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# Development of Disaster Management Plan at Upazila Level

Upazila: Lohagara, District: Chittagong

Plan Developed by-  
Upazila Disaster Management Committee,  
Lohagara, Chittagong

Co-ordinate by:



GHARONI

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Supported by  
Comprehensive Disaster Management Program  
(CDMP-2)

Ministry of Disaster Management & Relief



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## PREFACE

Bangladesh is a disaster prone country. This country has been considered as a country highly vulnerable to disasters in the world. Recently the intensity and havoc of disasters has been gradually mounting. Large scale disasters like flood, cyclone, tidal surge, drought, tornado, river erosion are occurring more frequently in Bangladesh. That is why government of Bangladesh has undertaken appropriate actions underscoring the need to reduce risks. Government has been implementing a program titled "Comprehensive Disaster Management Program -2" realizing its importance. Under this program Disaster Management Committee have been organized from national to district, Upazila and union level.

Local level preparedness for risk reduction and response has been outlined in Standing orders on Disasters (SOD). Here more emphasis has been put on local level planning for Disasters (DM Plan) for risk reduction of disasters and adaptation process.

Necessary actions has been undertaken to develop "Disaster Management Plan" at district, Upazila and unions. To accomplish the task, an NGO named GHARONI has been assigned to support and assist Upazila Disaster Management Committee and Union Disaster Management Committee.

The NGO has undertaken necessary steps and perform different activities in preparing this DM Plan. This Plan has been developed in collaboration and coordination with UzDMCs and UDMCs.

I am convinced that due process has been followed in this respect and a more practical and pragmatic Plan has been comes up.

I take this opportunity to convey my thanks to all particularly members of UzDMCs and UDMCs and GHARONI officials and other relevant stalk holders for effective accomplishment of this critical task.

I hope that the disaster risks will be minimized and adaption activities would be more strengthen if this DM Plan is implemented.

Date:

  
Signed 08.09.14

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## Chapter - 1 : Local information

### **1.1 Background:**

Bangladesh is known as a country of natural disasters. Natural and geographical condition is the main reason for such disasters. Almost every year Flood, big storm, Flash Flood attack us and the result of this attack is very worst because we have overpopulation, less income and another reason is we are close to sea. And now there is no doubt that Climatic Change is happening and green house effect is for the most part responsible for such change. The major worst impact is global warming. As result sea level water will increase and it is most likely that a large swathe may be inundated and that may result huge displacement of population like climatic refugee. Besides, Bangladesh will have to face huge loss.

Costal districts of Bangladesh have been more risky to natural disasters than other districts. Among them Chittagong district is more prone to natural calamities due to its geographical location. This district has been worst affected by small or large disasters that have been occurred so far in Bangladesh. Huge damage was caused by 1991 cyclones and perished lives and resources to a greater extent.

In addition, a large area of Chittagong district is hilly and that is why flood affect this district with more severity. In addition, each year large areas are devoured or affected by river erosion. Moreover human induced hazards like indiscriminate cutting of trees, hill cutting, destroying forest have been contributed more the risks of disasters. Lohagara upazila of other 14 upazilas of Chittagong district has been more risky due to so many obvious reasons. This upazila is consists of 9 unions. Every yera this upazila are more or less affected by various natural disasters like flesh flood, river erosion, drought, and attack of elephants. Each year these disasters impact badly to lives and livelihood of community people.

No concredited afforts for risk reduction and mitigation of disasters have been so far in this upazila. That is why this Plan haas been developed for this upazila.

### **1.2. Objectives of DM Planning:**

- Prepare a strategic document for certain areas and time
- It will act as a Comprehensive Plan for relevant all sectors including local and national level Disaster Management Committees.
- This Plan will provide guidance in formulating and implementing plan for all partners relevant to Disaster Management.
- Create effective partnership sense and participation in Disaster Planning of local communities and make development of risk reduction system by using local resources.
- Exercise and use locally developed planning for Need Assessment, Rescue, relief and rapid rehabilitation.
- Create awareness on disaster risks and to develop pragmatic means at union, upazila and district level for disaster risk reduction.

### 1. 3 Introduction of Local area:

Lohagara Upazila is the southereast upazila of Bangladesh and it is the most southern upazila of Chittgaong district. It is situated in the crossways of Dhaka Chittagong and Cox,s bazar highway. Satkania upazial is in the north of this upazila, Bnadarban Sadar is in the east side and a part of Lama Upazila, Chakaria upazial is in the South and in the west it is Satkania upazila and a part of Banskhali upazila.

This upazila is 65 miles southeast of Chittagong City and 62 KM north of tourist town Coxsbazar.

Geographycally the Upazila is in the 21.54 North latitude and between 92.00 and 92.13 east Longitude. This Upazila is in both side of Dhaka chitagong cox'sbazar highway main road. This upazila has become a Thana on 1981 it became a upazila on 1983. There is saying that the soil is hard like iron that's why this area is called lohagara. These total areas of the upazila are 258.87 Sq.KM. Among them 15% areas are hilly. The upazila is consists of 9 unions, 40 maujas, 43 villages. Union are - Lohagara sadar, Adhunagor, Chunati, Barohatia, Putibila, Charamba, Podua, Amirabad and Kalauzan Union. The population density is 1081 per Sq.KM. Upozila has 3 main small rivers that originated from east Bandarban hill and crossed travesely. And main river are Dholu river, Tanka borti river and Hangar river.

According to Agricultural Departmets assesment soil of this area is entirely clay soil and sandy clay.

#### 1.3.1 geographical location of Upazila-

this upazila and Bandarban Sadar upazila is in the east side and a part of Lama upazila, Chakaria upazila is in the south side and Satkania and part of Banskhali upazila is in the west side. It is 65 KM south east of Chittgaong city and 62 KM north from tourist town Coxsbazar. Total number of unions under this upazila is 9.

#### 1.3.2 Area:

The Chittagong district was formally established in 1966. Its areas are 5282:98 Sq. KM. There are 14 Upazilas under Chittagong District and Logara is among them. The Area of lohagara are 258.87 Sq. KM. There are total of 40 maujas in 9 Union of lohagara. Union-based maujas name are given below:

Sl no.	Union Name	Union area's name
1.	Chunati	Chunati, Shatgor, Nariccha, Faranga, Chanda, Pantirisa
2.	Amirabad	Shukchori, Mollick choban, Amirabad, Hazar vigra.
3.	Borahatia	Amtoli, Borohatia, Chakfirani, Jongol borohatia.
4.	Kalaujan	East kalauzan, west kalauzan , North kalauzan
5.	Charombba	Bibirchila, Churomba, Noarbila, Rajaghat , Telibila
6.	Adhunagar	Horina, adhunagor, KulPagli, Rasiderghona, Mosdia
7.	Poduya	Andhar manik, Dholibila, Podua, Jongol podua
8.	Putibila	Putbila, Pohorchada, gorosthan, Soreya.
9.	Lohagara	Lohagara, South shukchori.

### 3.3 Population:

Total population of this Upazila is 372325. Among them 185065 are male, 187760 are female, 922115 are Children, 51267 are aged and 2353 are disabled. Total households are 73204 And total voter are 175369. Union based different levels peoples list are shown in below chart:

Sl no.	Union Name	Male	Female	Children (0-15)	Old (60+)	Disa ble	Total Populatio n	Family	Total Voter
1.	Chunati	18067	17020	12873	4867	208	35087	7890	16567
2.	Amirabad	38680	38880	14180	8523	160	77560	12870	38940
3.	Borohatia	20250	22050	9978	4439	227	42500	7269	25690
4.	Kalauzan	19625	20225	7934	4861	328	39850	9230	16322
5.	Churomba	16237	15482	8539	4892	152	31719	8629	16709
6.	Adunagor	12148	12239	6742	3987	257	24087	5614	9805
7.	Padua	22415	22715	12342	9264	570	45230	9750	28470
8.	Putibila	17825	17625	7980	4750	275	35450	5210	19320
9.	Lohagora	19818	15762	11534	5678	176	40842	6742	3546
Total		185065	187760	92115	51276	2353	372325	73204	175369

b) Information sources: All UP Chairman and UP Secretaries.

## 1.4 Structure and Structure related information

### 4.1 Infrastructure

#### ka) Embankment –

- There is no embankment in Barahatia union.
  - There is no embankment in Kalauzan union.
  - There are 2 embankment in Amirabad union- 1 is tankabati embankment that is situated in 3,4,5,6 & 7 no wards and it is 4 KM long and its height are 9 feet, another one is Dalu embankment. It is situated in ward no 2 and it is 3 KM long and it is 8 feet high.
- There is no embankment in Adunagar union.
  - There is no embankment in Padua union.
  - There is no embankment in Putibila union.
  - There is no embankment in Chunati union.
  - There is one embankment in Charamba union. There is a Rubber DAM in 5 no ward and it is 40 feet long.
- There is no embankment in Lohagara union.

## **Kha) Sluice gate**

- There is no sluicagate in Barahatia union.
- There is no sluicagate in Kalauzan union. But there is 1 rubber DAM in this union and it is close to ward no 3.
- There is no sluicagate in Amirabad union.
- There is 1 sluicagate in Adunagar union and it is situated on Hatia Canal in 6 no ward.
- There is no sluicagate in Padua union.
- There is no sluicagate in Putibila union.
- There is no sluicagate in Chunati union.
- There is no sluicagate in Charamba union.
- There is no sluicagate in Lohagara union.

## **Ga) Bridge:**

There are 78 Bridges in 9 Union of Lohagara Upazila.

- **Borahatia Union:** There are 8 bridges in this union. 2 bridges are on the Sonaichari canal in 1 no ward, 1 bridge is on the Hazipara road in the ward no 2. 2 bridges are on the Halimmukhtarpara road, 1 bridge is on the Paharpara road, 2 bridges are on the Danasikdarpara road of 6 no ward, 1 bridge is on the Gonermore Road and another 1 is on the laskarpara road.
- **Kalauzan Union:** There are 8 bridges in this union. Bridge is on the Tankabati canal at ward no 3, 1 brodge is on the Jabbar canal at ward no 4, 1 bridge is on the Karalia canal at wrad no 5, 1 bridge is on the Karalia canal at ward no 6, 1 bridge is on the Hoarir canal at ward no 8 and 1 bridge is on the Tankabati canal at ward no 9.
- **Amirabad Union:** There are 8 bridges in this union. 5 bridges on the Boalia canal at ward no 1, 1 bridge is on the Arakan road, 4 bridges are on the Boalia canal at ward no 2, 2 bridges are on the Nanada canal , 7 bridges are on the Katakhai canal at ward no 3, 4 bridges are on the Boalia canal, 2 bridges are on the Gonarpara road at ward no 4, 4 bridges are on the Gullachari canal at ward no5, 2 bridge are on the Gullahchari canal at 7 no ward, 1 bridge is on A.B. High School road at ward no 7, 2 bridges are on the Schoolchari road at ward no 7, 2 bridges are on Boalia canal at wrad no 8 and 2 bridges are on the Boalia canal at ward no 9.



- **Adhunagor Union:** There are 19 bridges in Adunagar union. 1 steel bridge is on the Dalu canal at ward no 1, 2 bridges are on the Hatia canal at ward no2, 3 bridges are on the Kolpakoli canal at wrad no 4, 5 bridges are on the Arakan road at wrad no5, 1 bridge is on the Hariyana road at ward no 7, 4 bridges are on the MaraDalu canal at wrad no 9, 1 is on the Juri canal and 2 bridges are on the Harian Farenga road, 4 bridges rae on the Mara dalu canal at wrad no 9, 1 bridge is on the Juri canal and 2 bridges are on the Harina Fareenga road.
- **Podua Union:** There are 9 bridges in Padua union. 1 bridge is on the Uttar padua Road at ward no 1, 1 bridge is on the Kalip[ara road at ward no 2, 4 bridges are on the Malipara, Sitbari, Mipara and Alipara road at wrad no 4, 1 bridge is on the Uttarpa road at ward no 5, 1 bridge is on the Hangar canal at ward no 7, 1 bridge is on the Hangar canal at ward no 8.
- **Putibila Union:**  
There are 7 bridges in Putibila union. 2 bridges are on the Sukchari canal at wrad no 1, 2 bridges are on Khansana canal at ward no 2, 1 bridge is on the Sukchari canal at ward no 4, 1 bridge is on the Shukchari canal at 6 no ward, 1 bridge is on the Saroi canal at 9 no ward.
- **Chunati Union:**  
There are 10 bridges in Chunati union. 2 bridges are in the wrad no 2, 1 bridge is in the ward no 3, 1 bridge is in the ward no 4, 1 bridge is in the ward no 5, 2 bridges are in the wrad no 7, and 1 bridge is in the wrad no 8 and 9.
- **Charombba Union:**  
There are 5 bridges in Charomba union. 1 bridge is in the wrad no 1, 1 bridge is in the ward no 2, 1 bridge is in the ward no 4, 1 bridge is in the ward no 5.
- **Lohagara Sadar Union:**  
There are 4 bridges in Lohagar sadar union. 1 bridge is on the Chambi canal at wrad no 3, 1 bridge is on the Battar canal at 4 and 5 no ward, 1 bridge is on the Hatiar canalat ward no 5, 1 bridge is on the Moulavir canal at 5 no ward.

## **Gha) Culverts:**

There are 339 culverts in 9 unions of Lohagara upazial. These Culverts helps discharging of water and maintain water flow of hilly streams, canals and tributaries of rivers. List of union based culverts are given below:

- There are total 53 culverts in Barahatia union. There are 5 culverts in 1 no ward, 4 culverts in 2 no ward, 4 culverts at 3 no ward, 8 culverts at 4 no ward, 6 culverts at 5 no ward, 9 culverts at 6 no ward, 5 culverts at 7 no ward, 7 culverts at 8 no ward, 5 culverts at 9 no ward.
- There are 73 culverts in Kalauzan union. There are 13 culverts in 1 no ward, 12 culverts in 2 no ward, 3 culverts in 3 no ward, 13 culverts in 4 no ward, 15 culverts in 5 no ward, 8 culverts in 6 no ward, 5 culverts in 7 no ward, 5 culverts in 8 no ward, 7 culverts in 9 no ward.
- There are 36 culverts in Amirabad union. There are 3 culverts in 1 no ward, 4 culverts in 2 no ward, 5 culverts in 3 no ward, 3 culverts in 4 no ward, 6 culverts in 5 no ward, 2 culverts in 6 no ward, 5 culverts in 7 no ward, 5 culverts in 8 no ward, 3 culverts in 9 no ward.
- There are 33 culverts in Adunagar union. There are 3 culverts in 1 no ward, 3 culverts in 2 no ward, 3 culverts in 3 no ward, 3 culverts in 4 no ward, 6 culverts in 5 no ward, 2 culverts in 6 no ward, 5 culverts in 7 no ward, 5 culverts in 8 no ward, 3 culverts in 9 no ward.
- There are 52 culverts in Padua union. There are 5 culverts in 1 no ward, 7 culverts in 2 no ward, 4 culverts in 3 no ward, 6 culverts in 4 no ward, 5 culverts in 5 no ward, 8 culverts in 6 no ward, 5 culverts in 7 no ward, 7 culverts in 8 no ward, 5 culverts in 9 no ward.
- There are 32 culverts in Putibila union. There are 4 culverts in 1 no ward, 3 culverts in 2 no ward, 4 culverts in 3 no ward, 3 culverts in 4 no ward, 5 culverts in 5 no ward, 4 culverts in 6 no ward, 3 culverts in 7 no ward, 4 culverts in 8 no ward, 3 culverts in 9 no ward.
- There are 47 culverts in Chunati union. There are 5 culverts in 1 no ward, 4 culverts in 2 no ward, 4 culverts in 3 no ward, 8 culverts in 4 no ward, 6 culverts in 5 no ward, 5 culverts in 6 no ward, 5 culverts in 7 no ward, 7 culverts in 8 no ward, 5 culverts in 9 no ward.
- There are 8 culverts in Charamba union. There are 2 culverts in 1 no ward, 2 culverts in 2 no ward, 1 culverts in 3 no ward, 1 culverts in 4 no ward, 1 culverts in 5 no ward, 1 culverts in 6 no ward.
- There are 4 culverts in Lohagara Sadar union. There are 1 culvert in 2 no ward, 1 culvert in Sipahipara of 3 no ward, 1 culvert in Sarkarpara of 4 no ward, 1 culverts in Moulanapara of 6 no ward.

## Uma) Road:

There are total 409.5 KM road in 9 unions of Lohagara upazila. Among them 109 KM are paved, 152.5 KM are Kacha and 148 KM HBB. List of union based total road is provided below:

1. **Borahatia union:** There are 10 KM paved road in this union which are situated in 1,2,3,4 and 6 no ward. There are 26 KM HBB road which are situated in 1,2,3,4,5,6,7,8 and 9 no wards , among them roads of 1,2,3,5 and 6 no wards are in risk. There are 25 KM Kacha road in 1,2,3,4,7 and 9 no wards and among them roads of 1,2,3,4,7 and 9 no wards are in risk.
2. **Kalauzan union:** There are 7 KM paved road in this union which are situated in 1,2,3,4 and 6 no wards. There are 12 KM HBB road which are situated in 1,2,3,4,5,6,7,8 and 9 no wards , among them roads of 1,2,3,7 and 8 no wards are in risk. There are 18 KM Kacha road in 1,2,3,4,5 and 6 no wards and among them almost all roads are in risk.
3. **Amirabad union:** There are 11 KM paved road in this union which are situated in 1,3,4,5,8 and 6 no wards. There are about 17 KM HBB road which are situated in 1,2,3,4,5,6,7,8 and 9 no wards , among them roads of 2,3,5,7 and 8 no wards are in bad shape. There are 28 KM Kacha road in 1,2,3,4,5,7,8 and 6 no wards and among them almost all roads are in risk.
4. **Adunagar union:** There are 14 KM paved road in this union which are situated in 1,2,4,6,7 and 8 no wards. There are about 21 KM HBB road which are situated in 1,2,3,4,5,6,7,8 and 9 no wards , among them roads of 1,2,3,5,7 and 9 no wards are in bad shape. There are 18.5 KM Kacha road in 1,2,3,4,5,7,8 and 6 no wards and among them almost all roads are in risk.
5. **Padua union:** There are 16 KM paved road in this union which are situated in 1,2,4,6, and 7 no wards. There are about 18.5 KM HBB road which are situated in 1,2,3,4,5,6,8 and 9 no wards , among them roads of 1,2,6 and 8 no wards are in bad shape. There are 13 KM Kacha road in 1,2,4,5,6 and 7 no wards and among them almost all roads are in risk.
6. **Putibila union:** There are 13 KM paved road in this union which are situated in 2,5,7,8 and 9 no wards. There are about 21.5 KM HBB road which are situated in 1,2,3,4,5,6,8 and 9 no wards , among them roads of 1,2,5,6 and 8 no wards are in bad shape. There are 22 KM Kacha road in 1,2,4,5,8 and 9 no wards and among them almost all roads are in risk.
7. **Chunati union:** There are 9 KM paved road in this union which are situated in 1, 2,4,7,8 and 9 no wards. There are about 11 KM HBB road which are situated in 1,2,3,4,5,6,8 and 9 no wards , among them roads of 1,4,5,8 and 9 no wards are in bad shape. There are 12 KM Kacha road in 1,2,4,5,6,7,8 and 9 no wards and among them almost all roads are in risk.

