

# Flood 2020: Current Situation and Required Actions

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- The CPD Team would like to register its deep appreciation to *Dr Fahmida Khatun*, Executive Director, CPD, *Professor Mustafizur Rahman*, Distinguished Fellow, CPD, *Dr Khondaker Golam Moazzem*, Research Director, CPD and *Mr Towfiqul Islam Khan*, Senior Research Fellow, CPD for their insightful comments and suggestions in preparing the report.
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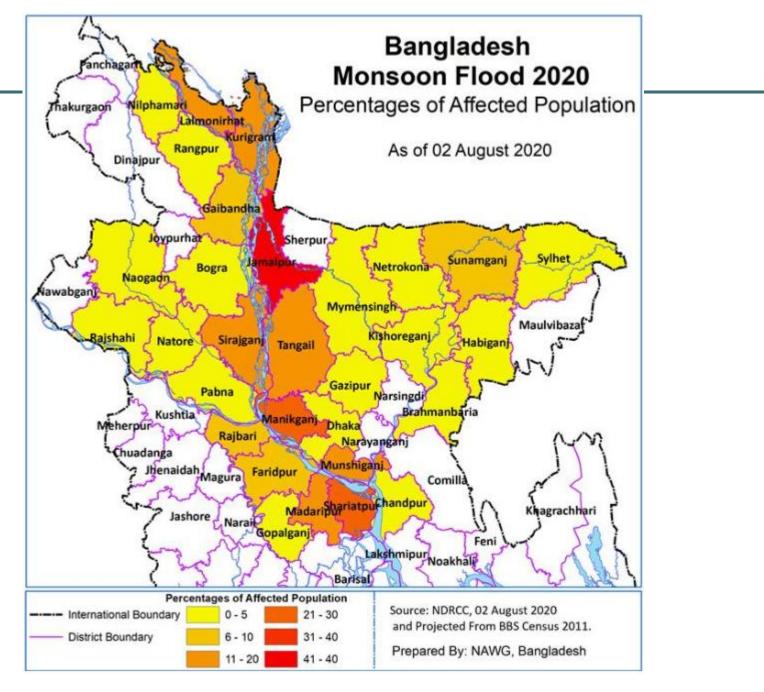
- Section 1: General Overview
- Section 2: Study Design
- Section 3: Damage Assessment
- Section 4: Relief and Rehabilitation
- Section 5: Rice Procurement and Stock
- Section 6: Concluding Remarks and Recommendations

### Background

- Heavy and prolonged rain in Meghalaya and Assam states of India since June have triggered an onrush of water flows to Bangladesh which led to a significant rise in the water levels in the Dharala, Brahmaputra, and the Teesta rivers
  - ✓ Jamalpur, Kurigram and Lalmonirhat are among the most affected districts
  - ✓ Rajbari, Bogura and Manikganj are among the moderately affected districts
- Rainfall in Bangladesh along with excessive flow of water from the upstream have resulted in a second spell of flood following first week of July
- This has aggravated the situation and contributed to the persistence of the flood situation, now continuing for over 35 days

#### Background (cont.)

- In addition to siltation, overflow of water, several districts have also been engulfed in water after embankments had collapsed at many points
- 50.28 lakh people have been affected which represents 6.1% of population in the 33 affected districts
- In some respect, the ongoing flood reminds the devastating floods of 1988 and 1999 in terms of its duration
  - ✓ Difficult to estimate the full cost of damages due to lack of comprehensive data
- CPD had earlier carried out assessment studies concerning floods in 2004, 2007 and 2017
- This time the parallel ongoing COVID-19 has made collection of relevant data particularly difficult



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			Floods		
Particulars	Flood 2004	Flood 2007	Flood April 2017	Flood August 2017	Flood in 2020*
Affected districts	39	39	6	32	33
Affected upazilas	265	256	60	208	162
Affected unions	NA	2,057	450	1,324	1065
Affected pourshavas	NA	67	NA	64	NA
Affected households (Full/Partial)	74,68,128	22,86,564	10,314,05	17,34,384	11,97,297
Affected people	3,63,37,944	1,06,55,145	46,676,23	82,02,025	5,028,646
Death (Drowning, snake bite etc)	747	554	10	147	44

#### **Comparable Scenarios Concerning Recent Floods**

Source: MoDMR and BBS Statistical Yearbook various issues.

