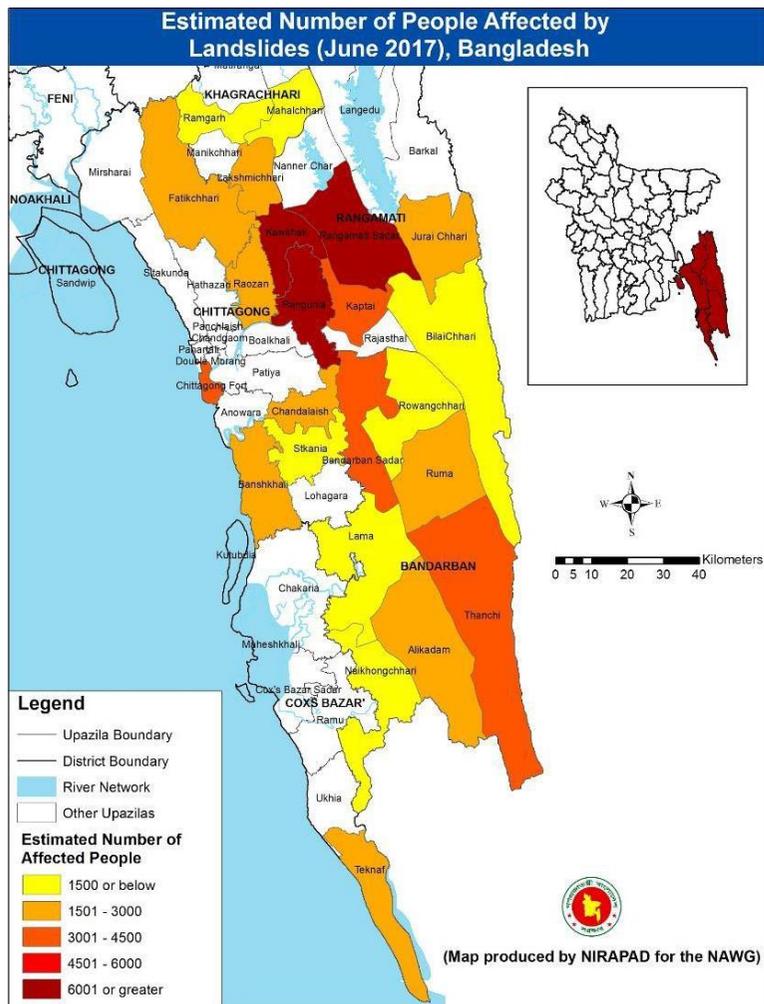Briefing Note – 21 June 2017

BANGLADESH
Landslides

Need for international assistance	Not required	Low	Moderate	Significant	Major
		X			

Expected impact	Very low	Low	Moderate	Significant	Major
			X		

Estimated Number of People Affected by Landslides (June 2017), Bangladesh

Legend
- Upazila Boundary
- District Boundary
- River Network
- Other Upazilas

Estimated Number of Affected People
- 1500 or below
- 1501 - 3000
- 3001 - 4500
- 4501 - 6000
- 6001 or greater

(Map produced by NIRAPAD for the NAWG)

Crisis overview

Landslides that began on 13 June in Chittagong division have resulted in 160 deaths and 187 injured. 6,000 structures have been destroyed, and other key infrastructure damaged. The area affected is in a region referred to as the Chittagong Hill Tracts (CHT). Reports indicate that approximately 80,000 people across five districts – Bandarban, Chittagong, Cox's Bazar, Khagrachari and, Rangamati – are affected. Among these people, 42,000 are considered severely impacted because their homes have been destroyed. Approximately 46% of the most affected are from Rangamati, 25% from Bandarban, 25% from Chittagong, 2% from Cox's Bazar and, 1% from Khagrachar. Chittagong, Rangamati and Bandurban are the hilly districts of Bangladesh.

There are reports that some communities in the affected areas have been cut off, without road access, electricity or food supplies. Prices for basic commodities like fuel and water soared in the market due to scarcity of goods. Power shortages have impacted communications, caused protection risks at night and hindered access to water. Access to health, nutrition assistance, and life-saving interventions are limited.