8. **Charamba union:** There are 10 KM paved road in this union which are situated in 1,2,3,4,7,8 and 9 no wards. There are about 11 KM HBB road which are situated in 1,2,3,4,5,6,7 and 8 no wards , among them roads of 1,4,5,7 and 8 no wards are in bad shape. There are 7 KM Kacha road in 1,2,4,5,6 and 9 no wards and among them almost all roads are in risk.
9. **Lohagara union:** There are 19 KM paved road in this union which are situated in 1,2,3,4,5,7,8 and 9 no wards. There are about 10 KM HBB road which are situated in 1,2,3,4,5,6,7 and 8 no wards , among them roads of 1,4,5,7 and 8 no wards are in bad shape. There are 9 KM Kacha road in 1,2,4,5,6 and 7 no wards and among them almost all roads are in risk.

### Ch) Irrigation facilities/system:

Use of tube wells for irrigation is not found much in this upazila. Deep tube wells, in most part, are used as sources of drinking water. Some are used in homesteads and very few are used for crop production. Total number of tubewells in this upazila are 68245, among them number of deep tube wells are 203, Shallow tube wells are 68245 and number of hand tube wells are 22. More detail information is provided below-

Sl no.	Source of irrigation	Quantity	quantity of Irrigation land	Amount of the land in the time of flood	Condition of after flood
1	Deep pump	203	20300 acre (approx)	13395 acre (approx) landed crops has been destroyed.	If Government give some help then After flood disaster can be controled.
2	Normal pump	68245	-	-	-
3	Hand pump	22	3400acre(approx)	-	-
4	Engine pump	-	-	-	-

**(Cha) Hat/Bazar:**

Sl. No	Name of Unions	Name of Hat & Bazars	Day of Hat & Bazar	Number of Shops at hat & bazars
<b>1.</b>	Borohatia	Mono Fakirhat	Weekly 2 days	300
		Sener hat	Weekly 2 days	245
		Borodighir bazar	Weekly 2 days	70
		Kumiraghona no.tun bazar	Everyday	76
<b>2.</b>	Kalauzan	Hindut hat	Weekly 2 days	96
		Banglabazzar	Weekly 2 days	150
		Kanuram Bazar	Weekly 2 days	300
<b>3.</b>	Amirabad	Master hat	Weekly 2 days	40
		Kalibari hat	Weekly 2 days	52
	Adhunagor	Adunagor khan hat	Weekly 2 days	450
		Hati mar pole hat	Weekly 2 days	66
<b>5.</b>	Podua	Podua tauyari hatPodua	Weekly 2 days	450
		East Dokan bazar	Weekly 2 days	55
<b>6.</b>	Putibila	Amchor hat	Weekly 2 days	230
		Gorosthan bazar	Weekly 2 days	70
<b>7.</b>	Chunoti	Chunoti deputy bazar	Weekly 2 days	100
		Chunoti munchef bazar	Weekly 2 days	87
		Chunoti bonpukur bazar	Weekly 2 days	53
		Shat gor moulovibazar	Weekly 2 days	80
<b>8.</b>	Chuombba	Charamba bazar	Weekly 2 days	64
		Charamba Dhulibila bazar	Weekly 2 days	76
		Charamba Maijbila bazar	Weekly 2 days	82
<b>9.</b>	Lohagora	Dorbesh hat	Weekly 2 days	186
		Botola hat	Weekly 2 days	100

## 1.4.2 Social assets:

### (Ka) House:

Sl.No.	Name of union	Number of Homes			Material that are used for making homes
		Kucha	Pucca	Semi-pucca	
1.	Chunoti	4339	780	2150	Bamboo ,brick sand cement and iron are are use for make a house.
2.	Amirabad	6304	893	2033	
3.	Borohatia	8516	1096	3258	
4.	Kalauzan	3616	562	1436	
5.	Churomba	5250	1726	2670	
6.	Adunagor	2378	1140	1692	
7.	Padua	5492	1098	1300	
8.	Putibila	5009	910	2710	
9.	Lohagora	3300	2200	1400	
<b>Total</b>		<b>40904</b>	<b>8205</b>	<b>17249</b>	

### Water

Sources of drinking water: Total tube wells are 68245, among them 66145 are in good condition, out of order are 2100, number of tube wells above flood level are about 60%,

Number of people use tube well water for drinking : 90%

Scarcity of water is seen during flood : yes

### Ga) Sanitation situation-

**No of Hygienic latrines:** 55320

Latines above flood level: 34380

How many people use hygienic latrines: about 70%

## (Gha) Educational Institutions/ Libraries:

There are total 122 educational institutions in 9 unions of Lohagora Upazila. Among them 73 are government Primary School, 3 are registered primary school, 3 are college, 19 are Madrasha, 23 are High school, 1 is Junior high school. Union based information is showcased in below table-

Educational Institution	Govt./non-govt./Resi	Name of the institution education	Position/Ward	No. of student	Teacher/Teacher
Collage	Non-Govt.	Mostafizur Rahman Degree College	Lohagora	1147	22
Collage	Non-Govt.	Baro Aulia Degree Collage	Lohagora	1194	23
Collage	Non-Govt.	Chunati Girls Collage	Chuno.ti	1028	18
High School	Non-Govt.	South Satkania Golam Bari high school	Amirabad	970	19
High School	Non-Govt.	Amirabad M. B. High school	Amirabad	658	8
High School	Non-Govt.	Amirabad Jono. Kollan High School	Amirabad	744	10
High School	Non-Govt.	Shuksori High School	Amirabad	687	10
High School	Non-Govt.	No.rth Amirabad High School	Amirabad	820	13
High School	Non-Govt.	Podua A C M High School	Padua	1132	17
High School	Non-Govt.	Mostafa Begum Girls High School	Lohagora	1070	16
High School	Non-Govt.	Hazu mostak Ahmed Chowdury High School	Lohagora	846	12
High School	Non-Govt.	S I Chowdhury High School	Padua	739	10
High School	Non-Govt.	M M Nurul Amin High School	Padua	590	8
High School	Non-Govt.	North Podua Junior High school	Padua	237	4
High School	Non-Govt.	Chunoti High School	Chunoti	921	13
High School	Non-Govt.	Rasider Ghona High School	Chunoti	670	9
High School	Non-Govt.	Churombba High School	Charamba	811	10
High School	Non-Govt.	Borohatia High School	Borohatia	793	12
High School	Non-Govt.	BG Senerhat High School	Borohatia	766	11
High School	Non-Govt.	Putibila High School	Putibila	690	10
High School	Non-Govt.	Adhunagor High School	Adhunagor	824	12
High School	Non-Govt.	Adhunagar Guljar Girls High School	Adhunagor	748	11
High School	Non-Govt.	Lohagora Shuksori Ujirvita High School	Lohagora	820	12
High School	Non-Govt.	Gorosthan High School	Lohagora	439	7
High School		Kalauzan D.yakub bojlul Rahman Sikdar High School	kalauzan	835	13
High School	Non-Govt.	Kalauzan Shuksori Goursundor High School	kalauzan	758	11
Primary	Government	Borohatia Government	Borohatia	551	6

Educational Institution	Govt./non-govt./Resi	Name of the institution education	Position/Ward	No. of student	Teacher/Teacher
School		Primary School			
Primary School	Government	Senerhat Government Primary School	Borohatia	678	6
Primary School	Government	Vobanipur Government Primary School	Borohatia	533	8
Primary School	Government	Amtoli Government Primary School	Borohatia	426	5
Primary School	Government	Middle Borohatia Government Primary School	Borohatia	766	8
Primary School	Government	Mallik shoyan Government Primary School	Borohatia	532	7
Primary School	Government	North Croatia Government Primary School	Borohatia	355	6
Primary School	Government	Hagar Bigha Government Primary School	Borohatia	278	5
Primary School	Government	মধ্যম Kalauzan Government Primary School	kalauzan	522	8
Primary School	Government	North Kalauzan Government Primary School	kalauzan	815	10
Primary School	Government	Kalauzan niz taluk Government Primary School	kalauzan	583	6
Primary School	Government	Kalauzan horin Government Primary School	kalauzan	400	5
Primary School	Government	East Kalauzan Government Primary School	kalauzan	345	4
Primary School	Government	west Kalauzan Government Primary School	kalauzan	595	9
Primary School	Government	Adharchor Government Primary School	kalauzan	322	5
Primary School	Government	Kalauzan khalasipara Government Primary School	kalauzan	420	7
Primary School	Government	Kalauzan Government Primary School	kalauzan	265	6
Primary School	Government	Amirabad Government Primary School	Amirabad	422	8
Primary School	Government	East Amirabad Government Primary School	Amirabad	337	6
Primary School	Government	Amirabad jonok kollyan Government Primary School	Amirabad	249	6
Primary School	Government	Shuksori Government Primary School	Amirabad	690	7
Primary School	Government	South Shuksori Government Primary School	Amirabad	284	6
Primary	Government	East Shuksori Government	Amirabad	160	4



Educational Institution	Govt./non-govt./Resi	Name of the institution education	Position/Ward	No. of student	Teacher/Teacher
School		Primary School			
Primary School	Government	Middle Amirabad Government Primary School	Amirabad	430	5
Primary School	Government	shuksori Moulovipara Government Primary School	Amirabad	378	6
Primary School	Government	No.rth Amirabad Government Primary School	Amirabad	322	5
Primary School	Government	Shuksori Rahmania Government Primary School	Amirabad	308	5
Primary School	Government	Amirabad Notun bazar Government Primary School	Amirabad	238	5
Primary School	Government	Adhunagor Government Primary School	Adhunagor	589	9
Primary School	Government	North Adhunagor Government Primary School	Adhunagor	349	4
Primary School	Government	Mosdia Government Primary School	Adhunagor	411	6
Primary School	Government	North Horin Government Primary School	Adhunagor	446	6
Primary School	Government	Adhunagor Damirpukur Government Primary School	Adhunagor	326	5
Primary School	Government	South Horin Government Primary School	Adhunagor	318	4
Primary School	Government	Rasids ghoran. Government Primary School	Adhunagor	650	7
Primary School	Government	South Adhunagor Government Primary School	Adhunagor	510	8
Primary School	Government	Podua Government Primary School	Padua	783	8
Primary School	Government	North Podua Government Primary School	Padua	514	7
Primary School	Government	Fariderkul Government Primary School	Padua	425	6
Primary School	Government	Tauyarikhil Government Primary School	Padua	331	5
Primary School	Government	Bagmua Government Primary School	Padua	496	6
Primary School	Government	Dhulibila Government Primary School	Padua	363	7
Primary School	Government	Adhar manik Government Primary School	Padua	289	4
Primary School	Government	Chanda Government Primary School	Padua	321	7
Primary	Government	Jongol Podua Government	Padua	354	6

Educational Institution	Govt./non-govt./Resi	Name of the institution education	Position/Ward	No. of student	Teacher/Teacher
School		Primary School			
Primary School	Government	Podua Nouyaghat Government Primary School	Padua	234	5
Primary School	Government	Podua ward has bari Government Primary School	Padua	294	5
Primary School	Government	Gorosthan Government Primary School	Putibila	563	7
Primary School	Government	Pubila Government Primary School	Putibala	395	6
Primary School	Government	East Putibila Government Primary School	Putibila	630	8
Primary School	Government	Chunoti hakimia Government Primary School	Chunoti	813	9
Primary School	Government	Chunoti Government Primary School	Chunoti	528	8
Primary School	Government	47 no. Nodim Government Primary School	Chunoti	350	6
Primary School	Government	Shat Ghor Government Primary School	Chunoti	511	7
Primary School	Government	Faranga Government Primary School	Chunoti	503	6
Primary School	Government	Narischa Government Primary School	Chunoti	358	6
Primary School	Government	Churombba Government Primary School	Charamba	531	7
Primary School	Government	Baiyarpara Government Primary School	Charamba	354	5
Primary School	Government	kumarpara Government Primary School	Charamba	514	6
Primary School	Government	Maizbila Government Primary School	Charamba	409	5
Primary School	Government	Churombba Moziderpara Government Primary School	Charamba	320	5
Primary School	Government	Bibibila Government Primary School	Charamba	319	5
Primary School	Government	Nouyerbil Government Primary School	Charamba	512	5
Primary School	Government	Rajghata Government Primary School	Charamba	309	5
Primary School	Government	Podmasithil Government Primary School	Charamba	253	5
Primary School	Government	Lohagora Government Primary School	Lohagora	480	6
Primary	Government	Uzirvita Government Primary	Lohagora	393	5

Educational Institution	Govt./non-govt./Resi	Name of the institution education	Position/Ward	No. of student	Teacher/Teacher
School		School			
Primary School	Government	Middle Lohagora Government Primary School	Lohagora	368	6
Primary School	Government	Shuksori Shahsaheb Government Primary School	Lohagora	321	6
Primary School	Government	Razzak chowdhury Government Primary School	Lohagora	325	6
Primary School	Registered	Begum jebunnesa Government Primary School	Lohagora	324	6
Primary School	Registered	Hazi samsul Islam Government Primary School	Lohagora	241	5
Primary School	Registered	Mostafa Begum Government Primary School	Lohagora	219	4
Madrasa	Non-Govt.	Chunoti Hakimia Kamil Madrasa	Chunoti	739	18
Madrasa	Non-Govt.	Adhunagor Islamia Fazil Madrasa	Adhunagor	925	20
Madrasa	Non-Govt.	Adhunagor akhtaria dakhil madrasa	Adhunagor	735	13
Madrasa	Non-Govt.	Borohatia Esakhatun ulum fazil madrasa	Borohatia	890	19
Madrasa	Non-Govt.	Borohatia Pukuria sikatul Ulum madrasa	Borohatia	788	13
Madrasa	Non-Govt.	Nouyar bila kaderia Adorsho dakhil Madrasa	Churombba	792	12
Madrasa	Non-Govt.	Fatema botul mohila alim Madrasa	Churombba	936	16
Madrasa	Non-Govt.	Churombba Jamul Ulum islamia dakhil Madrasa	Churombba	743	13
Madrasa	Non-Govt.	Lohagora islamia fazil Madrasa	Lohagora	906	17
Madrasa	Non-Govt.	Miskatumbi dakhil Madrasa	Lohagora	769	12
Madrasa	Non-Govt.	Amirabad Sufia kalim Madrasa	Amirabad	1040	21
Madrasa	Non-Govt.	Shuksori rahmania adorsho dakhil Madrasa	Amirabad	830	12
Madrasa	Non-Govt.	Southshuksori Abdul malek shah ambia hosainia hafezul ulum fazil Madrasa	Amirabad	963	18
Madrasa	Non-Govt.	Podua Inul darissonafazil Madrasa	Padua	1058	23
Madrasa	Non-Govt.	Putibila hamedia fazil Madrasa	Putibila	890	19
Madrasa	Non-Govt.	Kalauzan shah mosedia fazil Madrasa	kalauzan	788	17
Madrasa	Non-Govt.	Kalauzan darussonnah alim	kalauzan	868	16

Educational Institution	Govt./non-govt./Resi	Name of the institution education	Position/Ward	No. of student	Teacher/Teacher
		Madrasa			
Madrasa	Non-Govt.	Khadizatul kubra MohilaMadrasa	kalauzan	653	8
Madrasa	Non-Govt.	West Kalauzan khotibia Dakhil Madrasa	kalauzan	922	12

### (Umo) (Uma) Religious Institutions/ Religious gatherings (Eidgah) –

Sl. No.	Name of Union	Mosque/Temples/ Eidgah	Locations
1.	Borohatia	Mosque	There are 13 Mosques in Barahatia union. 2 mosques are in ward no 1, 3 mosques are in ward no 2, 2 mosques are in ward no 3, 1 mosques is in ward no 4, 1 mosques is in ward no 5, 2 mosques are in ward no 6 and 2 mosques are in ward no 9.
		Eid prayer field	There is 1 EIDGAH field in Barahatia union. It is located at Hadurpara in 4 no ward.
		Temple	There are 8 temples in Barahatia union. Among them 4 are in 1 no ward, 2 are in 4 no ward, 1 is in 5 no ward, 1 is in 6 no ward.
2	Kalauzan	Mosque	There are 47 mosques in Kalauzan union. There is 1 mosque in 1 no ward, 2 mosques are in 2 no ward, 3 mosques are in 3 no ward, 4 mosques are in 4 no ward, 5 mosques are in 5 no ward, 5 mosques are in 6 no ward, 6 mosques are in 7 no ward, 4 mosques are in 8 no ward, 4 mosques are in 9 no ward.
		Temple	There are 12 temples in Kalauzan union. 2 temples are in 1 no ward, 1 temple is in 2 no ward, 1 temple is in 3 no ward, 1 temple is in 4 no ward, 1 temple is in 5 no ward, 2 temples are in 6 no ward, 2 temples are in ward no 7 , 1 temple is in 8 no ward, 1 temples is in 9 no ward.
		Eidgah field	There is no government EDIDGAH field in this union.
3	Amirabad	Mosque	There are 44 mosques in Amirabad union. Among them 6 are in ward no 1, 7 mosques are in ward no 2, 9 mosques are in ward no 3, 4 mosques are in ward no 5, 7 mosques are in ward no 6, 5 mosques are in ward no 7, 4 mosques are in ward no 8, 3 mosques are in ward no 9.
		Temple	There are 7 temples in Amirabad union. 1 temple is in ward no 1, 1 temple is in ward no 2, 2 temples are in ward no 6, 1 temple is in ward no 8, 2 temples are in ward no 9.
		Eidgah field	There is no Government Eid prayer field in this union.
4	Adhunagor	Mosque	There are 32 mosques in Adunagar union. 2 mosques are in 1 no ward, 4 mosques are in 2 no ward, 3 mosques are in 3 no ward, 6 mosques are in 4 no ward, 2 mosques are in 5 no ward, 5 mosques are in 6 no ward, 2 mosques are in 7 no ward, 4