Note: \*as of 14 August 2020

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#### **Objectives**

- The broad objective of CPD's assessment of Flood 2020 is to understand the overall flood situation, the consequent damage and the response on the ground. The aim is to create an opportunity for discussion and help come up with a set of policy recommendation
- Specific objectives of the assessment were as follows:
  - ✓ Understand the intensity and impact of the flood
  - ✓ Assess the adequacy and efficacy of overall relief and rehabilitation activities undertaken by the government
  - Review the public food stock situation and its distribution during the period of flood
  - ✓ Needs assessment of the flood-affected people's vulnerabilities
  - ✓ Articulate a set of recommendations to address and mitigate the adverse effects

#### Methodology

- The study has reviewed relevant Government Orders (GOs) as regards overall relief activities, agricultural rehabilitation schemes, and secondary documents, and has drawn on insights from multiple in-depth interviews
- Support measures and programmes undertaken by various non-state organisations could not be covered by the study

#### Sources of data

- ✓ Ministry of Disaster Management and Relief (MoDMR)
- ✓ Department of Disaster Management (DDM)
- ✓ Bangladesh Bureau of Statistics (BBS)
- ✓ Department of Food (DoF)
- ✓ Department of Agricultural Extension (DAE)
- Interviews of UNOs (Gopalganj, Gaibandha, Jamalpur, and Sunamganj), NGO representatives (Gaibandha and Sirajganj), and journalists (*haor* area)

### **Section 3: Damage Assessment**

- Due to unavailability of D-form, comprehensive damage estimate was not possible
- The Needs Assessment Working Group (NAWG) led by the Department of Disaster Management (DDM) and CARE conducted an early assessment of the flood
- The NAWG assessment of damage reported the following estimates as of 2 August 2020:
  - ✓ USD 42 million worth crops
  - $\checkmark$  USD 74.5 million worth of livestock
  - ✓125,549 hectares of agriculture land
  - ✓16,537 hectares of grass land
  - ✓81,179 tube-wells
  - ✓73,343 latrines
  - ✓ Over 1,900 schools

### **Section 3: Damage Assessment**

- Out of 334 most affected unions, embankments in 220 unions have been damaged
  - ✓ Over 4km embankment damaged in 97 unions
  - ✓ 2-4 km embankment damaged in 53 unions
  - ✓ 0.1-2 km embankment damaged in 70 unions
- Secondary information reveals that authorities often fail to repair and replace faulty embankments
  - ✓ Locals also contribute to the damage by cutting dykes
- Beyond financial costs, there are non-economic costs (e.g. loss of productive work hours, schooling and cultural values) and vulnerabilities (e.g. reduced purchasing power and distress selling) which are difficult to monetise

#### Demand for relief, targeting of affected people and distribution channels

- In general, upazilla disaster management committee, humanitarian assistance committee and grassroot political leaders work together to carry out the needs analysis
- Requests placed by affected people via 333 (emergency response hotline number) and upazilla control room are also taken into account towards wider coverage
- In some cases, demand for relief is also assessed through:
  - ✓ Poverty mapping using district-level poverty data (updated in 2016)
  - ✓ Database of people called *Paribar Porichiti* which includes information on various socioeconomic indicators including house ownership and income
  - ✓ Number of affected people living in shelters

Demand for relief, targeting of affected people and distribution channels (contd.)

