May 3</i>	A giant bill board fell on a transport worker
	Manikganj	Sirajdikhan	1 killed in Balichar area	<i>The Daily Star, May 3</i>	A large chunk of building's wall fell on the victim

Table 1: Loss and damage by Nor'wester in April 2016

Date	Location		Impact	Source	Remark
	District	Upazila			
	Comilla	Burichang	1 man killed The district was out of electricity for a long time, many trees uprooted	<i>The Daily Jugantor, May 3</i>	
		Daudkandi	At Jinglatali union, roof of 15 tin roofed warehouses blew away and more than 1000 hectares land of crops damaged	<i>The Daily Jugantor, May 3</i>	
	Munshiganj	Lohaganj	More than hundreds of katcha houses, fruit trees damaged. Ferry service was stopped for four hours.	<i>The Daily Jugantor, May 3</i>	
	Narail	Lohagora	Electric poles uprooted and caused disruption of the power supply	<i>The Daily Jugantor, May 3</i>	Electric poles uprooted in the area of Amada, Chougacha and cause disruption of electricity
	Bhola	Monpura	5 classrooms damaged		5 classrooms of a high school called " Andipara High School" damaged in the storm
	Faridpur	Bhanga	A large tree uprooted and fell on Dhaka-Barisal highway causing disruption of traffic movement for 3 hours		
	Chuadanga	Damurhuda	1 killed, many mango trees damaged	<i>The Daily Jugantor, May 3</i>	Crops were damaged by hails
	Madariour	Kaorakandi-Shimulia	Disruption of ferry services for two and half hours	<i>The Daily Jugantor, May 3</i>	
	Chuadanga	Faridganj	1 woman killed	<i>The Daily Jugantor, May 3</i>	
	Chandpur	Faridganj	1 woman killed	<i>The Daily Star, May 3</i>	A tree branch fell on the victim
	Brahmanbari a	Kasba	1 boy killed about 50 houses. 20 electric poles damaged, many trees uprooted, electricity interrupted.	<i>The Daily Jugantor, May 3</i>	

Table 1: Loss and damage by Nor'wester in April 2016

Date	Location		Impact	Source	Remark
	District	Upazila			
6-May	Kurigram	Nageswari	Storm accompanied with hail damaged Boro paddy, Jute and fruitful trees along with houses of 30 villages	<i>The Daily Jugantor, May 7</i>	
Total			Total more than 3,730 houses and 13 educational institutes damaged, 2 boats capsized, 2 people killed , 68 people injured, more than 1,000 acres of crop land were destroyed, 100 trees uprooted that making loss of more than BDT 6 crore.		

Lightening

In the month of April, 8 incidents of lightning occurred in 6 districts e.g. Natore, Moulvibazar, Netrokona, Panchagarh, Habiganj and Sylhet on 3rd, 16th, 18th and 19th April. Among them, 4 incidents occurred on the same day on 19th April in Habiganj, Sylhet and Panchagarh district. The number of incidents were most in Habiganj district i.e. three. Total 13 people were killed and 9 were injured in these incidents.

Table 2: Loss and damage by Lightning in April 2016

Date	Location		Impact	Source	Remark
	District	Upazila			
2-May	Brahma+C4:F 4nbaria	Nasirnagar	2 people killed in Faundauk union and Atikura union	<i>The Daily Jugantor, May 3</i>	
	Natore	Bagatipara	1 killed		
6-May	Chandpur	Matlab	1 woman killed	<i>The Daily Jugantor, May 7</i>	
	Netrokona	Purbadhala	2 killed, one at Dhalamulgaon union and other at Charer vita village.	<i>The Daily Jugantor, May 7</i>	
7-May	Faridpur	Charbhadrasan	1 killed	<i>The Daily Star, May 8</i>	
	Faridpur	Nagarkanda	1 killed	<i>The Daily Star, May 8</i>	
	Shirajganj	Enayetpur	1 killed	<i>The Daily Star, May 8</i>	
	Shirajganj	Shahjadpur	2 killed	<i>The Daily Star, May 8</i>	
	Jamalpur	Shariyatpur	1 killed	<i>The Daily Star, May 8</i>	

14-May	Dinajpur	Birganj	1 woman killed at Maricha union.	<i>The Daily Prothomalo</i> May 15	
	Narail	Lohagora	2 including 1 woman killed at Naldi union	<i>The Daily Prothomalo</i> May 15	
	Patuakhali	Dashmina	1 woman killed	<i>The Daily Prothomalo</i> May 15	
15-May	Sylhet	Companiganj	3 children killed	<i>The Daily Prothomalo</i> May 16	The deceased were at fishing in "Bauti Bill"
	Sylhet	Jaintapur	1 farmer killed at Darbast union	<i>The Daily Prothomalo</i> May 16	
	Sunamganj	Doarabazar	1 child killed	<i>The Daily Prothomalo</i> May 16	
17-May	Naogaon	Dhamorihat	3 cows killed	<i>The Daily Star,</i> May 18	
31-May	Noakhali	Companiganj	3 killed at 8 no.ward	<i>The Daily Jugantor,</i> June 1	
	Jhenaidah	Maheshpur	2 killed including 1 child and 2 injured.	<i>The Daily Jugantor,</i> June 1	
	Pirozpur	Mathbaria	2 killed	<i>The Daily Jugantor,</i> June 1	
	Barisal	Babuganj	1 killed	<i>The Daily Jugantor,</i> June 1	
Total			Total 13 were killed and 9 were injured.		