Sl. No.	Name of Union	Mosque/ Temples/ Eidgah	Locations
			mosques are in 8 no ward, 4 mosques are in 9 no ward.
		Temple	There are 5 temples in Adunagar union. 1 temple is in 1 no ward, 2 temples are in 5 no ward, 1 temple are in 7 no ward, 1 temple is in 8 no ward.
		Eidgah field	There is only one Eidgah field in this union.
5	Podua	Mosque	There are 32 mosques in Padua union. Among them 11 are in 1 no ward, 7 in 2 no ward, 8 mosques are in 3 no ward, 9 mosques are in 4 no ward, 12 mosques are in 5 no ward, 9 mosques are in 6 no ward, 11 mosques are in 7 no ward, 11 mosques are in 8 no ward, 10 mosques are in 9 no ward.
		Temple	There are 12 temples in Padua union. Among them 2 temples are in 1 no ward, 2 temples are in 2 no ward, 1 temple is in 4 no ward, 3 temples are in 5 no ward, 2 temples are in 7 no ward, 2 temples are in 9 no ward.
		Eidgah field	There is only 1 Eidgah field in this union.
6	Putibila	Mosque	There are 40 mosques in Putibila union. Among them 6 are in ward no 1, 5 are in ward no 2, 9 are in ward no 3, 4 are in wrad no 5, 7 are in ward no 6, 5 are in ward no 7, 4 are in ward no 8 and 3 are in ward no 9.
		Temple	There are 10 temples in this union. Among them 2 temples are in ward no1, 3 temples are in ward no 2 and 5 temples are in 6 no ward.
		Eid prayer field	Putibila union has no Government Eid prayer field.
7	Chunati	Mosque	There are 31 mosques in Chunati union. Among them 11 mosques are in 1 no ward, 7 mosques are in 2 no ward, 8 mosques are in ward no 3, 9 mosques are in ward no 4, 12 mosques are in ward no 5, 9 mosques are in ward no 6, 11 mosques are in ward no 7, 11 mosques are in ward no 8 and 10 mosques are in wrad no 9.
		Temple	There are 4 temples in Chunati union. Among them 2 1 temple is in wrad no 2, 1 temple is in ward no 4, 1 temple is in ward no 7, 1 temple is in ward no 9.
		Eid prayer field	There is no government Eidgah field in this union.
8	Churombba	Mosque	There are 28 mosques in Charamba union. Among them 7 mosques are in 1 no ward, 7 mosques are in ward no 2, 8 mosques are in ward no 3, 9 mosques are in ward no 4, 5 mosques are in ward no 5, 6 mosques are in ward no 6, 9 mosques are in ward no 7, 6 mosques are in ward no 8 and 7 mosques are in ward no 9.
		Temple	There are 5 temples in Charamba union. Among the 1 temple is in 1 no ward, 1 temple is in ward no 3, 1 temple is in ward no 6 and 2 temple are in ward no 8.
		Eidgh field	There is 1 Eidgah field in 2 no ward of Charamba union.
9	Lohagara	Mosque	There are 32 mosques in Lahagara Sadar union. Among them

Sl. No.	Name of Union	Mosque/ Temples/ Eidgah	Locations
			11 mosques are in 1 no ward, 7 are in 2 no ward, 8 are in 3 no ward, 9 are in 4 no ward, 12 are in 5 no ward, 9 are in 6 no ward, 11 are in 7 no ward, 11 are in 8 no ward and 10 are in 9 no ward.
		Temple	There are 6 temples in Lahagar Sadaqr union. Among them 2 temples are in 2 no ward , 2 temples are in 5 no ward, 1 temple is in 7 no ward, 1 temple is in 8 no ward.
		Eidgah field	There is 1 central Eidgah field in this union.

### (Ca) Heath care:

Lohagora Upozila 9 union has total health and Family Care center -9. From this Upozilas health complex-1 , union has health and Family Care center -8, Community clinic-6 And union has satelite clinic -4. Total doctor-12 people. Health Center has doctor with other staff. Satelite and community clinic has not enough doctor and staff. So people are not satisfied. During disaster there has to be enough staff and doctor.

Heath care center	Place	No. of Doctor	Total nurse	Standard
Health and Family Care center	Borohatia	1 people	No. nurse	Good
Health and Family Care center	Kalauzan	1 people	No. nurse	Not That Good
Health and Family Care center	Amirabad	1 people	No. nurse	Good
Health and Family Care center	Adhunagor	1 people	No. nurse	Good
Health and Family Care center	Podua	1people	No. nurse	Good
Health and Family Care center	Putibila	1 people	No. nurse	Good
Health and Family Care center	Chunoti	1 people	No. nurse	Good
Health and Family Care center	Churombba	1people	No. nurse	Good
Health and Family Care center	Lohagora	1people	No. nurse	Good

During disaster health center has to maintain a good condition of their service. There is not enough doctor, Nurse and medicine. So that during disaster old man, pregnant woman fall into danger. It is important that There is enough doctor and staff during disaster.

**(Cha) Bank /Post office:** Union's Bank/post office list:

**Bank list:**

Sl no..	Union	Bank Name
1	Borohatia	-
2	Kalauzan	1) Brac bank and 2)Grameen bank ltd
3	Amirabad	1) Pubali Bank ltd 2) Zamuna. Bank ltd 3) Social Islami Bank ltd 4) Agrani Bank ltd 5) Rupali Bank ltd 6) One bank ltd 7) City bank ltd 8) Trust bank ltd and 9) Southeast Bank ltd
4	Adhunagor	-
5	Podua	1) Grameen Bank ltd 2) Pubali Bank ltd 3) Janata Bank ltd 4) Al Arafah Islami bank ltd
6	Putibila	1) Grameen Bank ltd
7	Chunoti	-
8	Churombba	-
9	Lohagora	Bangladesh Krishi Bank, Grameen Bank ltd and Sonali Bank ltd

**Post office List:**

sl.no.	Union	Post office name
1	Borohatia	Vobanipur Post Office
2	Kalauzan	Hindur hat post office and kanuram bazar Post Office
3	Amirabad	Shuksori Post office, Master hat Post Office and Joynab Fakir Academy Post Office
4	Adhunagor	Adhunagor Post Office
5	Podua	Podua Post Office
6	Putibila	Amdur hat Post Office
7	Chuno.ti	Chuno.ti Post Office
8	Churombba	Churombba Post Office
9	Lohagora	Lohagora Post Office

## (Ja) Club and social center:

Union's Club and cultural centers, including list of developmental and social services in help:

Sl no.	Union name	Club and social center's name	Help in social welfare
1	Borohatia	North Borohatia eleven star club	They help some cultural programme and social activity.
		BGS Friends club	
		Maiz para oiko porishod	
		Borohatia Adorsho youngzone reson shongho	
		Youngzone Reson society	
		Bongobondhu sriti shongho	
2	Kalauzan	North Kalauzan five star Shongho	
		East Kalauzan and zoyan keiya Shongho	
3	Amirabad	Raselsriti shongho	
		Chitatul mustaki Shongho	
		Islami dishari Shongho	
		Amirabad shuksori nobin Shongho	
4	Adhunagor	Adhunagor cultural Shongho	
5	Podua	Social care center	
		Teyarikhil adorsho somaj sheba Shongho	
		Beparipara prosomon Shongho	
		Panzeree islami oiko porishod	
		Basudeb akota Shongho	
6	Putibila	Fulkori asol Shongho	
7	Chunoti	Chunoti kriya Shongho	
		Rasel sriti Shongho	
8	Charamba	Churombba Somaj kolyan Shongho	
9	Lohagora	Lohagora Shikha samajik unnoyon Shongho	
		Surjo torun Shongho	



### 3.3 Development Plan of NGOs:

Sl. No.	Name of NGO	Activities	No of beneficiaries	Duration of project
1	PPS	Awerness& Micro-Credit	325 people	Long term/running
2	WEB	Health & Micro-Credit	265 people	Long term/running
3	GRAMEEN POWER	Solar current & Micro-Credit	270 people	Long term/running
4	MA FOUNDATION	Micro-Credit	195 people	Long term/running
5	ODEB	Healt ,Awerness & Micro-Credit	315 people	Long term/running
6	BLAST	Legal assistance, Awerness & small loan	417 people	5 year
7	CMES	Micro-Credit	185 people	Long term/running
8	CODEK	Education, Legal assistance ,Awerness and small loan	490 people	Long term/running
9	ASA	Education,small loan, Awerness	410 people	Long term/running
10	BRAC	Woman developmentEducation, Awerness,risk deduction,health and small loan project	870 people	Long term/running
11	MOMOTA	health,Awerness,small loan	385 people	Long term/running
12	Polli PRogoti	Awerness, Small loan	270 people	Long term/running
13	PCA	Awerness, small loan	310 people	Long term/running
14	GRAMEEN BANK	Micro-Credit	620 people	Long term/running
15	MSS	Micro-Credit	185 people	Long term/running
16	Buro Bangladesh	Education, Legal assistance ,Awerness and small loan	490 people	Long term/running
17	World vision	Education,small loan, Awerness	320 people	Long term/running
18	Uddipon	Woman development, Education, Awerness Risk Rededuction Health and small loan project	438people	Long term/running
19	Karitas	Health, Awerness, small loan	455 people	Long term/running

**(Umo) Play Ground:**

<b>Sl no.</b>	<b>Union name</b>	<b>Field area</b>	<b>What is helpful in disaster</b>
1	Borohatia	Mogdighirpar play field, Pachkunia play field, Borohatia high school play field and senerhat high school field.	Domestic animal and people can use as shelter related work
2	Kalauzan	Kalauzan ghoscandra play field, Banglabazar play field and yakub bojlul rahman high school play field.	do
3	Amirabad	Bar aulia degree field and golam bari high school field	do
4	Adhunagor	Adhunagor high school field and Rasider ghona high school field.	do
5	Podua	Podua ASM high school field , Podua model Government Primary school field, ali shikder para Government Primary school field and adhar manik Government Primary school field	do
6	Putibila	Gorosthan azu shah high school field, Putibila high school fieldand hamedia fazil madrasa field	do
7	Chunati	Chunati Government School field	do
8	Charamba	Charamba Government Primary school field, kumar para Government Primary school field.	do
9	Lohagara	Lohagara Government Primary school field	do

## (Ta) Graveyards:

There are 329 graveyards in 9 unions of Lohagara upazila. Union based informations are given below:

- 1. Barahatia Union:** There are 22 graveyads in Barahatia union. There are 5 graveyards in 1 no ward, 3 graveyards in 4 no ward. 4 graveyards in 6 no ward, 5 graveyards in 8 no ward and 5 graveyards in 9 no ward.
- 2. Kalauzan Union:** There are 55 graveyads in this union. There are 5 graveyards in 1 no ward, 4 graveyards in 2 no ward. 5 graveyards in 3 no ward, 6 graveyards in 4 no ward, 8 graveyards in 5 no ward, 7 graveyards in 6 no ward, 10 graveyards in 7 no ward, 9 graveyard in 8 no ward and 7 graveyards in 9 no ward.
- 3. Amirabad Union:** There are 60 graveyads in this union. There are 8 graveyards in 1 no ward, 9 graveyards in 2 no ward. 7 graveyards in 3 no ward, 8 graveyards in 4 no ward, 8 graveyards in 5 no ward, 7 graveyards in 6 no ward, 7 graveyards in 7 no ward, 9 graveyard in 8 no ward and 7 graveyards in 9 no ward.
- 4. Adunagar Union:** There are 52 graveyads in this union. There are 5 graveyards in 1 no ward, 4 graveyards in 2 no ward. 5 graveyards in 3 no ward, 6 graveyards in 4 no ward, 8 graveyards in 5 no ward, 7 graveyards in 6 no ward, 10 graveyards in 7 no ward, 9 graveyard in 8 no ward and 7 graveyards in 9 no ward.
- 5. Padua Union:** There are 48 graveyads in this union. There are 5 graveyards in 1 no ward, 4 graveyards in 2 no ward. 5 graveyards in 3 no ward, 6 graveyards in 4 no ward, 7 graveyards in 5 no ward, 7 graveyards in 6 no ward, 8 graveyards in 7 no ward, 8 graveyard in 8 no ward and 4 graveyards in 9 no ward.
- 6. Putibila Union:** There are 60 graveyads in this union. There are 8 graveyards in 1 no ward, 9 graveyards in 2 no ward. 5 graveyards in 3 no ward, 5 graveyards in 4 no ward, 6 graveyards in 5 no ward, 7 graveyards in 6 no ward, 7 graveyards in 7 no ward, 9 graveyard in 8 no ward and 5 graveyards in 9 no ward.
- 7. Chunati Union:** There are 41 graveyads in this union. There are 5 graveyards in 1 no ward, 4 graveyards in 2 no ward. 5 graveyards in 3 no ward, 6 graveyards in 4 no ward, 8 graveyards in 5 no ward, 7 graveyards in 6 no ward, 6 graveyards in 7 no ward, 5 graveyard in 8 no ward and 4 graveyards in 9 no ward.
- 8. Charamba Union:** There are 31 graveyads in this union. There are 5 graveyards in 1 no ward, 4 graveyards in 2 no ward. 4 graveyards in 3 no ward, 6 graveyards in 4 no ward, 4 graveyards in 5 no ward, 6 graveyards in 6 no ward, 5 graveyards in 7 no ward, 4 graveyard in 8 no ward and 5 graveyards in 9 no ward.
- 9. Lohagora Sadar Union:** There are 41 graveyads in this union. There are 4 graveyards in 1 no ward, 3 graveyards in 2 no ward. 5 graveyards in 3 no ward, 4 graveyards in 4 no ward, 6 graveyards in 5 no ward, 4 graveyards in 6 no ward, 5 graveyards in 7 no ward, 4 graveyard in 8 no ward and 5 graveyards in 9 no ward.

## Tha) Crematories:

There are 25 crematories in 9 unions of Lohagara upazila. And there are some small crematories besides homsteads and temples. List of Unions based Crematories are appended below:

1. **Barahatia Union:** There are 3 crematories in this union. There is 1 crematories in 5 no ward, 2 crematories in 8 no ward.
2. **Kalauzan Union:** There are 5 crematories in this union. There is 1 crematories in 1 no ward, 1 crematories in 3 no ward, 2 crematories in 5 no ward, 1 crematories in 8 no ward.
3. **Amirabad Union:** There are 5 crematories in this union. There is 1 crematories in 1 no ward, 1 crematories in 3 no ward, 2 crematories in 5 no ward, 1 crematories in 8 no ward.
4. **Adunagar Union:** There are 2 crematories in this union. There is 1 crematories in 3 no ward, 1 crematories in 5 no ward,
5. **Podua Union:** There are 5 crematories in this union. There is 1 crematories in 1 no ward, 2 crematories in 3 no ward, 1 crematories in 6 no ward, 1 crematories in 8 no ward.
6. **Putibila Union:** There are 4 crematories in this union. There is 1 crematories in 3 no ward, 1 crematories in 5 no ward, 1 crematories in 7 no ward, 1 crematories in 9 no ward.
7. **Chunati Union:** There are 2 crematories in this union. There is 1 crematories in 2 no ward, 1 crematories in 6 no ward.
8. **Charamba Union:** There are 3 crematories in this union. There is 1 crematories in 1 no ward, 1 crematories in 5 no ward, 1 crematories in 7 no ward.
9. **Lohagora Sadar Union:** There are 2 crematories in this union. There is 1 crematories in 4 no ward, 1 crematories in 8 no ward.

### **(Tha) Communication & means of transport:**

There is good communication from upazila to district and vice versa. There is a highway called Dhaka-Chittgaong – Coxsbazar highway that crossed this upazila. The road is most suitable for Public transport. This road is connected with Huge Public & private Bus, Private vehicles, CNG, Auto Rickshaw & Truck ply in this road in huge number. There are about 970 Rickshaw, 414 CNG, 298 Van, 1346 Bicycles and 138 Microbus.

### **(Da) Forest and forestation:**

Total forest areas of Chittgaong are 37930 acres. There are about 8344 acres forest area in 8 unions of this upazila. Now forest areas of this upazila are on the verge of extinction due to human induced factors and natural calamities. Name of the trees that can be found in these forests are: Goran, Akashmoni, Segun, Chambal, Rendy koroi, Epilepil, Gorjon, Nim, Jam, Khathal, Mango, Lemon bamboo, Rubber etc.

### **1.4.3 Climate and weather :**

**(a)** Analysing the trend of rain it is found that average rainfall in Lohagara upazila are almost same. Annual average rainfall of Last 1990, 1995, 2000, 2005 and 2010 are 4, 8, 7, 8.5 and 8.5 mm respectively. But more research is needed to ascertain whether this trend indicates Climatic Change. The usual rainy monsoon time is getting delayed due to abrupt change of rainfall pattern. So agricultural patterns are changing and production cost is getting more and more high but on the other hand production of crops is getting low. Crops and cultivation is being badly affected and impacted worstly to lives and livelihoods of people.

**(Kha) Temperature:** In recent years heat wave has been found due to indiscriminate cutting of trees and geographical locations. Now the highest temperature recorded in this upazila is 41.5 degree Celsius and lowest 19.5 degree Celsius. During raining monsoon the average temperature remains 25.0 degree Celsius. In most cases, the temperature remains normal but it is known from local people that the temperature is gradually rising day by day. Especially the temperature has risen during last 5 years that normal life of people has been turning harder. The main reason of heat wave is rise of humidity in atmosphere. Cultivation of crops are hampering due to warming. The affect will be more if the present trend continues. According to Public Health Engineering (PHE) survey is conducted two times in each year to gauge water level and the finding is that water level comes down during the month of April and May that results decrease of safe drinking water. This will be a great barrier for future development.

**(Ga) Underground layer-** According to information of Public Health Engineering (DPHE), a survey is conducted on each year to assess the underground water layer. It is found that it was 280-285 feet in 2003 for deep tube wells, 290-300 feet in 2013, it was 580-590 feet for deep tube wells. Underground water level gets down more in the month of May. According to community people – water has become scarce day by day due to lowering of water level. It is a great challenge / barrier for sustainable development.

#### 1.4.4 Others :

##### (A) Land and its use:

There are total 39545 acres of land in 9 upazilas of Lohagara upazila. Among them one crop land are 25375 acres. Two crop lands are 11220 acres and three crop lands are 2950 acres. Union based-crop land information is given below:

- Total areas of crop land in Barahatia union are about 4000 acres. Among them one crop land are 2500 acres, two crop land are 1000 acres, three crop land are 500 acres.
- Total areas of crop land in Kalauzan union are about 5700 acres. Among them one crop land are 3200 acres, two crop land are 1000 acres, three crop land are 1500 acres.
- Total areas of crop land in Amirabad union are about 7000 acres. Among them one crop land are 5000 acres, two crop land are 2000 acres.
- Total areas of crop land in Adunagar union are about 43700 acres. Among them one crop land are 2100 acres, two crop land are 1000 acres, three crop land are 1500 acres.
- Total areas of crop land in Padua union are about 4500 acres. Among them one crop land are 3000 acres, two crop land are 1500 acres.
- Total areas of crop land in Putibila union are about 4725 acres. Among them one crop land are 3725 acres, two crop land are 100 acres.
- Total areas of crop land in Chunati union are about 4050 acres. Among them one crop land are 2750 acres, two crop land are 1300 acres.
- Total areas of crop land in Charamba union are about 3500 acres. Among them one crop land are 2500 acres, two crop land are 1000 acres.
- Total areas of crop land in Lohagara Sadar union are about 5200 acres. Among them one crop land are 3100 acres, two crop land are 2100 acres.