- Relief demand is placed before District Commissioner from Upazilla level which is then passed on to the MoDMR
- Volume (how many reliefs in a package) and frequency (how many times to be distributed) of distributed packages vary based on needs (at the upazilla level)
- Local Union Parishad Chairman usually arranges relief distribution
  - ✓ Often this results in decision making which is not inclusive and is informed by biases
  - ✓Administrative officials at local-level are entasked to oversee relief distribution process

#### **Relief activities** <sup>a</sup>

Details	GR Rice (MT)	GR Cash (Tk. cr.)	Dry food (packets)	Animal food (Tk. cr.)	Children's food (Tk. cr.)	House building grant (Tk. cr.)	CI Sheet (bundle)
Allocation	19,510	4.27	168,000	3.30	1.54	0.12	400
Disbursed	12,818	2.89	141,286	2.04	1.01	0.03	100
Stock	6,692	1.38	26,714	1.26	0.53	0.09	300

<sup>a</sup>Data as of 14 August 2020

Source: Ministry of Disaster Management

#### GR-Rice

- ✓ 63% of allocation has been distributed: average per head entitlement is 2.5 kg
- ✓ If the remaining stock is distributed among the same number of affected people, each will receive on an average 1.3kg of rice
- GR-Cash
  - ✓ 68% of the allocated cash has been distributed: average per head entitlement is Tk. 5.7
  - ✓ If the remaining money is distributed among the same number of affected people, each person will receive only Tk. 2.75

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#### Assessing relief coverage

**Scenario 1**: Assuming 100% of affected people will receive the relief

#### Total affected population=50.28 lakh

Details	GR Rice	GR Cash	
Distribution per capita (affected)	2.5 kg	Tk 5.7	
Distribution per HH (affected)	10.7 kg	Tk 23.9	

Source: Authors' estimation

• Per household disbursement has been found to be quite low

#### Scenario 2

Assuming that each household comprises of 4.2 members and received (i) 20 kgs of rice, (ii) 1000 taka and (iii) one (1) packet of dry food

Based on the estimates

 20 kg rice will last only 13 days if each family consumes 1.5kg rice per day

✓ 46.2 kg rice per family will be needed to provide support for 30 days

- 54% of affected households could be covered with current disbursement of rice
  - Another 11,128 MT of rice will be required to cover rest of the affected households
- GR-Cash outreach is just 2%

✓ At least Tk 117crore will be needed to cover the remainder 98%

12% of the affected population received a packet of dry food

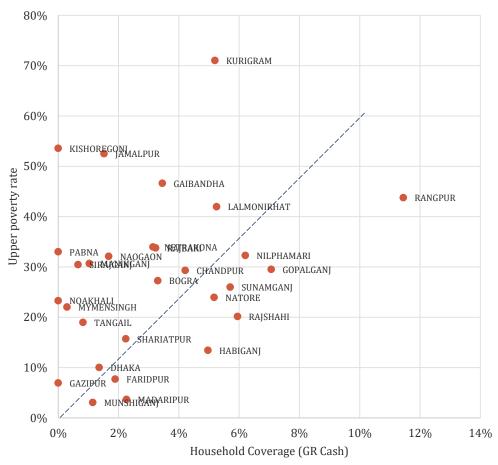
✓ Additional 10.56 lakh packets would be needed to cover the rest *Flood 2020: Current Situation and Required Actions* 

Details	<b>GR Rice</b>	GR Cash	Dry food
HH likely covered	640,876	28,882	141,286
HH coverage	54%	2%	12%
Amount needed to cover remaining affected HH	11,128 Mt		10.56 lakh packets

Source: Authors' estimation

#### **GR Cash Coverage**

- *Fig 1a* provides a scatter plot of GR Cash coverage of households against upper poverty rate
- In general, cash distribution is consistent with poverty rates
- However there are some outliers: Kurigram and Jamalpur have high poverty rates but had comparatively lower range of coverage



### Fig 1a: District-wise upper poverty rate by household coverage (GR Cash)

### GR Cash Coverage (cont.)

*Fig 1b* shows a scatter plot of GR Cash coverage of households against number of affected household

- Government cash relief was targeted based on poverty rates rather than the intensity of flood and number of affected households
- Most areas with high number of affected households had poor coverage (Jamalpur, Tangail, Sirajganj)