Key findings

Anticipated scope and scale	Although localised in impact, this is the worst landslide-related disaster since 2007. The most severely affected districts are Chittagong, Rangamati, and Bandurban.
Key priorities	Shelter and NFIs Food Health
Humanitarian constraints	• The Chittagong Hill Tracts are hard-to-reach areas of Bangladesh. They are geographically remote, served by poor roads and low levels of social services. • The number of languages spoken in the region make operations more complex. • Development partners wishing to access or work in this region must gain special permissions as it has been a conflict-affected area.

1

Limitations

The Start Alert was triggered 7 days after the first reports of the landslides. During this timeframe, disaster management stakeholders in Bangladesh have undertaken a number of rapid assessments, field trips. The Needs Assessment Working Group Report, issued on 19.06.17 has been heavily relied on for this Briefing Note.

Crisis impact

Overview from the Needs Assessment Working Group Report

People Affected	79,234 persons including 33,907 persons severely affected, among whom 4,028 are children.
Districts Affected	5 districts affected (Bandarban, Chittagong, Cox's Bazar, Khagrachari and, Rangamati). Bandarban, Chittagong and Rangamati are the worst affected. Bandarban and Rangamati are part of the Chittagong Hill Tracts.
Upazilas Affected	8 Upazila in Bandarban, 7 in Chittagong, 1 in Cox's Bazar, 3 in Khagrachari and, 5 in Rangamati.
Deaths	160 (6 people missing) Many of the houses were completely enveloped by the landslide at night and rescuers feared more deaths as people were sleeping when the disaster struck.
Injured	187
Main impact	• Destruction of houses (est. 6,000) and other buildings (38 schools damaged, 11 adolescent clubs severely damaged, 129 para-centers) • Medical services under pressure • Main road access blocked, compromised access to life-saving services, aid distribution and markets • Communication disrupted • Power lines damaged/electricity shortages • Shortages of key commodities including fuel, food, water • Price increases • Loss of food stocks • Livelihoods disrupted • Heightened protection risks

The sector reports below have been taken from the NAWG report. Findings have been condensed and rewritten in some cases.

Shelter

Over 6,000 shelters have been reported destroyed. Over 5,000 homes in the Kawkhali upazila of Rangamati, and nearly 1,000 houses were badly damaged in the Rangamati district..

800 families in Rangamati and 500 in Bandarban have taken refuge in emergency shelters, including schools and public buildings. 30 communal shelters have been opened in the hill areas and some 6,186 people have moved to the shelters from the affected areas.

Automobile fuel is not available.

Needs: Provision of emergency shelter support in the immediate phase and, later, transitional and resilient shelters. Support can include toolkits and construction materials and/or through cash grants based on detailed assessment results

Repair/rehabilitation of communal structures used for seeking safe refuge (e.g. schools, public buildings, health centres)

Food security

Immediate and short-term food assistance is needed. There has been widespread damage to household food stocks and non-availability of cooking facilities (UNICEF, Flash sitrep #2). Food supplies are also dwindling as access to markets is challenging. The price of essential commodities such as rice, lentils, oil, and vegetables is rising (UNRCO, Flash Appeal, #3). Typically, women and girls are most severely impacted, particularly pregnant and lactating mothers.

Crops (FAO, sitrep #1; HKI, SAPLING sitrep #2) and homesteads, vegetable and fruit gardens have been inundated, resulting economic loss and livelihood uncertainty (UNDP, sitrep #1).

The impact of the disaster on livestock is significant (FAO, sitrep #1) as well as on fish ponds in Lama Upazila (Bandarban district) (HKI, SAPLING sitrep #1).

Health

According to WHO/DGHS initial assessment, there was no major destruction of health facilities and most of the casualties were admitted to local health facilities 184 injured persons were admitted in local hospitals (DGHS, 18 June, 2017). Of those injured, approximately 89% (164 persons) were admitted to Rangamati district health facilities, followed by 4% from Bandarban district (7 persons), 4% from Chittagong City (7 persons), and 3% from Khagrachari district (6 persons).