## **(Kha) Agriculture & Food:**

The principal economic crops of this upazila are rice and fish. In addition, potatoes, pulses, sugarcanes, maize's, water melons, guava, pineapples, Bangi, papaya, jam, jackfruits are considered as economic crops in this areas. It may be mentioned here that huge vegetables are produced in plain land. Cauliflower, Cabbage, Kakrol, Barbati, Sweet gourd, bringle, Panni kumra, ladies finger, Mullah, Chili, carrot, tomatoes, Cucumber, Puishak, Lalshak and kachushak etc are abundantly produced in this Upazila. Total amount of crop production in this upazila are 41460 M. ton. Principal foods of this Upazila are rice, fish, pulse; bread and main food habit are 1 time in the early, 1 time in the noon, and 1 time in the night. Union wise crop production are appended below-

- Total annual production of fish, potato, guava, pine apple, papaya, and mango and other vegetables and fruits in Barahatia union are almost 112000 Metric ton.
- Total annual production of fish, potato, guava, pine apple, papaya, mango and other vegetables and fruits in Kalauzan union are almost 20600 Metric ton.
- Total annual production of fish, potato, guava, pine apple, papaya, mango and other vegetables and fruits in Amirabad union are almost 25200 Metric ton.
- Total annual production of fish, potato, guava, pine apple, papaya, mango and other vegetables and fruits in Adunagar union are almost 1490 Metric ton.
- Total annual production of fish, potato, guava, pine apple, papaya, mango and other vegetables and fruits in Padua union are almost 1760 Metric ton.
- Total annual production of fish, potato, guava, pine apple, papaya, mango and other vegetables and fruits in Putibila union are almost 1800 Metric ton.
- Total annual production of fish, potato, guava, pine apple, papaya, mango and other vegetables and fruits in Chunati union are almost 1200 Metric ton.
- Total annual production of fish, potato, guava, pine apple, papaya, mango and other vegetables and fruits in Charamba union are almost 1870 Metric ton.
- Total annual production of fish, potato, guava, pine apple, papaya, mango and other vegetables and fruits in Lohagara union are almost 1540 Metric ton.

### **Kha. 3 Information of damages-**

Detail information of Disaster affected land in 9 unions of lohagara upazila are appended below-

- Total crop land in Barahatia union is 4000 acres. Among them about 1120 acre crop land are affeted or damadged each year due to Flood, strom, drought, River Erosion and **other hazards.**
- Total crop land in Kalauzan union is 5700 acres. Among them about 1650 acres crop land are affeted or damadged each year due to Flood, strom, drought, River Erosion and **other hazards.**
- Total crop land in Amirabad union is 7000 acres. Among them about 2350 acres crop land are affeted or damadged each year due to Flood, strom, drought, River Erosion and **other hazards.**
- Total crop land in Adunagar union is 4370 acres. Among them about 1350 acres crop land are affeted or damadged each year due to Flood, strom, drought, River Erosion and **other hazards.**
- Total crop land in Padua union is 4500 acres. Among them about 1790 acres crop land are affeted or damadged each year due to Flood, strom, drought, River Erosion and **other hazards.**
- Total crop land in Putibila union is 4725 acres. Among them about 1330 acres crop land are affeted or damadged each year due to Flood, strom, drought, River Erosion and **other hazards.**
- Total crop land in Chunati union is 4050 acres. Among them about 1120 acres crop land are affeted or damadged each year due to Flood, strom, drought, River Erosion and **other hazards.**
- Total crop land in Charamba union is 3500 acres. Among them about 1430 acres crop land are affeted or damadged each year due to Flood, strom, drought, River Erosion and **other hazards.**
- Total crop land in Lahagar Sadar union is 3000 acres. Among them about 1285 acres crop land are affeted or damadged each year due to Flood, strom, drought, River erosion and **other hazards.**



**(Ga) River:** There are three rivers named Tankabati, Hangar and Dalu have trasversely flown over lohagara upazila.

### **(Gha) Pond:**

There are total 1273 ponds in 9 unions of Lahagara upazila. And there is some small pond in homesteads. Usually peoples cultivate fish in those ponds. People do take bath and wash their cloths in those ponds.

- There are total 127 ponds in Barahatia Union. Among them 20 ponds are in 1 no ward, 15 ponds are in 2 no ward, 10 ponds are in 3 no ward, 8 ponds are in 4 no ward, 15 ponds are in 5 no ward, 12 ponds are in 6 no ward, 22 ponds are in 7 no ward, 10 ponds are in 8 no ward & 15 ponds are in 9 no ward.
- There are total 114 ponds in Kalauzan Union. Among them 16 ponds are in 1 no ward, 14 ponds are in 2 no ward, 9 ponds are in 3 no ward, 11 ponds are in 4 no ward, 14 ponds are in 5 no ward, 13 ponds are in 6 no ward, 10 ponds are in 7 no ward, 15 ponds are in 8 no ward & 12 ponds are in 9 no ward.
- There are total 133 ponds in Amirabad Union. Among them 13 ponds are in 1 no ward, 17 ponds are in 2 no ward, 15 ponds are in 3 no ward, 13 ponds are in 4 no ward, 17 ponds are in 5 no ward, 15 ponds are in 6 no ward, 16 ponds are in 7 no ward, 15 ponds are in 8 no ward & 12 ponds are in 9 no ward.
- There are total 220 ponds in Adhunagar Union. Among them 17 ponds are in 1 no ward, 17 ponds are in 2 no ward, 19 ponds are in 3 no ward, 23 ponds are in 4 no ward, 27 ponds are in 5 no ward, 25 ponds are in 6 no ward, 19 ponds are in 7 no ward, 25 ponds are in 8 no ward & 22 ponds are in 9 no ward.
- There are total 212 ponds in Padua Union. Among them 25 ponds are in 1 no ward, 19 ponds are in 2 no ward, 22 ponds are in 3 no ward, 23 ponds are in 4 no ward, 27 ponds are in 5 no ward, 25 ponds are in 6 no ward, 24 ponds are in 7 no ward, 25 ponds are in 8 no ward & 22 ponds are in 9 no ward.
- There are total 230 ponds in Putibila Union. Among them 25 ponds are in 1 no ward, 22 ponds are in 2 no ward, 27 ponds are in 3 no ward, 25 ponds are in 4 no ward, 27 ponds are in 5 no ward, 25 ponds are in 6 no ward, 24 ponds are in 7 no ward, 25 ponds are in 8 no ward & 22 ponds are in 9 no ward.
- There are total 122 ponds in Chunati Union. Among them 13 ponds are in 1 no ward, 17 ponds are in 2 no ward, 15 ponds are in 3 no ward, 13 ponds are in 4 no ward, 17 ponds are in 5 no ward, 16 ponds are in 6 no ward, 16 ponds are in 7 no ward, 15 ponds are in 8 no ward & 12 ponds are in 9 no ward.
- There are total 275 ponds in Charamba Union. Among them 22 ponds are in 1 no ward, 32 ponds are in 2 no ward, 33 ponds are in 3 no ward, 33 ponds are in 4 no ward, 31 ponds are in 5 no ward, 35 ponds are in 6 no ward, 30 ponds are in 7 no ward, 25 ponds are in 8 no ward & 32 ponds are in 9 no ward.
- There are total 320 ponds in Lohagara Sadar Union. Among them 32 ponds are in 1 no ward, 32 ponds are in 2 no ward, 33 ponds are in 3 no ward, 33 ponds are in 4 no ward, 41 ponds are in 5 no ward, 35 ponds are in 6 no ward, 40 ponds are in 7 no ward, 35 ponds are in 8 no ward & 32 ponds are in 9 no ward.

## **(Umo) Canels / Khals:**

There are 31 canals in 9 unions of Lohagara Upazila. Union based information about canals is given below:

- There are 2 canals in Barahatia union. 1 is known as “Thomhom canal” and it is situated in 8 & 9 no wards and its length are 4.5 KM. Another one is known as “ Kalar Khal” and it is situated in the 7 and 9 no ward and it,s length are about 2 KM.
- There are 2 canals in Kalauzan union. 1 canal is known as “Boalia canal” and it is situated in 1,2 & 5 no wards and its length are 3.00 KM. Another one is known as “ Kamalaziri Khal ” and it is situated in the4,5,6 & 7 no wards and it,s length are about 2 KM.
- There are 2 canals in Kalauzan union. 1 canal is known as “Boalia canal” and it is situated in 1,2 & 5 no wards and its length are 3.00 KM. Another one is known as “ Kamalaziri Khal ” and it is situated in the 4,5,6 & 7 no wards and it,s length are about 2 KM.
- There are 6 canals in Amirabad union. 1 canal is known as “Tankabati Khal” and it is situated in 3,4,5,6,7 and 9 no wards and its length are 8.00 KM. Another canal is known as “ Dalu Khal ” and it is situated in the 2,4 and 8 no ward and it,s length are about 8 KM. Anoth canal is known as “ Boalia Khall” and it is situated in 1,3,8 and 9 no wards and its length are 10.00 KM. Another one is known as “ Bai khal” and it is situated in the 4, 6 and 8 no ward and it,s length are about 3 KM. Another one is known as “Katakhali khal” and it is situated in the 7,8 and 9 no wards and it,s length are about 3 KM. Another canal is known as “Gullahchari Khal” and it is situated in the 6,7 wards and it,s length are about 4 KM.
- There are 4 canals in Adunagar Union. 1 canal is known as “Hatimarkhal “ and it is situated in 4,5 and 6 no wards and its length are 4.00 KM. Another canal is known as “ Dalu Khal ” and it is situated in the 2,4 and 8 no ward and it,s length are about 8.00 KM. Another canal is known as “ Kulpagli Khal” and it is situated in 4 and 5 no wards and its length are 5.00 KM. Another one is known as “ Jurikhal ” and it is situated in the 8 and 9 no wards and it,s length are about 5 KM.
- There are 2 canals in Padua union. 1 canal is known as “Tangaboti khal “ and it is situated in 5 no ward and its length are 1.00 KM. Another canal is known as “ Hangar Khal ” and it is situated in the 1,7,8 and 9 no wards and it,s length are about 9.00 KM.
- There are 4 canals in Putibila union. 1 canal is known as “Sukchari khal “ and it is situated in1,4,5 & 6 no wards and its length are 14.00 KM. Another canal is known as “ Saroi Khal ” and it is situated in the 6,7 & 8 ward and it,s length are about 12.00 KM. Another canal is known as “ Kalo Khal” and it is situated in 8 and 9 no wards and its length are 4.00 KM. Another one is known as “ Andari khal ” and it is situated in the 7 and 8 no wards and it,s length are about 8 KM.

- There are 2 canals in Chunati union. 1 canal is known as “Sukchari Khal “ and it is situated in 4, 5 and 6 no ward and its length are 5.00 KM. Another canal is known as “ Hangar Khal ” and it is situated in the 6,7 and 8 no wards and its length are about 4.5 KM.
  
- There are 4 canals in Charamba union. 1 canal is known as “Hangor Khal “ and it is situated in 1,4 & 6 no wards and its length are 4.00 KM. Another canal is known as “ Atiyar Khal ” and it is situated in the 4,7 & 8 ward and its length are about 8.00 KM. Another canal is known as “ Chambi Khal” and it is situated in 5, 7 & 8 no wards and its length are 3.00 KM.
  
- There are 3 canals in Lohagara Sadar union. 1 canal is known as “Chambi Khal “ and it is situated in 1, 2, 3, 5 and 6 no wards. Another canal is known as “ Hatiar Khal ” and it is situated in the 5, 6 & 7 no wards. Another canal is known as “ Bartar Khal ” and it is situated in the 1, 2, 3, 5 & 9 no wards.

## 2<sup>nd</sup> Chapter: Disasters, Hazard and vulnerability

### 2.1 History of Disaster:

Lohagara Upazila is on

e of the most vulnerable upazila among all upazilas of Chittagong district. Every year this upazila faces one disaster or other. Each year huge resources are damaged and normal human lives are shattered due to different disasters like hilly flood, flood, river erosion, tornadoes, cyclone, drought, cold wave and attack of elephants etc. Strong cyclone, tornado, tidal surge etc flowed during 1988, 1991 and 1997. All unions were affected by these disasters including Pourashava. The speed of wind was 220-240 KM / hour. Many people died and it caused huge damaged on agriculture, fisheries, livestock, sanitation and infrastructures. Many government, non-government and foreign development organization came forward to help the distress people. Apart from this, they provided support on recovery, rescue, primary treatment and distribution of medicines, distribution of dry foods, rehabilitation and other support.

Again In 2012, cyclone 'Ila' was affected this Upazila. Though there was no death in this disaster but majority standing crop was severely damaged by this cyclone. In addition, Kucca houses, shops, trees, livestock, infrastructures, ponds, educational institutions were damaged in this areas.

Again in 2013 cyclone 'Mohasen' was partly affected this Upazila. Though extensive damage were not happened but few areas were partially affected.

#### **Time of disasters and affected sectors**

Name of Disasters	Year	Extent of Damage	Affected sectors
Hilly flood	Each year	Huge	Crop, Human resources, Livestock, Fishery and infrastructures
Flood	Each year	Huge	Crop, Houses, Fishery, Livestock, roads, human resources
River erosion	Each year	Huge	Crop, Houses, roads,
Tornado	Everyday	Huge	Crop, Houses, Fishery, Livestock, roads, human resources
Drought	Everyday	Huge	Agriculture, Fishery and Health
Cold wave	Each year	Huge	Agriculture, trees, Sampling
Attack of Elephants	Everyday	Huge	Crop, Houses, trees, human
Salinity	Each year	Little	Crop, Houses, Fishery, Livestock, roads, Scarcity of drinking water
Arsenic Contamination	Everyday	Little	Scarcity of safe drinking water, Human loss

## 2.2 Identification of hazards and prioritization:

Sl No.	Name of disasters	Sl. No	Priorities
1	River Erosion	1	Flood
2	Flood	2	Onrush of Hilly flood
3	Drought	3	Tornado
4	Tornado	4	River erosion
5	Hilly onrush of water	5	Drought
6	Water logging	6	Water logging

## 2.3 Different hazards, it's present & future:

**1. Flood:** Flood is occurring in each and every year in this upazila. About 200-250 homes, 6750 crops, 22 KM Kacha roas, 280 tubewells, fishes of 150 ponds are damaged if a flood hits this upazila. Apart from this many educational nstitutions and livestock are affected or damaged by flood. The damage will increase in future if effective measures are not taken to control flood.

**2. On rush of hilly water:** The Upazila is known as hills covered Upazila. There are hills in almost all unions. About 5890 kucha houses, 3884 kucha latrines, 35 graveyards and 28 mosques, 675 deep tube wells and damage of 4270 acres crop, 25600 trees, and 125 KM kacha roads are affected by onrush of hilly water. Moreover people die due to landslide during excessive rain. So the situation can be worse in landslide if rehabilitation of people before start of excessive rain is not done by government and non government initiatives.

**3. Tornado:** Typically tornado affects this Upazila in the months of Baishak and Jaista. As a result, 110-150 homes are partially damaged and about 50-100 homes are partially damaged. About 5 educational institutions are damaged. About 200-350 cows, goats and Chicken are died. Besides about 400-600 hectres Roby crops are perished. So everything will be damaged if preventive actions are not taken.

**4. River erosion:** Moderate to severe erosion is seen in this upazila due to huge onrush of water from upstream and sandy nature of soil in both banks of Tankabati River. The river erosion is occurs mainly during rainy monsoon. But river erosion is seen in some areas even in Bhadra and Ashin months. No effective actions are seen despite keeping Water Development Board officials informed. There is possibility that large part of this upazial can be devoured by rivers in future if necessary actions are not taken to preven the river erosion.

**5. Drought:** There is Tankabati River. But during rainy season this river caused flood by overflowing both banks and water comes down from upstream. There is no water in this river during dry monsoon and drought turns into severity. Huge crops are damaged due to drought in this upazila.

**6. Water logging:** Water logging occurs due to onrush of hilly water and as the mighty Tankabati has flown through this upazila. Water logging gives birth many water born diseases. In addition about 4305 acres crops are affected by by water logging. It is important to undertake necessary steps to get over this situation.

## 2.4 Vulnerability and Capacity:

(Ka) Vulnerability means socio, economic and environmental condition that refers to disasters and people do not have capacity to face them.

(Kha) Capacity means natural, social and environmental induced condition or process by which people or organizations face adverse situation and reduces the havoc of disasters.