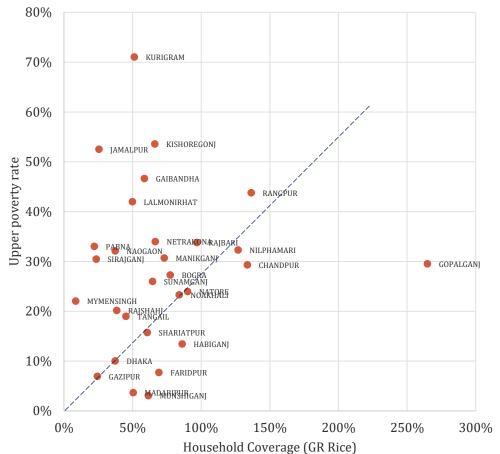
250000 IAMALPUR 200000 Number of affected household 150000 TANGAIL SIRAJGANJ 100000 DHAKAHARIATPUR AIBANDHAKURIGRAM 50000 MEMUNGHIMANARIPUF ALMONIRHAT SUNAMGAN NETRAKONA RAJBARI CHANDPUR TSHOREGON RANGPUR PHAMARI MANPALGAN 2% 10% 8% 12% 4% 6% 14% Household Coverage (GR Cash)

#### Fig 1b: District-wise affected household by coverage of GR-Cash

#### **GR-Rice Coverage**

*Fig 2a* provides scatter plots of GRrice coverage of households against upper poverty rate

- Overall coverage of GR-Rice distribution is also consistent with poverty rates
- However, low poverty areas had higher coverage (e.g. Nilphamari, Chandpur, Gopalganj) while high poverty areas have low coverage (e.g. Kurigram, Jamalpur)

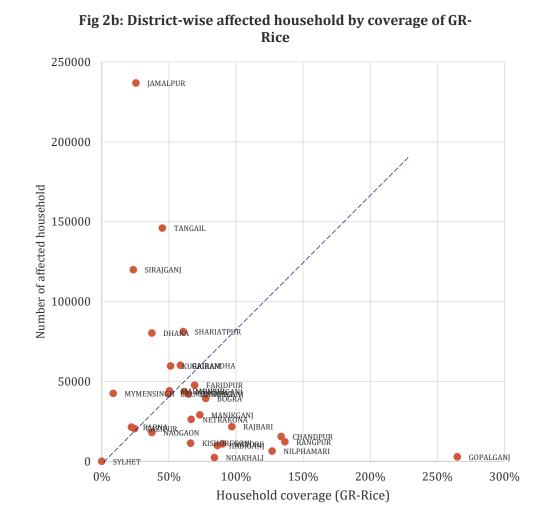


### Fig 2a: District-wise Upper Poverty Rate by household coverage (GR Rice)

### **GR-Rice Coverage (cont.)**

*Fig 2b* provides scatter plot of GRrice coverage of households against the number of affected households

- Distribution of rice did not reflect the needs of affected people
- Areas with high number of affected households had poor coverage e.g. Jamalpur, Tangail, Sirajganj while Chandpur and Gopalganj had over 100% coverage despite low number of affected households



#### **CPD Observations**

- Capacity constraint in terms of services delivery
  - $\checkmark$  Government relief distribution is predominantly driven by poverty information
    - The multidimensional nature of adverse impacts which increases vulnerability of population is not reflected in the distribution mechanism
  - ✓ Field observations reveal both irregularities and inadequacy in the volume of relief disbursed, particularly in *haor* regions
- Difficulty in ensuring social distancing at the flood shelters
- Some marginalised groups, including the COVID-19 induced 'new poors', are at high risk
  - ✓ Situation is aggravated by scarcity of both human and animal food
  - Risk of malnutrition among households members
  - Occupational immobility due to lack of financial capacity (e.g. facilitating farmers in *haor* regions switching to fishing)
  - Field observations revealed that distress selling has gone down as the pandemic has eroded purchasing powers
    - This would further deteriorate the wellbeing of vulnerable groups