With large numbers of girls and women displaced and more cut off from health infrastructure, the potential for reproductive health emergencies leading to morbidity and mortality is high. This is likely to include maternal and newborn mortality. Maternal and Child Welfare Centres are open and receiving patients, but reaching the centres would be very difficult for many women due to the road communication disruption. The health care needs, especially menstrual hygiene of adolescent girls is a big problem after such a crisis but almost always overlooked in response efforts.

No disease outbreaks were reported in the landslide-affected areas but there is high possibility of communicable disease outbreak due to the disruption of water and sanitation systems.

Needs

- Additional Inter-agency Emergency Health Kits and Cholera kits

- Other emergency drugs and medical supplies, including clean delivery kits and water purification tablets

- Midwifery-led sexual and reproductive health services in affected areas

- Distribution of clean delivery kits to visibly pregnant women

- Provision of drugs and supplies to affected facilities to be able to provide life-saving minimum initial service package for RH in crisis situations

- Cash grants for pregnant women to access emergency transport.

Nutrition

There is a risk that acute malnutrition rates will go up due to increase in communicable diseases and reduced access to food.

A significant number of Para Centers (129) in three CHT districts are affected so the domiciliary services including routine follow up visits, nutrition counselling particularly by Para Workers to pregnant and lactating women is being hampered.

Needs

- MNP (Micronutrient Powders) supplementation to children aged 6-23 months.

- Infant and young child feeding (IYCF) counselling to pregnant and lactating women (PLW)

- Private space for PLWs staying in crowded shelter and protection including space allocated for breastfeeding.

- Proper complementary feeding

- Monitoring to ensure no violation of the BMS (breast milk substitutes) code.

WASH

Deteriorated access to WASH facilities has resulted in drinking unsafe water, open defecation and unhygienic behaviour among the affected population. The risk of communicable disease outbreaks is heightened. Furthermore, the safety and security of women and adolescent girls could be compromised due to inadequate WASH facilities in the affected districts.

There are not many emergency shelters in the hill districts, and most shelters are at educational institutions and other public buildings, where there is less chance of having separate latrines for women.

Protection

- A number of children are likely to become orphaned due to the death of any parents or both parents in landslide areas

- Children are left unattended for longer hours in the shelters or in open space because caregivers are busy in restoring their livelihoods and shelter which heightens vulnerability.

- Children cannot attend schools. Boys and girls are not engaged in any productive activities which contributes to risk of school dropout, child labor, and trafficking.

- Pre-existing patterns of discrimination compounded by lack of household decision-making power, land rights, and access to education render indigenous women and girls in the CHT doubly vulnerable to gender-based violence as a result of the landslides (Kapaeeng Foundation, Human Rights Report, 2012).

Education

- 13 primary schools in Rangamati town, 21 schools in Jurachari, and 2 schools in Langudu upazila, are reported damaged by the District Primary Education Office

- Two facilities for non-formal education supported by Save the Children in Rangamati district are damaged.

- Approximately 40 schools reported that facilities and/or educational materials are also damaged

- Eight schools are being used as temporary shelter.

Needs

- Repair of schools (including WASH facilities)

- Replenish of learning materials of students and teachers

- Establish temporary learning spaces

Markets

- The three big kitchen markets (namely Rezar Bazar, Banarupa Bazar & Tabal Chari Bazar) in Rangamati are functional since the landslide.

- The prices of some goods has risen to two to three times higher than the normal price due to the failure of the supply chain. The price of rice, cooking oil, salt, onions, for example, has increased by 5 to 10 BDT on average. Local markets usually collect goods from Chittagong. Disruption in the communication system has contributed to the price hike. Some products are being carried by water, although not enough to fulfil the needs of people.

- The price of fuel has increased nearly threefold resulting in an increase of public and service transportation fare. Price of other NFIs has also increased.