Vulnerability and Capacity are shown by points below-

Hazards	Vulnerability	Capacity
1. Flood	<ul style="list-style-type: none"> <li>• More or less 5-6 unions (Chunati, Adunagar, Barahatia, Kalauzan, Putibila. Amirabad and Charamba) are affected by flood in each year.</li> <li>• Standing crops gone under water.</li> <li>• Assests damage is caused by untrusing water to homes and habitat.</li> <li>• Roads, Institutions and other Infrastructures are damaged.</li> <li>• Sources of Safe drinking water are damaged.</li> <li>• Three main rivers that have lost navigavility and massive siltration.</li> <li>• No embankment in some places.</li> <li>• Weak embankments and freaks down easily.</li> <li>• Narrowing of rivers &amp; Khall/ streams due to siltation</li> <li>• Less and weak embankments that break down easily.</li> <li>• Lack of regular maintamnence of embankments.</li> </ul>	<ul style="list-style-type: none"> <li>• Dredging is now allowed that is increasing navigability.</li> <li>• Dredging to increase navigability.</li> <li>• Embankments can be making strong and height can uprise.</li> <li>• Construct embankment newly.</li> </ul>
2. Hilly water onrush	<ul style="list-style-type: none"> <li>• Construction of homes away from hills.</li> <li>• Constrution of homes at hilly slops and hill sides</li> <li>• Poor awareness about onrsh of hilly water.</li> </ul>	<ul style="list-style-type: none"> <li>• Construction of homes away from hills</li> <li>• Construct homes that can be disaster resilient</li> <li>• Make community people aware about the danger of</li> </ul>

Hazards	Vulnerability	Capacity
	<ul style="list-style-type: none"> <li>• Non-construction of disaster resilient houses.</li> </ul>	<p>hilly watter rush.</p> <ul style="list-style-type: none"> <li>• Not to build houses close to hills.</li> </ul>
3. Tornado	<ul style="list-style-type: none"> <li>• Non availability of large trees.</li> <li>• Non availability of bushy trees around houses.</li> <li>• Non- availability of trees and bushes around houses</li> <li>• Poor construction of Kacha latrines</li> <li>• Poor construction of Cattle homes</li> <li>• Less shelter centers in contrast to needs.</li> <li>• Non cultivation of cyclone resilient crop varieties.</li> </ul>	<ul style="list-style-type: none"> <li>• Construct required number of shelters.</li> <li>• Cultivation of disaster resilient crop varieties.</li> <li>• Plant more trees</li> <li>• Plant more bushy trees in and around homes</li> <li>• Construct disaster resilient kacha latrines</li> <li>• Construct disaster resilient cattle houses.</li> </ul>
4. River erosion	<ul style="list-style-type: none"> <li>• Non availability of embankments at unions.</li> <li>• None repairing of embankments regularly.</li> <li>• Not to stengthen banks of rivers by concrete blocks.</li> <li>• No dense afforestation on river side.</li> <li>• Soil not clay and poly.</li> </ul>	<ul style="list-style-type: none"> <li>• Construct homes in the coastal areas keeping safe distance.</li> <li>• There are scopes for planting more trees around embankment that can strengthen soil.</li> <li>• Plant trees in both sides of roads.</li> </ul>
5. Drought	<ul style="list-style-type: none"> <li>• Lack of sufficient trees and forest. Indiscriminate cutting of trees.</li> <li>• Siltration of ponds, canals, beels and destroy of water sources.</li> <li>• Massive use of firewoods due to increase of population.</li> <li>• Indiscriminate cutting of hilly trees due to people’s mobility to hills.</li> <li>• Number of deep tube wells is less.</li> <li>• No rain water harvesting system for retaining safe drinking water.</li> <li>• Non availability of PSF filters</li> </ul>	<ul style="list-style-type: none"> <li>• Plant more trees and create forest.</li> <li>• Increase number of tube wells by Go/NGOs.</li> <li>• Cultivate drought resistant crops</li> <li>• Install rain water harvesting system for safe water.</li> </ul>
6. Water Logging	<ul style="list-style-type: none"> <li>• Heavy rain creates water logging.</li> <li>• Due to siltration of canals and</li> </ul>	<ul style="list-style-type: none"> <li>• Start speedy discharging of water.</li> </ul>

Hazards	Vulnerability	Capacity
	<p>streams.</p> <ul style="list-style-type: none"> <li>• Many diseases spread by water logging.</li> </ul>	<ul style="list-style-type: none"> <li>• Take initiatives to excavate canals and streams.</li> </ul>

**Vulnerability:** Extensive damage of crops is caused. Aged, Children, lactating mother and disabled are in risk during flood.

**Capacity:** There is no shelter in any unions.

## 2.5 Most vulnerable areas:

Union wise detail of most vulnerability and its reasons are provided below-

Hazards	Most vulnerable areas	Reason of Vulnerability	Vulnerable population
1. Flood	<ul style="list-style-type: none"> <li>• 6, 7 and 9 no wards of Barohatia union</li> <li>• 3,5 and 7 no wards of Kalauzan union.</li> <li>• 2, 4, 8 &amp; 7 no wards of Amirabad union.</li> <li>• 1, 3 and 6 no wards of Adunagar union.</li> <li>• 5, 6 &amp; 7 no wards of Padua union.</li> <li>• 3,4, &amp; 8 no wards of Putibila union.</li> <li>• 3, 4, &amp; 8 no wards of Chunati union.</li> <li>• 3, 4 and 8 no wards of Charamba union.</li> </ul>	<ul style="list-style-type: none"> <li>• Less navigability of rivers and canals.</li> <li>• Less embankment and also weak embankment.</li> <li>• No plantation on both sides of roads.</li> <li>• Not to build disaster resilient homes.</li> </ul>	Total number of affected families are 9540
	• 4,5,6,7,8 & 9 no ward of	• Non –	Total



<p>2. Onrush of hilly water</p>	<p>Barahatia union</p> <ul style="list-style-type: none"> <li>• 1,2,3,4 no wards of Kalauzan union.</li> <li>• 1, 2, 4 &amp; 9 no wards of Amirabad union.</li> <li>• 1, 2, 3, &amp; 9 no wards of Adunagar union.</li> <li>• 1, 2, 3 &amp; 4 no wards of Padua union.</li> <li>• 1, 2, 3,5,6,7 &amp; 8 no wards of Putibilala union.</li> <li>• 6, 7, 8 &amp; 9 no wards of Chunati union.</li> <li>• 2, 3, 4 &amp; 5 no wards of Charamba union.</li> </ul>	<p>construction of homes away from hills.</p> <ul style="list-style-type: none"> <li>• Build houses close to hillsides.</li> <li>• People not aware about hilly on rush of water.</li> <li>• Not building houses disaster resilient.</li> </ul>	<p>number of affected families are 5437</p>
<p>3. Tornado</p>	<ul style="list-style-type: none"> <li>• All wards of Barahatia union</li> <li>• All wards of Kalauzan union.</li> <li>• All wards of Amirabad union.</li> <li>• All wards of Adunagar union.</li> <li>• All wards of Padua union.</li> <li>• All wards of Putibila union.</li> <li>• All wards of Chunati union.</li> <li>• All wards of Charamba union.</li> </ul>	<ul style="list-style-type: none"> <li>• Non –construction of disaster resilient homes.</li> <li>• Non cultivation of Disaster Resilient crops.</li> <li>• Indiscriminate cutting of trees.</li> <li>• Non-availability of bushy trees around the homes.</li> <li>• Build kacha latrines weakly.</li> <li>• Build residence of livestock weakly.</li> <li>• Less number of govt &amp; non govt. shelters.</li> </ul>	<p>Total number of affected families are 12495</p>
<p>4. River Erosion</p>	<ul style="list-style-type: none"> <li>• 1,2,3,4 no wards of Barahatia union.</li> <li>• 1,2 8 &amp; 9 no wards of Padua union.</li> <li>• 1, 2,8 &amp; 9 no wards of Putibila union.</li> </ul>	<ul style="list-style-type: none"> <li>• No concrete block on Bank of rivers.</li> <li>• Weak embankment.</li> <li>• No afforestation on both sides of</li> </ul>	<p>Total number of affected families are 4690</p>

	<ul style="list-style-type: none"> <li>• 1,2,8 &amp; 9 no wards of Chunati union.</li> <li>• 1,2,8,9 no wards of Charamba union.</li> </ul>	<ul style="list-style-type: none"> <li>• rivers.</li> <li>• Broken embankments at different parts. .</li> </ul>	
<b>5. Drought</b>	<ul style="list-style-type: none"> <li>• All wards of Barahatia union.</li> <li>• All wards of Kalauzan union.</li> <li>• All wards of Amirabad union.</li> <li>• All wards of Adunagar union.</li> <li>• All wards of Padua union.</li> <li>• All wards of Putibila union.</li> <li>• All wards of Chunati union.</li> <li>• All wards of Charamba union.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of sufficient trees and forest</li> <li>• Number of deep tube wells are less for cultivation</li> <li>• Crop damage occurs</li> <li>• No rain water harvesting system safe drinking water.</li> <li>• Non availability of PSF filters</li> </ul>	Total number of affected families are 10300
<b>6. Water Logging</b>	<ul style="list-style-type: none"> <li>• 1,2,3,4 no wards of Barahatia union.</li> <li>• 3,4,5,6 &amp; 7 no wards of Kalauzan union.</li> <li>• 1, 2, 3,6, 7, 8 &amp; 9 no wards of Amirabad union.</li> <li>• 4, 5,7 &amp; 8 no wards of Adunagar union.</li> <li>• 1, 2, 8 &amp; 9 no wards of Padua union.</li> <li>• 1,2, 8 &amp; 9 no wards of Putibila union.</li> <li>• 1,2,8 &amp; 9 no wards of Chunati union.</li> <li>• 1,2,8 &amp; 9 no wards of Charamba union.</li> </ul>	<ul style="list-style-type: none"> <li>• Abundance of hilly areas.</li> <li>• Non cultivation of Disaster resilient crops.</li> <li>• Non construction of Disaster resilient homes</li> </ul>	Total number of affected families are 4200

## 2.6 Major sectors of development planning:

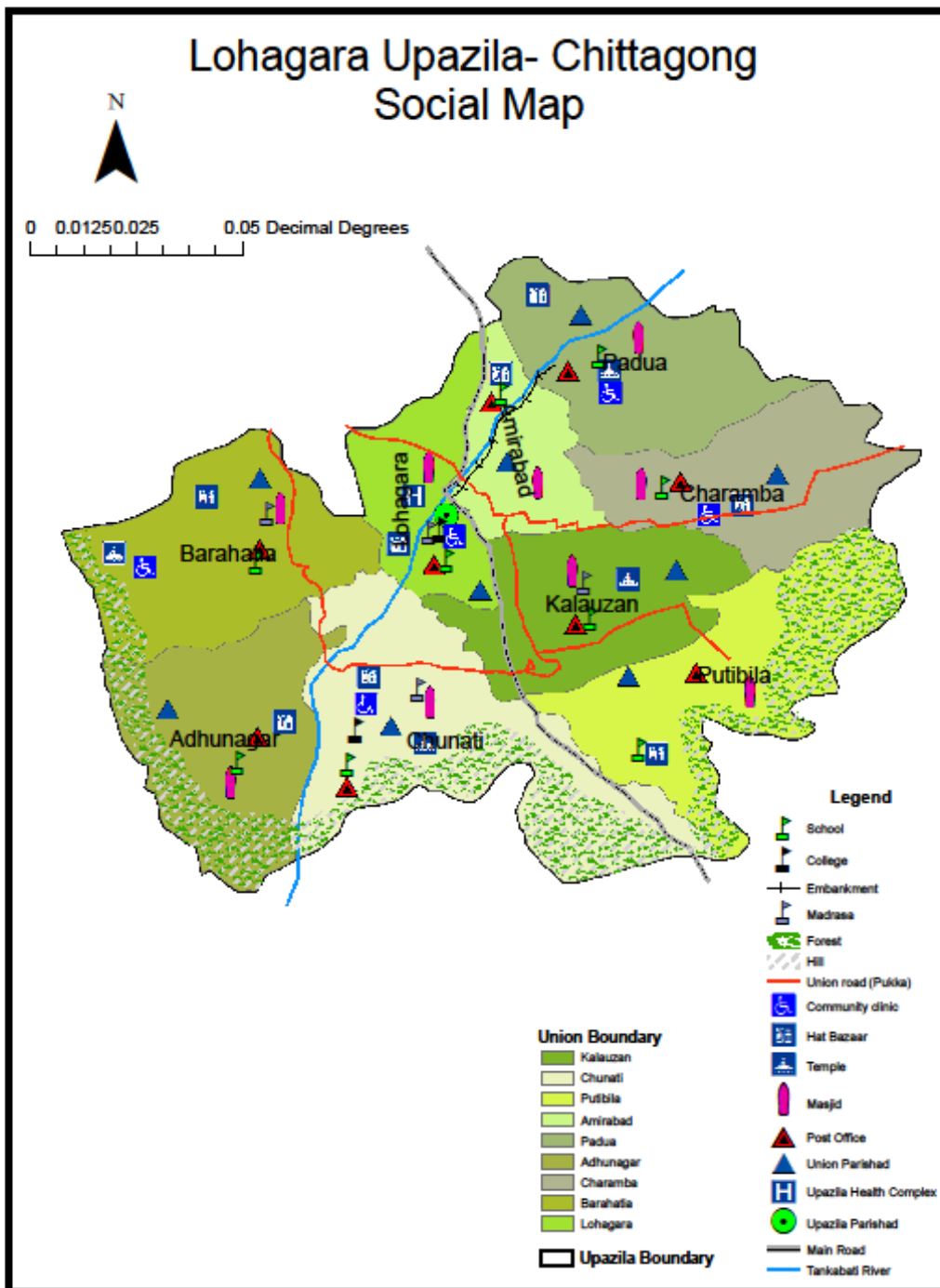
The major development sectors of Lohagara Upazila:

Main sectors	Detail description	Coordination with Disaster risk reduction
1. Agriculture	<ul style="list-style-type: none"> <li>• Total crop land of nine unions of this Upazila is 39545 acres. Almost every year onrush of hilly water occurs in this upazila. Aman, boro, Aus paddy and Robi crops including guava and other vegetable cultivation of 2200 acres land can be badly affected if a hilly on rush of water happen.</li> <li>• Aman, boro, Aus paddy and Robi crops including guava and other vegetable cultivation of 2190 acres land out of 39545 acres crop land can be badly affected if flood occurs like 1991 and 1997.</li> <li>• Crop of about 1000- 1100 acres can be affected if river erosion occurs in this Upazila.</li> <li>• Crop of about 2300 acres can be badly affected if a tornado occurs.</li> <li>• Drought affects the Upazila every year. Crop of about 1450 acres can be damaged if a drought occurs in future.</li> <li>• Water logging occurs in this Upazila every year. Crops of 2070 acres are damaged by water logging.</li> </ul>	<ul style="list-style-type: none"> <li>• Building embankment strong.</li> <li>• Improve water discharge system.</li> <li>• Use rain water in Aman sampling production.</li> <li>• Use organic manure in soil.</li> <li>• Develop irrigation system and river excavation.</li> <li>• Standing rice sampling put under beneath deep into the soil.</li> </ul>
2. Fisheries	<ul style="list-style-type: none"> <li>• Total ponds in 9 unions of lahagara upazila are 1273. Fishes of about 294 ponds can be swept away if a hilly water on rush occurs here like 2007 and 2010.</li> <li>• Flood hits this upazila almost every year. Fishes of 350 ponds can be swept away if a flood occurs.</li> <li>• About 60-70 ponds are affected due to river erosion.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase depth of ponds.</li> <li>• Repair and strengthen of embankment.</li> <li>• Fisherman should be trained up.</li> </ul>

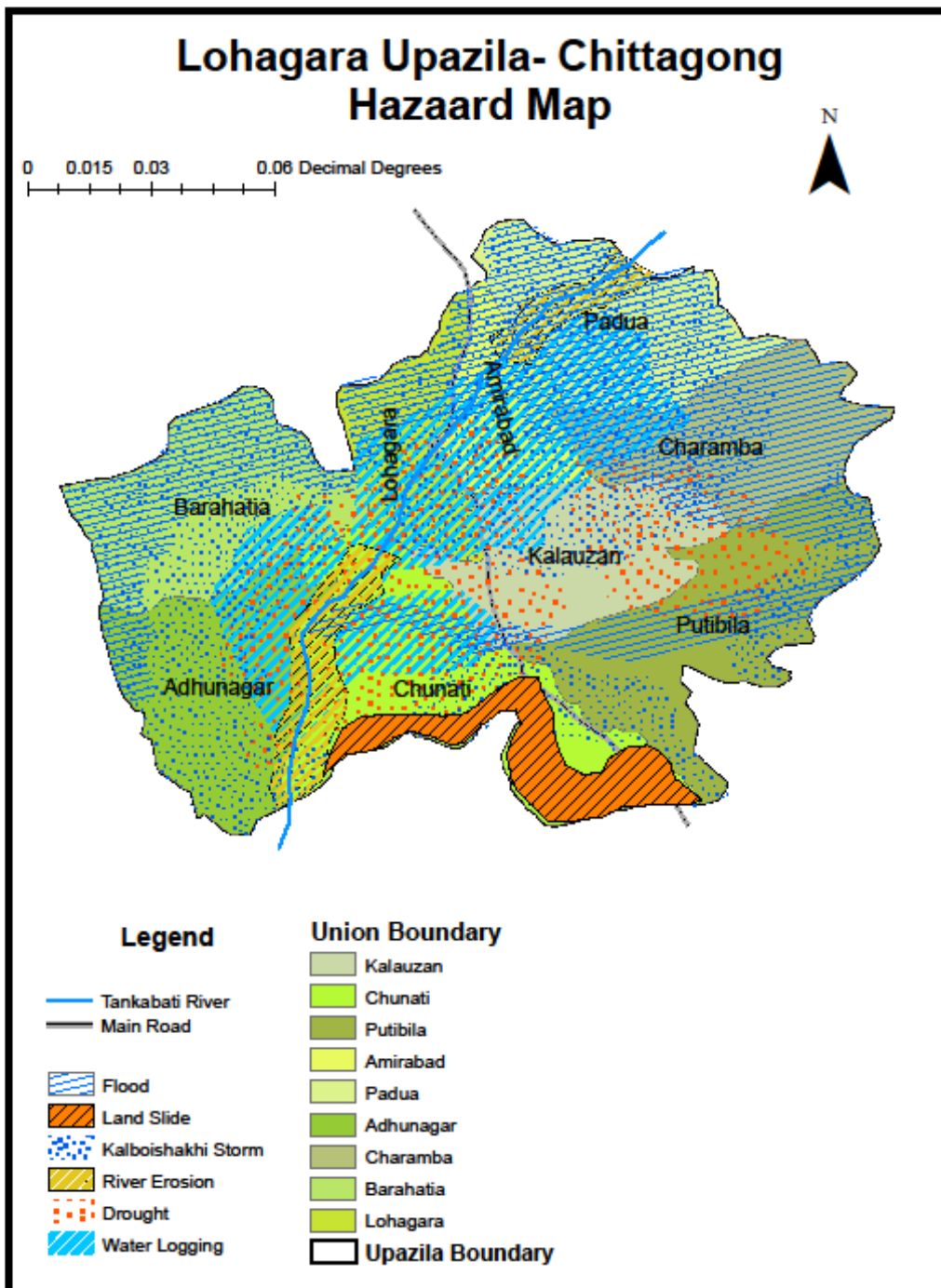
	<ul style="list-style-type: none"> <li>• Drought hits this upazila almost every year. Fishes of 60-65 ponds are affected if a drought occurs in this Upazila.</li> </ul>	
3. Livestock	<ul style="list-style-type: none"> <li>• It is most likely that 11279 cows out of 54386, 9430 goats out of 20430, 28 sheep out of 110 sheep, 52710 chicken out of 145325 Chicken 2970 ducks out of 12526 ducks can be swept away if a flood hits lohagara upazila.</li> <li>• About 2600 cows, 3210 goats, 28 sheep, 44760 chicken and 1870 ducks can be swept away if a tornedo/ cyclone like 1991 and 1997 occurs in this upazial again.</li> </ul>	<ul style="list-style-type: none"> <li>• Build earthen killas.</li> <li>• Develop grazing land to govt. fellow and khas land.</li> <li>• Motivate people to rear disaster resilient cross breed varieties of animals.</li> <li>• Ensure vaccination.</li> <li>• Build cyclone resilient habitat for livestock.</li> <li>• Make people aware about disease and treatment of livestock.</li> <li>• Esatblish food processing units for fooder of livestock.</li> </ul>
4. Health	<ul style="list-style-type: none"> <li>• Flood hits almost all unions of Lohagara Upazila. Water logging occurs if a flood occurs in this Upazila. Family members of 7540 famalies can be affected by different water born diseases.</li> <li>• Drought occurs in this upazila almost every year. Family members of about 7500 families can be affected by different diseases and there is possibility that 12500 families will lost access to safe drinking water.</li> </ul>	<ul style="list-style-type: none"> <li>• Raise awareness about health.</li> <li>• Impart training to doctors on risk of health during disasters.</li> <li>• Increase quality of service delivery of union level health centers and community clinics.</li> <li>• Ensure supply of medicines for primary care.</li> <li>• Ensure supply of pure drinking water.</li> <li>• Rehabilitate disabled during disasters.</li> <li>• Provide adequate vaccination and immunization.</li> <li>• Post of doctors and nurses should be</li> </ul>

		increased at Health centers according to needs.
5. Livelihoods	<ul style="list-style-type: none"> <li>• About 3475 fisherman are directly or indirectly affected in this Upazila due to flood.</li> <li>• About 4550 fisherman are affected due to Tornado.</li> <li>• About 1040 fisherman are directly or indirectly affected due to Drought.</li> <li>• About 17350 farmers and 12700 day labourer do not get employment due to tornado.</li> <li>• About 12600 farmers out of 10300 day labourer get out of work due to flood.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize different IGA training for sustainable livelihood option.</li> <li>• Motivate women for income generation.</li> <li>• Ensure use of local resources.</li> <li>• Government and non-government support should be ensured for livelihoods of vulnerable population.</li> <li>• Organize training for small traders through Samities/ Groups.</li> <li>• Ensure social security.</li> </ul>
6. Homes & Infrastructure	<ul style="list-style-type: none"> <li>• About 58 KM Kacha road, 62 KM HBB and 1265 Kacha homes can be inundated if a onrush of hilly water occurs. Besides, 26 educational institutions and 16 temples can badly be affected. About 50 Km kacha road , 48 KM HBB, inundation of Kucha roads , 48 KM HBB can be inundated and 23 educational institutions and 5 health centers can badly be affected if a tornado/ cyclone like 1991 and 1997 occurs. Besides, about 55-60 KM electric lines can be damaged.</li> <li>• About 32 KM Kacha roads, 73 KM HBB, Kacha homes of 10400 families , 20 educational institutions, 7 Hatbazars can be inundated and 4 health centers can be directly or indirectly affected if a flood hits this upazila. About 1000-1200 Kacha houses were affected due to excessive rain induced water logging in 2012-2014.</li> </ul>	<ul style="list-style-type: none"> <li>• Make road elevated and Pucca/ paved.</li> <li>• Construct necessary culverts and bridges.</li> <li>• Construct sufficient cyclone centers.</li> <li>• Plant trees around infrastructures, roads and both banks of rivers and canals.</li> </ul>