Fire

There were 30 fire incidents in April, 2016. As for geographic spread, 18 districts (Patuakhali, Dhaka, Sherpur, Faridpur, Dinajpur, Chittagong, Habiganj, Bandarban, Bagherhat, Gazipur, Madaripur, Brahmanbaria, Feni, Lakshmipur, Chapainawabganj, Netrokona, Joypurhat and Chandpur) experienced fire. These incidents caused death to 5 persons; 6 cows, 5,000 broilers and injury to 17 people. More than 15 shops and 141 houses were burnt and estimated loss was about BDT 3 crore 54 lac (Table 3).

As many as 4 fire incidents occurred on 10th, 24th and 26th April, three or two incidents in a single day occurred on 8th, 16th, and 23rd April. Highest seven fire incidences occurred in Dhaka district. There were four fire incidents occurred in Dinajpur, three in Chittagong, two in Bandarban and Gazipur and one incident in each of the remaining 12 districts.

Table 3: Loss and damage by Fire in April 2016

Date	Location		Impact	Source	Remark
	District	Upazila			
1-May	Dhaka	Tejgaon	18 shops gutted.	<i>The Daily Star, May 3</i>	Fire broke out at Uttar Karwan Bazar Babosayee Janakalyan Samity (Hasina) market.
2-May	Jhalakathi	Rajapur	12 houses gutted	<i>The Daily Star, May 3</i>	Fire originated from electric short circuit
	Narshingdi	Narshingdi sadar	No loss determined	<i>The Daily Prothomalo, May 3</i>	Ghorashal Poweplat caught fire
3-May	Chittagong	Pahartali	2 factories and a house burnt. Estimated loss BDT 8 lakh	The Daily Star, May 4	Two adjacent ice cream factories and a tin roofed house caught fire. Fire originated from electric short circuit
4-May	Khulna	Dighalaya	1 Jute mill burnt. Estimated loss BDT 5 crore.	The Daily Jugantor, May 5	"Jute Textile Mill" caught fire. Fire originated from electric short circuit
	Dhaka	Dhanmondi	55 tin shade houses burnt	The Daily Jugantor, May 5	Fire broke out at the slum in Green road.
6-May	Kurigram	Chilmari	1 house burnt. Estimated loss BDT 5 lakh	<i>The Daily Jugantor, May 7</i>	
8-May	Tangail	Sakhipur	1 child killed	<i>The Daily Prothomalo, May 9</i>	Fire originated from a kerosene lamp

14-May	Gazipur	Kaliyakair	1 house burnt. Estimated loss BDT 5 lakh	<i>The Daily Prothomalo May 15</i>	
16-May	Dhaka	Bangshal	3 burnt	The Daily Star, May 17	Fire broke out in a shoemaking factory. Fire originated from a burning cigarette.
	Dhaka	Kotwali	No casualties.	The Daily Jugantor, May 17	The burn unit of Dhaka Medical College (DMC) caught fire. Fire originate from Air conditioner.
	Dhaka	Kotwali	No casualties.	The Daily Jugantor, May 17	Fire broke out at the Academic building of "Jagannath University" from dumped things.
28-May	Kurigram	Roumari	7 shops burnt, 2 killed and 5 injured	<i>The Daily Jugantor, May 29</i>	Fire erupt from gas cylinder.
31-May	Dhaka	Savar	5 injured. Estimated loss BDT 1 Crore	<i>The Daily Jugantor, June 1</i>	A commercial organization caught fire. Fire erupt from a riser of gas line.
Total			Total 5 people killed, 17 people injured, more than 15 shops, 2 factories, 40 rooms, 141 houses and 1 bus burnt, 6 cows and 5000 boiler killed and estimated losses were about BDT 3 crore 54 lac.		

Heat Wave

In the month of April, the longest spell of heat wave has been reported i.e. 24 days at a stretch in several districts. The highest temperature was recorded 41.2 degree Celsius in Rajshahi which was the highest in last thirty years. Total 6 people were killed by heat stroke in 4 districts (Chuadanga, Joupurhat, Jhalakathi and Pabna). 17 districts e.g. Dhaka, Rajshahi, Pabna, Bogra, Dinajpur, Gopalganj, Tangail, Faridpur, Madaripur, Rangamati, Chandpur, Noakhali, Nilphamari, Barisal, Khulna, Patuakhali, Bhola experienced mild heat wave throughout the month (The Daily Jugantor, May 1).