- Market stocks are depleting and it is feared that supplies will not be available even with higher prices unless the communication system is restored (NAHAB and Media News)

Impact on critical infrastructure

Currently, the only accessible route to Chittagong and Rangamati is by water. Local buses operate from Lichu Bagan, Kaptai, to Chittagong city. Rangamati district is currently not accessible from the other hill districts and Chittagong city by road. Most connecting roads remain obstructed by land and debris.

Within Rangamati, Manikchari–Kutukchari–Naniarchar access road linking to Rangamati town and Khagrachari hill district is inaccessible. In Rangamati and Bandarban, roads are also damaged near Bangalhalia area in several locations. Roads between Bandarban and Ruma upazila are inaccessible.

Families who are staying in shelters have very limited access to electronic channels of information.

Electricity remains disrupted in many areas contributing to insecurity in the community after dark, particularly for women and girls. Anecdotal reports suggest that electricity was initially interrupted (due to flooding), resulting in lack of electronic communication for the first four days.

Vulnerable groups affected

According to Save the Children, around 24,000 Rohingyas are living in Naikhongchhari Upazila, in Bandarban District[2].

Humanitarian and operational constraints

- The Chittagong Hill Tracts is made up of steep, rugged, hilly terrain and dense forest. These are considered hard-to-reach areas. They are geographically remote, served by poor roads and low levels of social services.

- The number of languages spoken in the region makes operations more complex.

- Development partners wishing to access or work in this region must gain special permission as it has been a conflict-affected area.

Aggravating factors

Weather

Continued heavy rain after landslides occur hamper rescue efforts and lead to waterlogging (World Landslide Forum)

These landslides have taken place at the start of the Bangladesh monsoon. There will be continued heavy rain over the next three or four months. This will make the situation more difficult for those displaced and will have an impact on response and recovery. Those who did not lose their house during these landslides may be more vulnerable during this monsoon as result of damage to their housing and land changes.

Recent landslides

Landslide is becoming a regular hazard in the urbanised hilly areas in Chittagong, Bangladesh. In 2015 floods and landslides affected the same 3 districts (Chittagong, Cox's Bazaar, Bandarban) in late June and early July. In August of the same year these areas were impacted by cyclone Komen.

The magnitude of the impact of such disasters increases as a result of unplanned settlements near the mountains (IFRC, 11/03/2013)

Location of housing

Unplanned settlement near the mountains and "hill cutting" for house construction and other uses destabilises the hillsides and increases the risk to the people living in these areas. Limited livelihood options have caused communities to be dependent on forest resources such as cutting firewood and selling them in local markets, which decrease forest cover and increase environmental degradation, leading to disasters of a larger scale.

Other factors associated with slope instability include heavy rainfall, deforestation, seismic activity, and abnormal tidal flow. Poverty and landlessness force poor people to live in the risky areas (Natl Plan 2010-2015).

Underlying poverty

Low-value livelihood strategies combined with high dependency on single livelihood and low literacy rates results in high poverty (27%). All three districts of CHT fall in the 20 underperforming and deprived districts identified for UN Development Assistance in Bangladesh 2012-2016 (UNDAF). Among these 20 districts, the CHT districts are at the bottom for most of the indicators. Within the CHT the there are pockets of severe deprivation, which are masked by overall regional statistics. This lack of uniform access to services is seen as a risk to social cohesion.

Lack of adequate infrastructure and human resources for healthcare, education and other services are considered major bottlenecks affecting effective coverage of basic services in the area.

An assessment after landslides and flooding in 2012 found that the majority of the affected population in the east of the country (i.e. in the areas currently impacted) were below the poverty line and are forced to reside in vulnerable mountainous locations in the districts of Chittagong, Cox's Bazar, Bandarban, Sunamganj and Sylhet. (IFRC 11/03/2013).

Political stability and security

The region is still marked by 25 years of conflict surrounding issues of identity, local control of resources, land ownership and rights. The conflict formally ended with the signing of the CHT Accord between the government and the region's main militant group, Jana Sanghati Samiti (JSS) in 1997.