## 2.7 Social map



## 2.8 Hazard and Risk map:



## 2.9 Hazard calendars:

Hazard Calendar of Upazila

Sl No.	Hazards	Name of Months											
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	Flood												
2	Land slide												
3	Tornado												
4	River Erosion												
5	Drought												
6	Water-logging												

### Calendar Analysis:

Lohagara upazila is a disaster prone area. It is known from interaction with community people that hazards like hilly water on rush, flood, river erosion, tornado, drought, cold wave and attack of elephants are occurred in almost 9 unions of this Upazila. Occurrence time of hazards has been shown in above charts. Detail is being analysis below-

- **Flood:** It is known that unions are close to rivers and canals and flood occurs every year due to climatic change. Flood occurs from Asar to Asin month.
- **On rush of hilly water:** During interaction with local people it is known that hills are abundances in most parts of the Upazila. On rush of hilly water occurs every year during rainy monsoon in these areas and it damages local resources. On rush of hilly water is the most devastating hazards than other hazards. Usually this on rush occurs during Azar to Asin month.
- **River Erosion:** It is known that river erosion is a major hazard in this Upazila. Every year homes and crop land are devoured by this erosion. This is happened from Asar to Ashin month.
- **Tornado:** It is known from interacting with local people that Tornado is another hazard that occurs almost every year. It took huge toll to lives and other resources. Usually this is happen from Baishak to Justa month.
- **Drought:** It is known that Drought is another hazard that badly damage crop lands and crops and create scarcity of safe drinking water.
- **Water logging:** Water logging occurs due to onrush of hilly water and as the mighty Tankabati has flown through this upazila. Water logging causes many water born diseases.



## 2.10 Monsoon calendar of livelihoods:

Hazard Calendar of Upazila

Sl. No.	Livelihoods	Name of months											
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	Farmers	Blue	Blue	White	White	Blue	Blue	Blue	Blue	Blue	Blue	White	White
2	Fishermen	White	White	Purple	Purple	Purple	Purple	Purple	White	Purple	Purple	Purple	Purple
3	Business	Blue	Blue	White	White	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
4	Vatbati/ Van driver	Blue	Blue	White	White	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
5	Day labarer	Purple	Purple	White	White	Purple	Purple	Purple	Purple	Purple	White	White	Purple

## 2.11 Life & Livelihood related vulnerability:

Main livelihoods and what problems it creates is shown in below table

Sl No.	Livelihoods	Misfortune befalls ballots/disaster management					
		Flood	Land Slide	Baishakhi storm	River Erosion	Drought	Water-logging
1	Agriculture	Purple	Purple	Purple	Purple	Purple	Purple
2	Animals resources	Blue	Blue	Blue	White	Blue	Blue
3	Business	Green	Green	Green	White	White	White
4	Fish	Purple	White	Purple	Purple	Purple	White
5	Workers day	Blue	White	Blue	White	White	White
6	Tattati also ply, van driver,	Purple	Purple	Purple	White	White	White

## 2.12 Sector wise description of hazards and of risks:

(Ka) Kind of sectors that fall victims by hazards in Lohagara upazila is detailed in below-

Hazards induced Risk identification and listing has been done after identifying union wise hazards, vulnerable sectors and areas. Risk prioritization has been done through votes of 24 representatives (3 groups consisting of 8 people of Farmer, fisherman and businessman professionals). Priorities risks and its causes of three groups have been combined, made analysis and risk reduction approaches have been identified. List of Priorities risks are exhibited below-

### Identification of Vulnerable sectors

Hazards	Vulnerable social Components/elements					
	Crops	Fisheries	Homes	Roads	Sanitation	Health
Flood						
Land Slide						
Baishakhi storm						
River Erosion						
Drought						
Water-logging						

## Sector wise description of Hazards and risks:

Sector	Hazards	Description
Agriculture	Flood	Aman crop of 2457 acres in Barahatia union can be affected if a flood like 1987 and 1988 occurs in lohagara upazila. As a result 2635 families can be directly or indirectly affected. Aman of 1876 acres, Robi of 128 acres and vegetables of 239 acres can be affected in Chunati union by flood; As a result about 1349 families can be directly or indirectly affected. In addition, about 2147 acres crops of 5 wards of Padua union and 324 acres vegetable field can be badly damaged. As a result, about 2654 famalies can be directly or indirectly affected. Besides, about 1643 acres Aman crops and 324 acres vegetable field of Adunagar union can be badly damaged. As a result, about 983 famalies can be directly or indirectly affected and about 2645 people can be subject to loss. Aman crop of 1298 acres out of 6920 acres and vegetable field of 245 acres of Kalauzan union can be affected. Crop of 1023 acres and vegetvlbe field of 245 acres of Charamba union can be badly affected. As a result, about 643 families can be directly or indirectly affected. Crop of 521 acres, Aman crop of 254 acres , Boro and vegetable field of Putibila union can be severely affected. As a result, about 218 families and 1548 people

Sector	Hazards	Description
		can be directly or indirectly affected.
Livestock	Flood	About 345 cows, 430 goats, 2100 Chicken, 400 ducks, 30 sheep, 22 buffalows of Chunati union can be swept away if a flood hits this upazila. As a result, many families can be affected. About 290 cows, 332 goats, 2200 Chicken, 260 ducks, 19 Sheep and 14 buffalows of Adunagar union can be swept away. As a result many families can be affected. About 204 cows, 178 goats, 2500 Chicken, 250 ducks, and 22 buffalows of Charamba union can be swept away. As a result many families can be affected. About 200 cows, 170 goats, 2600 Chicken, 350 ducks, 28 sheep and 10 buffalows of Amirabad union can be swept away. As a result many families can be affected. About 100 cows, 150 goats, 1000 Chicken, 100 ducks, 25 sheep and 20 buffalows of Lohagara Sadar union can be swept away. As a result, many families can be affected. About 230 cows, 250 goats, 2300 Chicken, 242 ducks, 30 sheep and 25 buffalows of Barahatia union can be swept away. As a result, many families can be affected. About 400 cows, 550 goats, 1540 Chicken, 500 ducks, and 22 buffalows of Kalauzan union can be swept away. As a result, many families can be affected. About 230 cows, 450 goats, 2300 Chicken, 220 ducks, and 32 buffalows of Putibila union can be swept away. As a result, many families can be affected. About 238 cows, 280 goats, 1950 Chicken, 370 ducks, and 25 buffalows of Padua union can be swept away. As a result, many families can be affected.
Infrastructures	Flood	About 22 KM Kacha roads, 18 KM HBB, 16 KM Pucca roads, and kacha homes of 2349 families can be damaged by inundation. Besides, About 12 educational institutions, 5 hatbazars and infrastructures of 3 health centers can be inundated and damaged.
Trees	Flood	About 321 forest, 1523 fruit, 123 herbal trees of Chunati union, about 216 forest, 3287 fruit, 341 herbal trees of Padua union, about 145 forest, 1987 fruit, 175 herbal trees of Adunagar union, about 148 forest, 2563 fruit, 236 herbal trees of kalauzan union, about 432 forest, 3427 fruit, 287 herbal trees of Barahatia union, about 421 forest, 1753 fruit, 235 herbal trees of Charamba union, about 234 forest, 1378 fruit, 134 herbal trees of Putibila union, about 124 forest, 2458 fruit, 163 herbal trees of Amirabad union can be affected by flood. As a result, 1236 families of these unions can be directly or indirectly affected economically.
Sanitation	Flood	There are about 91600 latrines in Lohagara upazila. Among them concrete latrines are 56742 and kacha latrines are 56424. According to field survey, Kacha and semi Pucca latrines are vulnerable to more damage during disasters.

Sector	Hazards	Description
Health	Flood	Flood hugely affects union health centers and spread many waterborn diseases. Most health centers are affected by flood.
Crop	Onrush of hilly water	Onrush of hilly water makes extensive damage to 710 acres crops in Barahatia union during rainy season. Similarly Onrush of hilly water makes extensive damage to 320 acres crops in Kalauzan union during rainy season. Similarly Onrush of hilly water makes extensive damage to 4960 acres crops in Amirabad union during rainy season. Onrush of hilly water makes extensive damage to 650 acres crops in Padua union during rainy season. Onrush of hilly water makes extensive damage to 645 acres crops in Putibila union. Onrush of hilly water makes extensive damage to 690 acres crop in Chunati union. Onrush of hilly water makes extensive damage to 642 acres crop in Charamba union.
Fishery	Onrush of hilly water	Onrush of hilly water occurs every year. Huge damage is caused if onrush of hilly water occurs. About 430 fishermen out of total 697 fishermen of 2630 families of Barahatia union can be affected if a onrush of hilly water hits. About 658 fishermen out of total 1209 fishermen of 4120 families of Kalauzan union can be affected if a onrush of hilly water hits. About 830 fishermen out of total 1548 fishermen of 8597 families of Amirabad union can be affected if a onrush of hilly water hits. Bout 548 fishermen out of total 1866 fishermen of 9445 families of Adunagar union can be affected if a onrush of hilly water hits. About 332 fishermen out of total 980 fishermen of 3921 families of Padua union can be affected if a onrush of hilly water hits. About 920 fishermen out of total 1246 fishermen of 6930 families of Barahatia union can be affected if a onrush of hilly water hits. About 455 fishermen out of total 1650 fishermen of 5057 families of Putibila union can be directly or indirectly affected if a onrush of hilly water hits. About 431 fishermen out of total 976 fishermen of 5740 families of Chunati union can be directly or indirectly affected if a onrush of hilly water hits. About 328 fishermen out of total 760 fishermen of 4060 families of Charamba union can be directly or indirectly affected if a onrush of hilly water hits.
Infrastructure	Onrush of hilly water	Though the upazila is not fully hilly upazila but there are hills in some unions. About 15500 families can be directly or indirectly affected if a onrush of hioll water occurs during rainy monsoon. Landslide that is resulted from excessive rain causes huge damages to trees, shops, hatbazar, educational institutions and roads.
		Extensice damage is caused in every year due to tornedo. About 100 acres Aman, Boro, Aus, Robi crop including guava and

Sector	Hazards	Description
Agriculture	Tornado	<p>vegetable cultivation can be badly affected in Chunati union if a tornado hits. About 90 acres Aman, Boro, Aus, Robi crop including guava and vegetable cultivation can be badly affected in Lohagara Sadar union if a tornado hits.</p> <p>About 125 acres Aman, Boro, Aus, Robi crop including guava and vegetable cultivation can be badly affected in Amirabad union if a tornado hits. About 120 acres Aman, Boro, Aus, Robi crop including guava and vegetable cultivation can be badly affected in Barahatia union if a tornado hits. About 110 acres Aman, Boro, Aus, Robi crop including guava and vegetable cultivation can be badly affected in Kalauzan union if a tornado hits. About 100 acres Aman, Boro, Aus, Robi crop including guava and vegetable cultivation can be badly affected in Charamba union if a tornado hits. About 105 acres Aman, Boro, Aus, Robi crop including guava and vegetable cultivation can be badly affected in Adunagar union if a tornado hits. About 95 acres Aman, Boro, Aus, Robi crop including guava and vegetable cultivation can be badly affected in Padua union if a tornado hits. About 110 acres Aman, Boro, Aus, Robi crop including guava and vegetable cultivation can be badly affected in Putibila union if a tornado hits. Families of those unions can be directly or indirectly affected.</p>
Agriculture	River Erosion	<p>Aman, Boro, Aus and Robi crop including guava and vegetable cultivation of 180 acres in Chunati union can be severely damaged and 35 acres land can be devoured in rivers if river erosion occurs. As a result, 186 families can be affected. Aman, Boro, Aus and Robi crop including guava and vegetable cultivation of 130 acres in Lohagara Sadar union can be severely damaged and 22 acres land can be devoured in rivers if river erosion occurs. As a result, 120 families can be affected. Aman, Boro, Aus and Robi crop including guava and vegetable cultivation of 142 acres in Amirabad union can be severely damaged and 20 acres land can be devoured in rivers if river erosion occurs. As a result, 30 families can be affected. Aman, Boro, Aus and Robi crop including guava and vegetable cultivation of 135 acres in Barahatia union can be severely damaged and 24 acres land can be devoured in rivers if river erosion occurs. As a result, 41 families can be affected. Aman, Boro, Aus and Robi crop including guava and vegetable cultivation of 175 acres in Kalauzan union can be severely damaged and 18 acres land can be devoured in rivers if river erosion occurs. As a result, 33 families can be affected. Aman, Boro, Aus and Robi crop including guava and vegetable cultivation of 170 acres in Charamba union can be severely damaged and 20 acres land can be devoured in rivers if river erosion occurs. As a result, 30 families can be affected. Aman, Boro, Aus and Robi crop including guava and vegetable</p>

Sector	Hazards	Description
		cultivation of 142 acres in Adunagar union can be severely damaged and 15 acres land can be devoured in rivers if river erosion occurs. As a result, 25 families can be affected. Aman, Boro, Aus and Robi crop including guava and vegetable cultivation of 135 acres in Padua union can be severely damaged and 20 acres land can be devoured in rivers if river erosion occurs. As a result, 35 families can be affected.
Trees	Drought	About 1500 fruits and forest trees of Chunati union, 1000 fruits and forest trees of Adunagar union, 12000 fruits and forest trees of Charamba union, 1000 fruits and forest trees of Amirabad union, 1500 fruits and forest trees of Lohagara sadar union, 1300 fruits and forest trees of Barahatia union, 1000 fruits and forest trees of Kalauzan union, 1100 fruits and forest trees of Charamba union, 1000 fruits and forest trees of Putibila union, 1200 fruits and forest trees of Padua union can be affected by drought. As a result, families of those unions can be directly or indirectly affected.
Agriculture	Water logging	Aman, Boro, Aus, Robi crops of about 96 acres out of 1500 acres including guava and vegetable cultivation can be badly affected in Chunati union if water logging occurs due to excess rain and onrush of hilly water happens. Aman, Boro, Aus, Robi crops of about 72 acres including guava and vegetable cultivation can badly be affected in Amirabad union if water logging occurs. Aman, Boro, Aus, Robi crops of about 105 acres including guava and vegetable cultivation can badly be affected in Barahatia union if water logging occurs. Aman, Boro, Aus, Robi crops of about 75 acres including guava and vegetable cultivation can badly be affected in Kalauzan union if water logging occurs. Aman, Boro, Aus, Robi crops of about 100 acres including guava and vegetable cultivation can badly be affected in Charamba union if water logging occurs. Aman, Boro, Aus, Robi crops of about 62 acres including guava and vegetable cultivation can badly be affected in Adunagar union if water logging occurs. Aman, Boro, Aus, Robi crops of about 100 acres including guava and vegetable cultivation can badly be affected in Padua union if water logging occurs. Aman, Boro, Aus, Robi crops of about 100 acres including guava and vegetable cultivation can badly be affected in Padua union if water logging occurs. Aman, Boro, Aus, Robi crops of about 120 acres including guava and vegetable cultivation can badly be affected in Putibila union if water logging occurs.
		Water logging is caused as the upazla is close to two main rivers that have flown transversely from east to west of this upazila and due to onrush of hilly water during rainy season. About 65 ponds out of 127 ponds can be affected by water

Sector	Hazards	Description
Fishery	Water logging	logging in Barahatia union. Similarly about 55 ponds out of 114 ponds can be affected by water logging in kalauzan union. Similarly about 58 ponds out of 113 ponds can be affected by water logging in Amirabad union. Similarly about 56 ponds out of 220 ponds can be affected by water logging in Adunagar union. About 70 ponds out of 212 ponds can be affected by water logging in Adunagar union. About 70 ponds out of 230 ponds can be affected by water logging in Padua union. About 65 ponds can be affected by water logging in Chunati union. About 60 ponds can be affected by water logging in Charamba union.