Table 4: Loss and damage Heat wave in April 2016

Date	Location		Impact	Source
	District	Upazila		
2-May	Joypurhat	Akkelpur	1 farmer died from heatsroke	The Daily Star, May 3
Total				

Boat Capsize

One incident of boat capsized was reported killing 1 people at Goanighat in Sylhet district on 17th April (The Daily Jugantor, April 18)

Riverbank Erosion

During this month, riverbank erosion was reported on 27th at Monpura upazila in Bhola district resulting the damage of road connecting to North Sakuchiya and South Sakuchiya (The Daily Jugantor, April 28).

Table 4: Loss and damage Heat wave in April 2016				
Date	Location		Impact	Source
	District	Upazila		
2-May	Joypurhat	Akkelpur	1 farmer died from heatsroke	The Daily Star, May 3
Total				

Flash Flood

Fulchari upazila of Gaibandha district experienced flood on 18th of this month due to sudden rise of the water level in Jamuna River. The flood inundated immature “Kali Boro” paddy on 20 hectares of land (The Daily Star, April 19).

Table 4: Loss and damage Heat wave in April 2016				
Date	Location		Impact	Source
	District	Upazila		
2-May	Sylhet	Sylhet sadar	Cropsland and houses were flooded at Khadimnagar union	<i>The Daily Star, May 19</i>
2-May	Moulvibazar	Moulvibazar sadar	Kulaura-Baralekha road were flooded	<i>The Daily Star, May 19</i>
Total				

Embankment Collapse

In the month of April, 2 embankment collapse incidents occurred. Embankment of Baram and Sonadubi haor under Derai and Dharmapasha upazila of Sunamganj district collapsed on 19th of this month due to overflow of water coming from hill slope. At least 250 acres land of Boro paddy were damaged (The Daily Prothom Alo, April 18).

Also, “Heyeza” dam was breached at Dingapota haor in Mohanganj upazila under Netrokona district on 22nd April following damage of Boro paddy (The Daily Jugantor, April 23).

Table 4: Loss and damage Heat wave in April 2016				
Date	Location		Impact	Source
	District	Upazila		
8-May	Satkhira	Ashasuni	6 villages inundated and about 1000 families marooned, 400 shrimp hachari damaged.	<i>The Daily Prothomalo, May 9</i>
9-May	Khulna	Koira	5 villages of North Bedkashi union inundated. 8000 people marooned.	<i>The Daily Jugantor, The Daily Prothomalo May 10</i>

9-May	Brahmanbaria	Brahmanbaria sadar	1 child killed	<i>The Daily Prothomalo May 10</i>
Total				

Hailstorm

In this month, one incident of hailstorm occurred on 2nd April. The hailstorm accompanied by hails and rain swept through eight villages of Bagerhat district and damaged 1,000 houses, 100 CI sheet-roofed shops and a few mosques damaged. It also damaged 200 hectares of maize plant (The Daily Star, April 3).

Table 4: Loss and damage Heat wave in April 2016

Date	Location		Impact	Source
	District	Upazila		
2-May	Joypurhat	Akkelpur	1 farmer died from heatsroke	The Daily Star, May 3
Total				

Teawler Capsized

On 2nd May, two incident of trawler capsized occurred at the sadar of Chandpur district and Shibalaya upazila of Manikganj district in the same day. It made 2 people, 4 trawler capsized, many trees uprooted and a lots of houses damaged (The Daily Jugantor and The Daily Star, May 3).

Table 4: Loss and damage Heat wave in April 2016

Date	Location		Impact	Source
	District	Upazila		
2-May	Chandpur	Chandpur sadar	4 trawler capsized, many trees uprooted and a lots of houses damaged	<i>The Daily Jugantor, May 3</i>
2-May	Manikganj	Shibalaya upazila	2 people missing	<i>The Daily Star, May 3</i>
Total				

Response in May 2016

GoB Response in Cyclone Roanu

The district administration of Bagerhat district distributed BDT 25 thousand to each of the affected people (The Daily Jugantor, Aril 10). Agricultural department started work from the next day to mitigate the damages.

Within 24 hours, most of the evacuated returned to their homes

Conclusion

There were few devastating incidents in the month of April. Fire, Nor'wester, lightning caused death and injuries a lot. The almost unbearably hot and dry weather scorched parts of Bangladesh throughout the month. Frequent fire incidents at Sundarban posing a threat to the biodiversity. Again response and preparedness activities are not in an improved condition. Countrywide Nor'wester was responded by the Government, but it could not mobilize resources and precede the action adequately. Several natural incidents in the same month are an alarm to take the course of action to mitigate the consequences.