While the Accord has made a dramatic difference to stability in the region, there have been sporadic episodes of intercommunal violence (e.g. in 2013, 2014 and, again in 2015).

Key characteristics

Shelter

Houses in the affected areas are highly vulnerability to flash floods and landslides due to their construction. Most houses in Chittagong Division, particularly the 3 districts affected are Kutcha (i.e. Floors made of soil and roof and walls made of tin):

	Kutcha	Pucka	Semi-Pucka	Jupri
Bandarban District	83.69%	5.69%	6.86%	3.76%
Chittagong District	57.65%	19.50%	16.04%	6.51%
Rangamati District	83.34%	4.46%	7.60%	4.59%
Chittagong Division	70.20%	12.41%	13.59%	3.74%

The 2012 assessment reported that many of the houses were made of mud, which made them susceptible collapse.

Food security

Bandarban has been classified in Level 4 or Severe Chronic Food Insecurity (CFI). This is the result of the combination of the poor quality of food consumed, an insufficient quantity of food consumed and high levels of chronic undernutrition.

Rangamati has been classified in moderate CFI (Level 3) (Chronic IPC analysis, 2015). This is the poor quality of food consumed along with chronic undernutrition is more of a

concern than the quantity of food people is consuming. Nearly 70% children and over 60% women do not consume minimum diversified diets

Chittagong district has not been analysed as it is not considered as a vulnerable district.

Lack of electricity, roads, growth centres (government-approved marketplaces) contribute to the poor situation in relation to food security (Chronic IPC analysis, 2015).

The affected areas consist mainly of a mix of different farming and production systems. Jhum and plough cultivation co-exist with fruit-growing and horticulture. Other activities in the agricultural sector of the CHT include fishing, raising livestock and poultry, as well as forest-based activities (UNDP, sitrep #1).

Health

Due to its inaccessibility, health service delivery is challenging in CHT. There are limited health facilities in the landslide-affected areas.

Rangamati has some of the worst indicators related to sexual and reproductive health in the country. The proportion of births with a skilled birth attendant present is 16%, well below the national average of 42%. Only 11% of women deliver in health facilities and only 5% of pregnant women complete four antenatal care visits.

Nutrition

The number of underweight children in the affected areas is already high at 40% Bandarban, 34% in Rangamati and 33% in Chittagong of under 5s. WHO considered very high levels of underweight children to be when the figure is over 30%.

Education

Villages in the Rangamati have lower access to education compared to the rest of the country.

The literacy rate among adult women and men in the hill area is lower than that on the plainland. More than half of the children who start school drop out before completing primary school. Schools often lack sufficient classrooms and other basic facilities and materials. A large number of schools in Rangamati are without safe water supply or sanitary latrines. Schools offer lessons only in Bengali and not in local languages.

Response capacity

Communities lack appropriate preparedness measures to respond to such large scale disasters.

Government response

The Bangladesh Army cleared roads and conducted rescue operations with the help of local police, fire, and medical services. 18 emergency shelter centers have been opened to accommodate over 4,500 displaced people. Government food provision is not always enough for all the people in the shelter.

The government allocated BDT 2.647 million and 691 MT of rice to landslide-affected areas. Affected families also received corrugated iron sheets.

DGHS is distributing drugs from emergency medical buffer stock. Water purification tablets, ORS, 500 I/V saline and other drugs have been distributed. WHO is procuring emergency drugs and kits . UNFPA is distributing delivery kits for pregnant women.

DPHE (Department of Public Health Engineering) has commenced water and sanitation response in the affected areas.

Government response in rice and cash

District	Rice (MT)	General relief cash (BDT)
Chittagong	Adequate stock at district offices	5,00,000
Bandarban	150	5,00,000
Rangamati	100	10,00,000
Total	**250**	**20,00,000**

International response capacity

The NAWG, a working group of the Humanitarian Coordination Task Team, has undertaken a secondary data review for this disaster. The HCTT will then use this document as a basis of planning for a Joint Response Plan. There is no information regarding additional funds for this disaster, beyond the pre-positioned response mechanism, the Start Fund Bangladesh.