- NGO efforts are constrained by funding issues and health regulations
  - Changing global dynamics has shrunk access to funds from development partners
    Reduced capacity of NGOs limits relief efforts due to lack of funds
    Field staff is being reduced as funds are shrinking
  - ✓ Both Bangladesh government and international development community have introduced health restrictions due to COVID-19
    - NGOs cannot conduct specific activities such as community consultations and meetings due to social distancing measures
    - Majority of NGOs try to deliver reliefs directly to the affected households
  - ✓This has increased operational costs and has slowed down relief efforts
- Government relief efforts have largely missed the multidimensional needs as revealed by a survey carried out in 15 most affected districts (NAWG, 2020)
  ✓90% households have difficulty in accessing cooking fuel
  - ✓ Access to safe water is seriously impeded in 90% of the unions
  - $\checkmark$  Personal and menstrual hygiene are of major concern in two-thirds of the unions

### **Rehabilitation: Incentives for Agriculture**

- Free distribution of leafy vegetable and other vegetable seeds among affected small and marginal farmers
  - Budget: Tk 10.26 crore (3.4% of total budget) from agriculture rehabilitation assistance of Tk 300 crore
  - ✓ Announced: 06 August 2020
  - ✓ Total farmers targeted: 151,600
  - ✓ Allocation per farmer: Tk 677.00
- Aman rice seed (Nabi variety) to be distributed for free among small and marginal farmers in the most affected districts
  - ✓ Budget: Tk 58.08 lakh which is only **0.2% of total budget** for agriculture rehabilitation assistance of Tk 300 crore
  - ✓ Districts targeted: 25
  - ✓ Total tray: 41,600
  - ✓ Farmers: 1600
  - ✓ Allocation per farmer: Tk 3380.00

### Assessment of agricultural rehabilitation

- The announced two rehabilitation programmes are only 3.6% of total agricultural rehabilitation budget in FY21
- Leafy-vegetables and vegetable seeds
  - ✓ Three flood affected districts were not part of the scheme (Lakshmipur, Maulvibazar, Noakhali)
  - ✓ Four districts included in the agricultural scheme are not included in DDM's list of affected districts: Chapainawabganj, Cumilla, Dinajpur, Narayanganj, Narsingdi, Sherpur
  - *• Borga* farmers may not receive the benefits as they do not own lands
- Rehabilitation measures for non-crop sectors (e.g. fisheries and livestock) often receive less attention

### **Section 5: Rice Procurement and Stock**

#### Rice procurement and stock

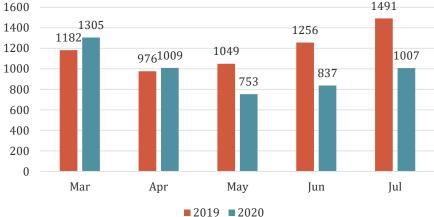
- Government had targeted to procure 8 lakh MT of paddy @Tk. 26/kg, 10 lakh MT of parboiled rice @Tk. 36/kg and 1.5 lakh MT of sunburn rice @Tk. 35/kg during this *Boro* season
  - ✓ However, *Boro* procurement has been very low this season
- Government has been able to procure only 22% Boro paddy (0.18 lac MT) and 45% Boro rice (5.23 lac MT)
  - ✓ In 2019 during this time, 76% *Boro* paddy and 86% *Boro* rice had been procured
  - ✓ Many farmers have already sold their produce by the time the government procurement drive was started in the area

Thee stocks are also tower than fast year							
Food Grain	Target (lac mt) 2020	Procurement (lakh MT)	Target Achievement (%)				
Aman Paddy	6.27	6.27	100%				
Aman Rice	3.81	3.79	99.9%				
Boro paddy	0.80	0.18	22%				
Boro rice	11.50	5.23	45%				
Wheat	0.75	0.64	85%				

✓ Rice stocks are also lower than last year

Source: Ministry of Food (2019;2020)

Flood 2020: Current Situation and Required Actions



Rice stocks (in '000 MT)

*Source: Ministry of Food (2019;2020) Note: July 2020 figure represents stock data from 05 August 2020* 25