## 2.13 Climatic Change & Its potential impact:

Sectors	Hazards	Descriptions
Agriculture	Flood	Flood occurs every year in this upazila. Every union is affected by flood. The intensity of flood increase during rainy monsoon. About 15400 acres crop can be directly or indirectly affected by flood in this upazila.
Fishery	Flood	Fishes of about 673 are swept away if a flood like 1991 occurs in this upazila and about 1450 fisherman can be directly or indirectly affected.
Infrastructures	Flood	Flood damages most houses in this upazila. Particularlry Kacha houses are damaged in larger numbers. There are about 40904 families of Kacha houses and 17249 families of Pucca houses. Roads, educational institutions, temples, mazjids, and health centers are partly damaged if flood hits.
Sanitation	Flood	Lohagara upazila is known as diaster prone upazila. Sanitation system becomes worst if a flood hits this upazila.
Health	Flood	Waterborn diseases spread and affect people to a greater extent if a flood hits this upazila. Four health centers are directly or indirectly affected by flood.
Agriculture	Onrush of hilly water	Onrush of hilly water occurs in every year in this upazila. Extensive damage is caused by this disaster. Crop of about 8900 acres are affected in each year if a flood occurs.
Fisheries	Onrush of hilly water	Onrush of hilly water occurs in every year in this upazila. About 2120 fisherman families are directly or indirectly affected by onrush of hilly water.
Infrastructures	Onrush of hilly water	Onrush of hilly water damages infrasructures in each year. Particularly this affects Kacha houses. Apart from this it also partly affect roads, educational institutions, temples, mosques, and health centers.
Agriculture	Tornado	Tornado damages huge crops every year. Crop of 6500 acres are damaged due to tornado in each year.
Fishery	River erosion	River erosion is occurs in each year at Lohagar upazila. Extensive damage is caused if river erosion is occurs. About 1180 fishermen of 12500 families are directly or indirectly affected by river erosion.
Infrastructures	River erosion	River erosion is seen in greater during rainy monsoon. Houses, roads, educational institution, temples, mosques, and health centers are partly or wholly damaged due to river erosion.
Agriculture	Drought	Drought affecte lohagara upazial in each year. Crop of 7300 acres are directly or indirectly damaged due to drought.
Trees	Drought	Drought is seen in almost every year at Lohagara upazila. About 5100 fruits, forest and herbal trees including 7 nurseries can be affected due to heat wave that is resulted from drought. Intensity of drought is increasing day by day due to lossing navigation of rivers and canals. The extent of damage can be increased if this trend continues.



Sectors	Hazards	Descriptions
Agriculture	Water logging	Water logging occurs as the upazila is close to Tankabati river and huge onrush of hilly water during raining monsoon. As a result about 5200 acres crop are directly or indirectly affected.
Fishery	Water logging	As the upazila is close to Tankabati river and huge onrush of hilly water occurs during rainy monsoon. Fishes of about 533 acres are swept away due to this disaster and as a result, peoples lives become very hard.

### 3<sup>rd</sup> Chapter: Disaster Risk Reduction

#### 3.1 Identification of Causes of Risks:

Description of risk	Causes		
	Immediate	Secondary	Final
<p><b>Sector: Agriculture</b>  <b>Hazard: Flood</b>                      Flood occurs every year in this upazila. Every union is affected by flood. The intensity of flood increase during rainy monsoon. About 15400 acres crop can be directly or indirectly affected by flood in this upazila.</p>	<ul style="list-style-type: none"> <li>➤ Not to make quick disposal of water</li> <li>➤ Not to make available the massage of flood in time.</li> <li>➤ Due to intrusion of saline water to crop land directly.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Intrusion of saline water due to Joar and Bhatta.</li> <li>➤ No regulatory system for control of saline water intrusion.</li> <li>➤ Non availability of required number of Sluice gates in conjunction of rivers and canals.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of appropriate actions of WDB.</li> <li>➤ Donors support is less in contrast to need.</li> <li>➤ Unawareness of people.</li> </ul>
<p><b>Sector: Trees</b>  <b>Hazard: Flood</b>                      Flood is seen in almost every year at Lohagar upazila. About 5100 fruits, forest and herabal trees including 7 nurseries can be affected due to heat wave resulted from flood. Intensity of flood is increasing day by day due to lossong navigation of rivers nad canals. The extent of damage can be increased if this trend continues.</p>	<ul style="list-style-type: none"> <li>→ Trees Water can be taken to be heard.</li> <li>→ Not to go to down to the water.</li> <li>→ In the dam was not Beri</li> <li>→ Trees to be planted in low</li> </ul>	<ul style="list-style-type: none"> <li>→ The flood tolerant trees do not other species.</li> <li>→ The next flood to protect trees in the training in a about</li> </ul>	<ul style="list-style-type: none"> <li>→ How to get to the canal navigability and shots to protect, not to.</li> <li>→ There is a lack of government policy trees</li> </ul>
<p><b>Sector: Livestock</b>  <b>Hazard: Flood</b>                      About 345 cows, 430 goats, 2100 Chicken, 400 ducks, 30 sheep, 22 buffolows of Chunati union can be swept away if a flood hits this upazila. As a result, many families can be affected. About 290 cows,332 goats, 2200</p>	<ul style="list-style-type: none"> <li>→ For domestic animals not to have the high refuge</li> <li>→ shots of domestic animals in the abode is not high</li> <li>→ The water in the discharging system</li> </ul>	<ul style="list-style-type: none"> <li>→ There is a lack of awareness of the people</li> </ul>	<ul style="list-style-type: none"> <li>→ From the flood to protect resources on animals in the training</li> </ul>

<p>Chicken, 260 ducks, 19 Sheep and 14 buffalows of Adunagar union can be swept away . As a result many families can be affected. About 204 cows, 178 goats, 2500 Chicken, 250 ducks, and 22 buffalows of Charamba union can be swept away. As a result many families can be affected. About 200 cows, 170 goats, 2600 Chicken, 350 ducks, 28 sheep and 10 buffalows of Aimirabad union can be swept away. As a result many families can be affected. About 100 cows, 150 goats, 1000 Chicken, 100 ducks, 25 sheep and 20 buffalows of Lohagara Sadar union can be swept away. As a result, many families can be affected. About 230 cows, 250 goats, 2300 Chicken, 242 ducks, 30 sheep and 25 buffalows of Barahatia union can be swept away. As a result, many families can be affected. About 400 cows, 550 goats, 1540 Chicken, 500 ducks, and 22 buffalows of Kalauzan union can be swept away. As a result, many families can be affected. About 230 cows, 450 goats, 2300 Chicken, 220 ducks, and 32 buffalows of Putibila union can be swept away. As a result, many families can be affected. About 238 cows, 280 goats, 1950 Chicken, 370 ducks, and 25 buffalows of Padua union can be swept away. As a result, many families can be affected.</p>			
<p><b>Sector: Health</b>  <b>Hazard: Flood</b>  Waterborn diseases spread and affect people to a greater extent if a flood hits this upazila.</p>	<ul style="list-style-type: none"> <li>➤ People are not aware about health.</li> <li>➤ Locations of tube wells are in low-lying spots.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Placing garbage to everywhere.</li> <li>➤ Lack of awareness about diseases.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Increase standard of health services.</li> <li>➤ Non availability of health centers and doctors.</li> </ul>

Four health centers are directly or indirectly affected by flood.		➤ Lack of awareness about post disaster responsibilities	
<b>Sector: Fisheries</b> <b>Hazard: Flood</b> Fishes of about 673 are swept away if a flood like 1991 occurs in this upazila and about 1450 fisherman can be directly or indirectly affected.	<ul style="list-style-type: none"> <li>➤ Pond location is in low-lying areas.</li> <li>➤ Bank of ponds are low.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Ponds are not built on high land.</li> <li>➤ Lack of awareness of Fisherman.</li> <li>➤ No provision of netting around ponds.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Banks of ponds are not high.</li> <li>➤ Not to provide training to Fisherman by Govt. and non Government.</li> </ul>
<b>Sector: Infrastructure.</b> <b>Hazard: Flood</b> Flood damages most houses in this upazila. Particularlry Kacha houses are damaged in larger numbers. There are about 40904 families of Kacha houses and 17249 families of Pucca houses. Roads, educational institutions, temples, mazjids, and healyj cenyers are partly damaged if flood hits.	<ul style="list-style-type: none"> <li>➤ Unplanned building of educational institution.</li> <li>➤ Rural homes are made of Bamboos so beaks easily.</li> <li>➤ Not to build roads strongly.</li> <li>➤ Not to build culverts strongly.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Due to low-lying locations of educational and religious Institutions.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Due to lack of formulating risk reducing infrastructure Policies.</li> <li>➤ Building materials are not cyclone resilient.</li> </ul>
<b>Sector: Agriculture</b> <b>Hazard: Onrush of hilly water</b> Onrush of hilly water occurs in every year in this upazila. Extensive damage is caused by this disaster. Crop of about 8900 acres are affected in each year if a flood occurs.	<ul style="list-style-type: none"> <li>➤ Not to make quick disposal of water</li> <li>➤ Not to make available the massage of flood in time.</li> <li>➤ Due to intrusion of saline water to crop land directly.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Intrusion of saline water due to Joar and Bhatta.</li> <li>➤ No regulatory system for control of saline water intrusion.</li> <li>➤ Non availability of required number of Sluice gates in conjunction of rivers and canals.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of appropriate actions of WDB.</li> <li>➤ Donors support is less in contrast to need.</li> <li>➤ Unawareness of people.</li> </ul>
<b>Sector: Fisheries</b> <b>Hazard: Onrush of hilly water</b> Onrush of hilly water occurs in every year in this upazila. About 2120 fisherman families are directly or indirectly affected by onrush of hilly water.	<ul style="list-style-type: none"> <li>➤ Low height of ponds embankment.</li> <li>➤ Less awareness of people.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Less awareness of people.</li> <li>➤ Non provision of netting above ponds.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Non locating of ponds away from hills.</li> <li>➤ Low depth of ponds.</li> </ul>
<b>Sector: Infrastructure</b>	1. The houses are	1. People living in the hills are	1. persons living in rainy

<p><b>Hazard: Onrush of hilly water</b> Onrush of hilly water damages infrastructures in each year. Particularly this affects Kacha houses. Apart from this it also partly affect roads, educational institutions, temples, mosques, and health centers.</p>	<p>destroyed; they are not strongly made it.</p>	<p>not aware .</p>	<p>season on the mountain do not have to be transferred to 2. The local administration in this regard in the active not</p>
<p><b>Sector: Agriculture</b> <b>Hazard: Tornado</b> Tornado damages huge crops every year. Crop of 6500 acres are damaged due to tornado in each year.</p>	<ul style="list-style-type: none"> <li>➤ Affect of depression to coastal areas.</li> <li>➤ Increase of temperature in atmosphere.</li> <li>➤ Affect of green houses.</li> <li>➤ Climatic Change.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Absence of sufficient trees.</li> <li>➤ Having no plan for social afforestation.</li> <li>➤ Due to black fumes of mills and transports.</li> <li>➤ Not getting advance forecasting of tornadoes.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Poor attention of Agricultural department.</li> <li>➤ Absence of Agricultural research centers.</li> <li>➤ Lack of adequate training of farmers.</li> <li>➤ Lack of effective government policies about Hazard and risks.</li> </ul>
<p><b>Sector: Agriculture</b> <b>Hazard: River Erosion</b> There are Tankabati river &amp; Dalu khal in this Upazila. River erosion is seen About 1200-1800 acres crop are damaged due to river erosion.</p>	<ul style="list-style-type: none"> <li>➤ Weak embankment.</li> <li>➤ Increase of water pressure in rivers.</li> <li>➤ Non existence of trees on sides of embankments.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Losing / decreasing navigability.</li> <li>➤ Decrease of depth by siltation.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of cooperation of WDB.</li> <li>➤ Not to take any initiatives to prevent river erosion.</li> </ul>
<p><b>Sector: Fisheries</b> <b>Hazard: River Erosion</b> River erosion is occurs in each year at Lohagar upazila. Extensive damage is caused if river erosion is occurs. About 1180 fishermen of 12500 families are directly or indirectly affected by river erosion.</p>	<ul style="list-style-type: none"> <li>➤ Due to presence of ponds close to rivers.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Not to make Embankment strong.</li> <li>➤ Not aware of fisherman in this respect.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of proper attention of Fishery Departments.</li> <li>➤ Not taking any government initiatives to prevent river erosion.</li> </ul>
<p><b>Sector: Infrastructure</b> <b>Hazard: River Erosion</b> River erosion is seen in greater during rainy</p>	<p>→Most of the institutions in May →Not to have the block</p>	<p>→Institutions to be built in a planned manner not →institutions do not have the</p>	<p>→Transparency in the construction organization →How to create disaster</p>

monsoon. Houses, roads, educational institution, temples, mosques, and health centers are partly or wholly damaged due to river erosion.	adjoining the river.	water discharging	tolerant institutions.
<b>Sector: Agriculture</b> <b>Hazard: Drought</b> Drought affecte lohagara upazial in each year. Crop of 7300 acres are directly or indirectly damaged due to drought.	<ul style="list-style-type: none"> <li>➤ Due to climatic Change</li> <li>➤ Not timely raining.</li> <li>➤ Absence of sufficient large trees.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Absence of provision of retaining water in rivers and canals.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of appropriate attention of DAE.</li> <li>➤ Not inventing drought resistance crops.</li> </ul>
<b>Sector: Trees</b> <b>Hazard: Drought</b> Drought is seen in almost every year at Lohagar upazila. About 5100 fruits, forest and herabal trees including 7 nurseries can be affected due to heat wave resulted from drought. Intensity of drought is increasing day by day due to lossong navigation of rivers nad canals. The extent of damage can be increased if this trend continues.	<ul style="list-style-type: none"> <li>→ Climate change</li> <li>→ Not enough in the deep tube-wells</li> <li>→ The more than tree-it is time to cut off</li> </ul>	<ul style="list-style-type: none"> <li>→ In the nursery pond beside the</li> <li>→ Seeds covered from direct sunlight to keep to not kept in.</li> <li>→ More than not more than trees are used</li> </ul>	<ul style="list-style-type: none"> <li>→ Forest Department of indefference</li> <li>→ The local administration about planted trees do not look at the</li> </ul>
<b>Sector: Agriculture</b> <b>Hazard: Water Logging</b> Water logging occures as the upazila is close to Tankabati river and huge onrush of hilly water during raining monsoon. As a result about 5200 acres crop are directly or indirectly affected.	<ul style="list-style-type: none"> <li>➤ As the crop land are in low lying areas.</li> <li>➤ Non avialiavlibility of speedy water discharging system.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Non – cultivation of of disaster resilient crop varieties.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Not taking appropriate actions by WDB.</li> <li>➤ Poor support from donors.</li> </ul>
<b>Sector: Fisheries</b> <b>Hazard: Water Logging</b> As the upazila is close to Tankabati river and huge onrush of hilly water occures during rainy monsoon. Fishes of about 533 acres are swept away due to this disaster and as a result, peoples lives become very hard.	<ul style="list-style-type: none"> <li>➤ As the fishermen are not aware about it.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Absence of required number of fish services centters.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Not to take proper scctions by district Fishery department.</li> </ul>

### 3.2 Identification of means to reduce risks

Hazards & Risks	Possible means to reduce risks		
	Short-term	Midterm	Long-term
<p><b>Sector: Agriculture</b>  <b>Hazard: Flood</b>            Flood occurs every year in this upazila. Every union is affected by flood. The intensity of flood increase during rainy monsoon. About 15400 acres crop can be directly or indirectly affected by flood in this upazila.</p>	<ul style="list-style-type: none"> <li>→ Make easy and speedy disposal of water.</li> <li>→ Reach warning message in time.</li> <li>→ Not to allow entering saline water directly to crop land.</li> </ul>	<ul style="list-style-type: none"> <li>→ Not to allow entering saline water directly to crop land.</li> <li>→ Control intrusion of saline water.</li> <li>→ Install sluice gate at the junction of rivers and canals.</li> </ul>	<ul style="list-style-type: none"> <li>→ Take appropriate steps by WDB.</li> <li>→ Increase donor's cooperation &amp; support as per need.</li> <li>→ Make people aware.</li> </ul>
<p><b>Sector: Fisheries</b>  <b>Hazard: Flood</b>            Fishes of about 673 are swept away if a flood like 1991 occurs in this upazila and about 1450 fisherman can be directly or indirectly affected.</p>	<ul style="list-style-type: none"> <li>→ Ponds are located at low-lying areas.</li> <li>→ Elevate banks of ponds.</li> </ul>	<ul style="list-style-type: none"> <li>→ Establish ponds to high land.</li> <li>→ Make farmers aware.</li> <li>→ Netting above banks.</li> </ul>	<ul style="list-style-type: none"> <li>→ Elevate banks.</li> <li>→ Train fisherman by GO/NGOs.</li> </ul>
<p><b>Sector: Infrastructure.</b>  <b>Hazard: Flood</b>            Flood damages most houses in this upazila. Particularly Kacha houses are damaged in larger numbers. There are about 40904 families of Kacha houses and 17249 families of Pucca houses. Roads, educational institutions, temples, mazjids, and health centers are partly damaged if flood hits.</p>	<ul style="list-style-type: none"> <li>→ Build institutions by planned way.</li> <li>→ Rural homes must be made in such a way that it is not destroyed easily.</li> <li>→ Roads must be made strongly.</li> <li>→ Culverts must be made strongly.</li> </ul>	<ul style="list-style-type: none"> <li>→ Educational and religious institutions should not keep Kacha and made in low lying spots.</li> </ul>	<ul style="list-style-type: none"> <li>→ Make policies for risk and hazard free Infrastructure. Building materials should be disaster resilient.</li> </ul>
<p><b>Sector: Trees</b>  <b>Hazard: Flood</b>            Flood is seen in almost every year at Lohagar upazila. About 5100 fruits, forest and herabal trees including 7 nurseries can be affected due to heat wave resulted from flood.</p>	<ul style="list-style-type: none"> <li>→ Make easy and speedy disposal of water.</li> <li>→ The flood waters reaching on time message alert</li> <li>→ Rain suddenly submerged in water not to go to centers for</li> </ul>	<ul style="list-style-type: none"> <li>→ Digging river and Canal.</li> <li>→ It is assumed that the next step in the About.</li> <li>→ The sediment in the river and the canal to increase navigability</li> </ul>	<ul style="list-style-type: none"> <li>→ Bhorer kagaz was reelected by river and canal. taken in a digging</li> <li>→ Government/has been trained to work owners</li> </ul>