The Bangladesh Red Crescent Society mobilized its district branches to assist search and rescue, first-aid, and evacuation efforts.

UNICEF is responding. BRAC is responding in Rangamati.

Information gaps and needs

Information from the D-Form is not fully available at the present time. The Department of Disaster Management (DDM) anticipates information from the field by 22 June. Physical access to the affected area, as well as phone communication, remains limited (NAWG).

BRAC is undertaking a situational analysis of makeshift settlements in Rangamati.

A health team from WHO and DGHS/MoH officials visited (on 15 June 2017) affected areas in Chittagong Division including Chittagong Medical College Hospital, Rangamati Medical College Hospital and Rangunia Upazila Health Complex to conduct the initial assessment of the current situation.

Suggested assessments

- A rapid assessment to identify the number of orphan and separated children (CP Cluster reported in NAWG).

- Completion of an in-depth education needs assessment once access to the areas can be established.

- There needs to be further analysis of how to respond to those affected but not injured by this disaster.

Lessons learned

In 2012 floods and landslides affected a similar area. The most affected upazilas were Lama in Bandarban district; Chokoria in Cox's Bazar district; and Banshkhali in Chittagong district. After the initial search and rescue and response was over, damages to houses were a priority concern for the population in all 3 districts. According to government estimates, 75,894 (17%) houses in the affected area had experienced damage. Bandarban district has the highest percentage of affected houses, at 49.6%. In addition to losing houses, people lost assets.

Water supply and sanitation facilities were destroyed in 2012, in Bandarban 31% of public water points and private wells were damaged, hygiene practices worsened in all 3 affected districts and there was an increase in open defecation. (Shelter, WASH, Early Recovery Needs Assessment Report, August 2012)

Past experience in Bangladesh has shown that in general markets reopen quickly and price rises for essential food and commodities are not dramatic (IFRC, 11/03/2013).

In 2012, household incomes reduced significantly because of the flooding and landslides.

Major sources of drinking water remained unchanged, but access to drinking water from deep tube wells and shallow tube wells reduced, while use of drinking water from rainwater and other open sources increased. Use of sanitary latrine (both household and communal) reduced and open defecation increased.

Agriculture was severely impacted in all three affected districts, most severely in Bandarban district. Seedbeds and fishponds were affected. Monthly income levels were reported to fallen by between 12% and 57%, with Lama upazila the most impacted. Negative coping mechanisms reported by the affected families included reduced consumption of food and taking out loans.

Lessons learned over recent years from disaster-related events in Bangladesh is that whenever people are displaced women and girls face risks and feel insecure going to the toilet and bathing. The absence of secure places with lighting is a protection risk and the inability to safely maintain hygiene results in health concerns. In 2012, women reported concerns related to their safety to access water points, fuel collection sites, health facilities and communal bathing points. (Shelter, WASH, Early Recovery Needs Assessment Report, August 2012)