## **Section 5: Rice Procurement and Stock**

Price has increased for thin and thick rice by 8.7-18.1% compared to last year

Retail market price of rice in Dhaka

Rice Type	16-Aug-20		16-Jul-20		Change (%)	16-Aug-19		Change (%)
Rice Thin (Nazir/Miniket)	50	62	52	62	-1.75	47	56	8.74
Rice (Medium) Paijam/Lata	44	50	44	52	-2.08	44	50	0.00
Rice (Thick) Gold/Chinese IRRI	40	45	40	45	0.00	34	38	18.06

Source: Trading Corporation of Bangladesh (2020)

- State public foodgrain stocks is a matter of concern: The stock has come down from 15 lac MT to 10 lac MT
  - ✓Government's PFDS activities might be affected in the wake of another possible spell of flood
  - Purchasing rice from millers to replenish food stocks will be challenging
    Millers might be reluctant to sell rice at government mandated Tk. 36 per kg as it is low
- Price of rice has increased since last year
  - ✓ Poor and vulnerable groups will face difficulties if the price continues to rise, at a time when their income has suffered erosion due to the pandemic

#### **Questions to ponder**

- Will low procurement affect flood related food distribution?
- Does low procurement demand immediate imports?
- Should the government revisit the duties imposed last year on imports?
- What impact will this have on domestic price levels for rice?

### **Policy recommendations**

- Expanding relief efforts
  - ✓ Our analysis have clearly shown that in terms of both coverage and per head allocations, government relief efforts fall short of the needs. The needs will also rise if there is a second spell of flood
  - ✓ Allocation of food and resources must be increased in a way which is commensurate with the demand
  - ✓ Government's relief efforts need to look beyond traditional relief items
    - Cooked food, firewood, drinking water and other healthcare articles including dignity kits for women need to be ensured
    - Necessary safety nets needs to be established as the double economic burden of COVID-19 and floods may lead more students to drop out of school
  - ✓ Targeting of relief is largely based on poverty rates
  - Hence, to widen coverage, demand analysis for relief has to go beyond poverty rates and take into account the multidimensional nature of vulnerabilities faced by affected people

- Flood management and infrastructure restoration programmes
  - ✓ Government's flood management and control activities appear to be losing steam
  - ✓ Urgent rehabilitation of affected and faulty embankment and dams has to be carried out. Coordination with, and support from, local institutions including LGED, R&HD and the Ministry of Water Resources is necessary to execute this task efficiently
    - oA master plan for dam/embankment maintenance needs to be developed
    - •Design flaws of infrastructures including bridge, culvert and road networks that cause waterlogging needs to be addressed and actions taken on an urgent basis

#### Institutional Issues

- Leakages in the distribution channels of relief and rehabilitation programmes should be addressed
  - Beneficiary selection and relief disbursement through Union Parishad oftentimes leads to discrepancies
  - oGrassroots participation of local people has to be encouraged
  - Transparency must be enhanced and accountability enforced in a more targeted manner. Non-state actors should encouraged both in relief distribution activities and enforcement of transparency in beneficiary selection

#### • Support measures

- ✓ Government's rehabilitation and support schemes have to go beyond the crop sector. People engaged in fish culture have also faced significant losses because of overflowing of ponds. Affected farmers should be provided with fingerlings
- ✓ Government should urgently take actions to ensure that *borga* farmers are brought under the coverage of agricultural support schemes
- Flood resiliency needs to be enhanced in the agricultural sector. Use of flood resilient crops and farming methods such as floating gardens can be explored to mitigate the adverse impact of flood on livelihoods of people in areas of frequently affected by floods
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- Address the challenges faced by NGOs
  - ✓ Historically, NGOs have played crucial role in extending support to affected population during floods. Current fund constraints have severely impeded the capacity of NGOs to undertake relief activities
  - ✓ Government may like to pass on the message to development partners to strengthen support to grassroot NGOs
- Management of Public Food Distribution System
  - Public food stocks must be raised in view of rising demand and to keep food markets stable. Procurement price may need to be revisited in view of low procurement of *boro* this year
  - ✓ Government should buy rice from the domestic market through open tender in the event the target is not achieved
  - ✓ Government may need to go for rice import in view of the lower food stock and rising food prices. The amount to be imported will need to be decided after carefully weighing the interests of consumers and farmers

# Thank you

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