Key characteristics

Key indicators	Bandarban	Rangamati	Chittagong	National	Data Sources and Year
Total population	373,273	576,536	7,417,706	140,888,202	(Population and Housing Census BBS, 2011)
Total population (Projected up to 2015)	431651	635208	8059516	153,229,248	Calculated up to Dec 2015 using district growth rate.
Pop density	86/km²	97/km²	1,421/km²	1,203/km²	(Population and Housing Census, BBS, 2011)
Average household size	3.0	4.1	3.6	4.4	(Population and Housing Census, BBS, 2011)
Area	2653.54 km²	6116.11 km²	5,283 km²	-	(Population and Housing Census, BBS), 2011
Under 5 mortality/1,000	84.5	76.9	24.6	35	(SVRS,BBS, 2016)
Crude disability rate	12%	16.9%	5.1%	9%	(SVRS,BBS, 2016)
IPC chronic food security classification	Severe CFI (Level 4)	Moderate CFI (Level 3)	Not Analysed	-	IPC 1st & 2nd Round Chronic Analysis, 2015-2016, Bangladesh
Main Crops	Paddy, sesame, cotton, turmeric, ginger, vegetables, fruits	Paddy, sugarcane, maize, pulse, cotton, tobacco, potato, fruits	Paddy, sugarcane, maize, pulse, cotton, tobacco, potato	-	(District Portal, BBS)
% Poor (Upper poverty line)	40.07	20.31	11.51	32.3%	(WB, WFP, BBS: 2010)
% Extreme Poor (Lower poverty line)	21.6	6.75	4.04	18.4%	(WB, WFP, BBS: 2010)
% Male head of Household	93.2	94	81.5	94	(Population and Housing Census, BBS, 2011)
HH receive Remittance	1%	3%	14%	12%	FSNSP, 2014
Access to loan	30.99%	39.13%	41.2%	-	Agriculture Census, BBS 2008
Dependency (%)	75.4	65.67	59.3	-	(BBS,2012)
Poor Dwelling	91.04%	86.96%		67.3%	(Population and Housing Census, BBS),2011
Population with electricity	28.2%	41.8%	81.9%	59.6%	(Population and Housing Census, BBS, 2011)
HH using solid fuel for cooking	97.1%	95.4%	65.8%	83.5%	Population and Housing Census, BBS, 2011
HH using Tubewell (Distance Within 200 Meters)	49%	41%	58.9%	31.6%	Population and Housing Censu, BBS, 2011
HH using Non-sanitary/Kutcha latrine	37.4%	58.5%	20.1%	51.3%	Population and Housing Census,BBS, 2011

Key indicators	Bandarban	Rangamati	Chittagong	National	Data Sources and Year
HH use improved Drink Water Source	45.8%	60.7%	98.3%	-	(MICS,2012-13)
HH use improved sanitation which are not shared	17.7%	32.8%	50.3%		(MICS,2012-13)
Wasting prevalence (moderate and severe)	12.9%	19.1%	10.3%	-	(MICS,2012-13)
Underweight Children, 2012	40%	34%	33%	-	(Small Area Estimation (SAE) techniques. Primary inputs for the analysis included Population and Housing Census 2011, CMNS 2012 and HMSS 2012 funded by (IFAD).
Underweight children under 5 years	33.90%	47.40%	28.50%		(BBS, WFP: 2010)
Severely underweight children, 2012	11%	8%	8%	-	(Small Area Estimation (SAE) techniques. Primary inputs for the analysis included Population and Housing Census 2011, CMNS 2012 and HMSS 2012 funded by (IFAD).
Stunted children under 5 years, 2012	48%	43%	41%	-	Use (Small Area Estimation (SAE) techniques. Primary inputs for the analysis included Population and Housing Census 2011, CMNS 2012 and HMSS 2012 funded by (IFAD).
Severely stunted children under 5 years, 2012	29%	25%	23%	-	Small Area Estimation (SAE) techniques. Primary inputs for the analysis included Population and Housing Census 2011, CMNS 2012 and HMSS 2012 funded by (IFAD).
Growth centres (Number)	8	38	78	-	Population and Housing Census BBS, 2011)
Literacy rates (%)	31.7	49.7	61.1	53.34	(Population and Housing Census BBS, 2011)
Literacy rate among young women (15-24 years)	46	65.6	83.7	-	(MICS,2012-13)

Map

Proportion of People below "Lower Poverty Level 2010"
in Upazilas Affected by Lanslides (June 2017), Bangladesh

Legend

— Upazila Boundary

— District Boundary

River Network

Other Upazilas

Extreme poors % of total population

6% or less

7% - 14%

15% - 24%

25% - 34%

35% or greater

(Map produced by NIRAPAD for the NAWG)

Note: The Lower Poverty line corresponds to the extreme poor household whose total expenditures are equal to the food poverty line using the Cost of Basic Needs (CBN) method.
Ref: Report of the Income and Household Expenditure Survey (HIES) 2010, BBS, GoB