Hazards & Risks	Possible means to reduce risks		
	Short-term	Midterm	Long-term
Intensity of flood is increasing day by day due to loss of navigation of rivers and canals. The extent of damage can be increased if this trend continues.	land to be discharging → In a planned way to nursery.	→ Increase in trees.	
<b>Sector: Health</b> <b>Hazard: Flood</b> Waterborne diseases spread and affect people to a greater extent if a flood hits this upazila. Four health centers are directly or indirectly affected by flood.	→ Make people aware about health. → Not to install tube wells at low-lying spots.	→ Not to dispose garbage here and there. → Keep people aware about diseases. → Know about post flood responsibilities.	→ Increase quality of health services. → Establish required number of health centers and keep sufficient doctors.
<b>Sector: Agriculture</b> <b>Hazard: Onrush of hilly water</b> Onrush of hilly water occurs in every year in this upazila. Extensive damage is caused by this disaster. Crop of about 8900 acres are affected in each year if a flood occurs.	→ People are not aware about 'Onrush of hilly water'. → People are not aware about Landslide. → Not to cut trees in large number from hills.	→ Cultivate water resistance crop varieties. → Farmers should have training. → Plant more and more trees to hills by GO & NGOs.	→ Cultivate water resistance crop varieties. → Impart training to farmers. → Strict execution and enforcement of Hill cutting policies.
<b>Sector: Fisheries</b> <b>Hazard: Onrush of hilly water</b> Onrush of hilly water occurs in every year in this upazila. About 2120 fisherman families are directly or indirectly affected by onrush of hilly water.	→ Raise height of ponds embankment. → Keep people aware.	→ Keep people aware. → Provide nets above banks.	→ Build ponds away from hills. → Increase depth of ponds.
<b>Sector: Agriculture</b> <b>Hazard: Tornado</b> Tornado damages huge crops every year. Crop of 6500 acres are damaged due to tornado in each year	➤ Affect of depression to coastal areas. ➤ Increase of temperature in atmosphere. ➤ Affect of green houses. ➤ Climatic Change.	➤ Absence of sufficient trees. ➤ Having no plan for social afforestation. ➤ Due to black fumes of mills and transports. ➤ Not getting advance	➤ Poor attention of Agricultural department. ➤ Absence of Agricultural research centers. ➤ Lack of adequate training of farmers. ➤ Lack of effective



Hazards & Risks	Possible means to reduce risks		
	Short-term	Midterm	Long-term
		forecasting of tornadoes.	government policies about Hazard and risks.
<b>Sector: Agriculture</b> <b>Hazard: River Erosion</b> There are Tankabati river & Dalu khal in this Upazila. River erosion is seen About 1200-1800 acres crop are damaged due to river erosion.	→ Strengthen embankments. → Repair embankments. → Plant more and more trees on banks of river.	→ Increase navigability. → Increase depth and keep clean the routes of rivers	→ Increase cooperation of WDB. → Not to take initiatives to protect river erosion.
<b>Sector: Fisheries</b> <b>Hazard: River Erosion</b> River erosion is occurs in each year at Lohagar upazila. Extensive damage is caused if river erosion is occurs. About 1180 fishermen of 12500 families are directly or indirectly affected by river erosion.	→ Not to build ponds close to rivers.	→ Build embankments strong. → Fisherman should be aware	→ Put more attention of fishery department. → Government initiatives must to prevent river erosion.
<b>Sector: Infrastructure</b> <b>Hazard: River Erosion</b> River erosion is seen in greater during rainy monsoon. Houses, roads, educational institution, temples, mosques, and health centers are partly or wholly damaged due to river erosion.	➤ Non existence of Embankments. ➤ Due to increase of water pressure in rivers during rainy monsoon.	➤ Losing / decreasing navigability. ➤ Decrease of depth of rivers by siltation.	➤ Not taking any government initiatives to prevent river erosion. ➤ Lack of good attention of WDB.
<b>Sector: Agriculture</b> <b>Hazard: Drought</b> Drought affecte lohagara upazial in each year. Crop of 7300 acres are directly or indirectly damaged due to drought.	→ Plant sapling newly. → Increase sufficient large trees.	→ Retain water in rivers and canals.	→ DAE should put more attention. → Invent drought resilient varieties of crops.
<b>Sector: Trees</b> <b>Hazard: Drought</b> Drought is seen in almost every year at Lohagar upazila. About 5100 fruits, forest and	→ A new saplings planted → There are sufficient to increase the big trees.	→For rivers and water to keep .	→ In the agriculture department advisors and agricultural advisors →drought tolerant varieties

Hazards & Risks	Possible means to reduce risks		
	Short-term	Midterm	Long-term
herabal trees including 7 nurseries can be affected due to heat wave resulted from drought. Intensity of drought is increasing day by day due to loss of navigation of rivers and canals. The extent of damage can be increased if this trend continues.			of rice.
<p><b>Sector: Agriculture</b>  <b>Hazard: Water Logging</b>  Water logging occurs as the upazila is close to Tankabati river and huge onrush of hilly water during raining monsoon. As a result about 5200 acres crop are directly or indirectly affected.</p>	<ul style="list-style-type: none"> <li>➤ As the crop land are in low lying areas.</li> <li>➤ Non availability of speedy water discharging system.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Non – cultivation of disaster resilient crop varieties.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Not taking appropriate actions by WDB.</li> <li>➤ Poor support from donors.</li> </ul>
<p><b>Sector: Fisheries</b>  <b>Hazard: Water Logging</b>  As the upazila is close to Tankabati river and huge onrush of hilly water occurs during rainy monsoon. Fishes of about 533 acres are swept away due to this disaster and as a result, people's lives become very hard.</p>	<ul style="list-style-type: none"> <li>➤ As the fishermen are not aware about it.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Absence of required number of fish services centers.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Not to take proper actions by district Fishery department.</li> </ul>

### 3.3 Development Plan of NGOs:

SL. No.	NGO	Activities on Disasters	Total number of beneficiaries	Duration of projects
1	PPS	Awareness & Micro-Credit	425 people	Long term- On going
2	Web	Health & Micro-Credit	456 people	Long term- On going
3	Grameen Shakti	Shoro Bidyet & Micro-Credit	438 people	Long term- On going
4	Mother foundation	& Micro-Credit	455 people	Long term- On going
5	WED	Health, Awareness & Micro-Credit small loans	315 people	Long term- On going
6	Blast	Legal help, Awareness & Micro-Credit	520 people	Long term- On going
7	CMES	& Micro-Credit	659 people	Long term- On going
8	Kodak	Education, Legal assistance, Awareness & Micro-Credit	490 people	Long term- On going
9	Hope	Education, & Micro-Credit Awareness	410 people	Long term- On going
10	BRACK	Development of women, education, Awareness, Risk reduction, Health & Micro-Credit	995 people	Long term- On going
11	Mamata	health-aid, Awareness & Micro-Credit	385 people	Long term- On going
12	Palli Progati	Awareness & Micro-Credit	755 people	Long term- On going
14	Grameen Bank	& Micro-Credit	620 people	5 year term
15	TMSS	& Micro-Credit	876 people	Long term- On going
16	Bangladesh Bureau	Education, Legal assistance, Awareness & Micro-Credit	490 people	3 Year term
17	World Vision	Education, & Micro-Credit Awareness	410 people	5 year term
18	Uddipon	Development of women, education, Awareness, Risk reduction, Health & Micro-Credit	995 people	Long term- On going
19	Karitas	Health-aid, Awareness & Micro-Credit	385 people	Long term- On going

### 3.4 Disaster Management Action Plan:

#### 3.4.1 Pre-preparation for Disaster

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implement.	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Comm. %	UP %	NGO %	
1	Identification of points for massage	96	96,000/--	Village, ward, up & purashava	Feb. to march	Through Co-ordination				All activities will make community people aware and motivate to work to reduce Disaster risks. As a result, the loss of lives and resources will be reduced. The activities will contribute to socio-economic and national development.
2	Group formation at Ward level	100	4,00,000 -	Pourashava & Up	Feb. to march					
3	Plan to circulate advance massage for flood/hazards at local level	96	2,45,000/-	Pourashava & Up	Feb. to march					
4	Circulate advance massage for Flood & disasters	96	48,000 -	Village, ward, up & purashava	Feb. to march					
5	Deliver Health Services	14	14,00,000 -	Village, ward, up & purashava	Feb. to march					
6	Conduct drill activities	18	2,70,000 -	Pourashava & Up	Feb. to march					
7	Repair of Shelters	4	40,00,000 -	Pourashava & Up	Feb. to march					
8	Impart training on Disasters & Primary Health	5	50,000 -	Pourashava & Up	Feb. to march					
9	Keep ready of Dry foods and Medicines	dry food - 4 tons Rice/Rice- 5 tons	5,50,000 -	Village, ward, up & purashava	Feb. to April					
10	Impart training to school students on Disasters	School 80	1,60,000 -	School	Feb. to April					

### 3.4.2 During Disasters:

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implement.	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
1	Distribution of Dry foods	4 tons dry food, rice, pulses 5 tons	5, 50, 000	Ward & Union	During disaster	Through Co-ordination				All activities will make community people aware and motivate to work to reduce Disaster risks. As a result, the loss of lives and resources will be reduced. The activities will contribute to socio-economic and national development.
2	Arrange provision for Pure drinking water & Sanitation	25, 000 Family	1, 00, 000	Ward & Union	During disaster					
3	Transfer affected people to shelters or Health centers	20, 000 family	1, 50, 000	Ward & Union	During disaster					
4	Take women, children, aged, ill and disabled to shelters and high land on emergency basis.	36	1, 20, 000 -	Ward & Union	During disaster					
5	Transfer affected people to proper medical service	-	-	Ward & Union	During disaster					
6	Ensure Social security	-	-	Ward & Union	During disaster					

### 3.4.3 After Disasters:

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
1	Rescue wounded People & provide primary treatment	96 t	3, 84, 000 -	All wards & unions of upazila	After disaster	Through Co-ordination				All activities will make community people aware and motivate to work to reduce Disaster risks. As a result, the loss of lives and resources will be reduced. The activities will contribute to socio-economic and national development.
2	Cleaning garbage immediately	96	4, 80, 000 -	In the disaster affected areas	After disaster					
3	Start early rescue operation	96 t	-	In the disaster affected areas	After disaster					
4	Emergency rehabilitation & support for livelihood	Families 11000	3, 50, 000/	In the disaster affected areas	After disaster					
5	Restablishment of social security	-	-	All wards & unions of upazila	After disaster					

### 3.4.4 in normal period/Risk reduction period:

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
1	Repair of embankment & construction	7.5 km	Per km 31 lac	1. Amirabad union 7 km. ward no. 3, 4, 5, 6 & 7 2. Charamba union 17 km. ward no. 2	Nov. to January	Through Co-ordination				All activities will make community people aware and motivate to work to reduce Disaster risks. As a result, the loss of lives and resources will be reduced. The activities will contribute to socio-economic and national development.
2	Road repairs & brick soling	Kacca road 51 km. & HBB road 45 km.	Per km. 15 lac	1. Barohatia union Kacca road 12 km. ward no. 3, 5 & 8 & HBB road 15 km. ward no. 1, 2, 3, 6, 7, 8 & 9 2. Kalowjan union Kacca road 10 km. ward no. 1, 3, 4, 5, 7 & 9 & HBB road 8 km. ward no. 2, 5, 6, 7, 8 & 9 3. Amirabad union Kacca road 8 km. ward no. 3, 4, 5, 6 & 8 HBB road 9 km. ward no. 1, 2, 3, 4, 6, 7 & 8. 4. Adhunagar union Kacca road 13 km & HBB road 15 km. ward no. 1, 2, 3, 4, 5, 6, 7 & 9 5. Putibila union Kacca road 11 km. ward no. 1, 2, 3, 4, 5, 6, 7 & 8 & HBB road 10 km. ward no. 2, 4, 5, 6, 7, 8 & 9 6. Cunati union Kacca	Nov. to January					

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
				road 8 km. ward no. 4, 6, 7 & 8 & HBB road 6 km. ward no. 3, 4, 5, 8. 7. Charamba union Kacca road 5 km. no. 2, 3, 4, 5, 6, 7 & 8 & HBB road 6 km. ward no. 2, 3, 4, 5 & 6. 8. Lohagara union Kacca road 5 km. no. 5, 6, 7 & 8 & HBB road 3 km. ward no. 4, 5 & 8 9. Padua union Kacca road 7 km. no. 1, 2, 3 & 4 & HBB road 9 km. ward no. 3, 4, 5, 6 & 7						
3	Emergency control room operation	-	-	Upazila & Union	After disaster					
4	Repair of shelter & reconstruction	4	Per 1.5 crore	Barohatia union, Amirabad union, Cunati union & Lohagara union	Nov. to January					
5	Exevation of Canal	28	Per 20 lac	1. Barohatia union no. of canal 1. ward no. 8 & 9. 2. Kalowjan union no. of canal 1. ward no. 4, 5, 6 & 7. 3. Amirabad union no. of canal 1. ward no.	Nov. to January					



Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
				3, 4, 5, 6, 7, 8 & 9. 4. Adhunagar union no. of canal 7. Ward no. 1, 2, 3, 4, 5, 6, 7, 8 & 9. 5. Padua union no. of canal 1. Ward no. 1, 7, 8 & 9. 6. Putibila union no. of canal 1. Ward no. 1, 4, 5 & 6. 7. Cunati union no. of canal 1. Ward no. 7 & 8. 8. Charamba union no. of canal 1. Ward no. 4, 7 & 8.						
6	Construction of Culvert	124	Per 1 lac 15 thd. tk.	1. Barohatia union no. of culvert 22. Ward no. 1 to 9. 2. Kalowjan union no. of culvert 11. Ward no. 1 to 9. 3. Amirabad union no. of culvert 10. Ward no. 1 to 9. 4. Adhunagar union no. of culvert 9. ward no. 1 to 9. 5. Padua union no. of	Nov. to January Nov. to January					

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
				culvert 21 ward no. 1 to 9. 6. Putibila union no. of culvert 13 wards no. 1 to 9. 7. Cunati union no. of culvert 16 wards no. 1 to 9. 8. Charamba union no of culvert 12 wards no. 1 to 9. 9. Lohagara union no of culvert 10 wards no. 1 to 9.						
7	Construction of Soil killa	16	Per 80 lac	Construction of soil Killa all of unions of Lohagara Upazila	Nov. to January					
8	Sanitation	1200	Per 22000	All of unions of Lohagara upazila arrange sanitation.	Nov. to January					
9	Rain water	2000	90 thd.	Vill. ward & Up	June to Aug.					
10	Tree plantation	150 km.	Per km. 15 thd.	Vill. ward & Up	Aug. to Sept.					
11	Disaster resilient crops	20000	60 lac	Upazila	After disaster					
12	Impart training on maintenance of shelters	300 people	3 lac	Upazila	After disaster					

## 4<sup>th</sup> Chapter: Emergency Response

### 4.1 Emergency Operation Center (EOC)

An emergency operation center is organized during disasters at Lohagara Upazila. The center plays effective role in responding during disasters and coordinates with others. The center opens 24 hours. During this period the center collect data, examines data, inspect and manage resources.

The emergency operation center is organized in the office of PIO. In this center, a operation center, 1 control room and 1 communication cell operates. The name, designation and mobile no of responsible persons are exhibited in below table-

ka) Upazila:

List of Lohagara Upazila's Emergency Operation center

Sl. No	Name/Designation	Mamber	Mobile No
01	Advocate Farid Uddin Khan	President	01711-381128
02	Mohammad Fiznur Rahman	Vice-President	01851-826153
03	Uma Khan kafi	Member Secretary	01721-112198
04	Farida Aktar	Member	01736-402987
05	Mainuddin Sarkat	Member	01912-391430
06	Md. Nurul Islam	Member	01815-408184
07	Md. Rasel Chowdhury	Member	01717-023762
08	Md. Tasbirul Haque	Member	01712-717808

Kha) Center list of union emergency operation center committee in table below:

List of Lohagara union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Jeabul Hossain	Chairman	01819-351836
02	Mojaffar Ahmed	Member Secretary	01823-692424
03	Mizanur Rahman	Member	01819-179095
04	Md. Abdul Malek	Member	01817-200266
05	Rusel Khan	Member	01935-154199

List of Borohatia union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Muhammad Junaid	Chairman	01818-442619
02	Md. Abdul Malek	Member Secretary	01818-178661
03	Abdul Matlab	Member	01819-338150
04	ChadakurRahman	Member	01815-818377
05	Mariyum Begum	Member	01830-159361

List of Kalowjan union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Abdul Wahid	Chairman	01830-924092
02	Mojaffar Ahmed	Member Secretary	01822-564203
03	Khokon	Member	01715-922541
04	Sirajul Islam	Member	-
05	Al-Mamun	Member	01816-908821

List of Adhunagar union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Sirajul Islam	Chairman	01834307360
02	Mintu Talukdar	Member Secretary	01814-485988
03	Jannatul Ferdous	Member	01819-783092
04	Siraj Miah	Member	01819-941284
05	Shah Alam	Member	01815-421572

List of Putibia union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Faridul Alam	Chairman	01819-631198
02	Md. Nazim Uddin	Member Secretary	01818-457234
03	Md: Nargis Aktar	Member	-
04	Md. Gias Uddin	Member	01815-571991
05	Ferdous Begum	Member	-

List of Chunati union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Joyal Abedin	Chairman	01843-533616
02	Mohammad Farooq	Member Secretary	01814-093367
03	Shafi Akter	Member	
04	Jafar Ahmed	Member	01715-983466
05	Md. Habib	Member	01819-132580

#### List of Charamba union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Shadat Ullah	Chairman	01813-191909
02	Md. Morshed	Member Secretary	01831-220099
03	Rehena Akhtar	Member	01815-945267
04	Md. Kamal Ahmed	Member	01813-910763
05	Abdul Hafez	Member	01817-737179

#### List of Padua union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Liyakat Ali Chowdhury	Chairman	01819-362967
02	Mohammad Anwar Hossain	Member Secretary	01818-575836
03	Fatema Begum	Member	01840-739434
04	Md Liakat Ali	Member	01818-117741
05	Sabbir Ahmed	Member	01819-833989

#### List of Amirabad union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Enamul Haque	Chairman	01711-353418
02	Mohammad Jasim Uddin	Member Secretary	01815-695942
03	Shaoli Das	Member	01823-606046
04	Shafiul Azam	Member	01819-964042
05	Md. Maulana Azizul Haque	Member	01819-624744

#### 4.1.1 Operate Emergency control room:

A control room is organized at the office of Upazial Nirbahi Officer during disasters. There is a register. Who, when will deliver their responsibilities is written in this register and what kind of message is received and what kind of message is send to whom is written in this register. A union based LGED MAL is kept in the room and various locations, roads for communication, khals and embankments etc is written in this MAP.

2 members of Upazila Disaster Management Committee (UzDMC) work in this control room by turns after just after occurrence of disasters and a police also present in this center. Responsible 3 people deliver their duties by turns and a 3 member voluntary team work 24 hours by turns. Full time contact is maintained through phone or mobile with Unions and district.

Just after the disasters, affected areas are identified in this MAP. It may be mentioned here that control room lacks some instrument like large torch light, gumboot, life jacket and raincoat etc.

## 4.2 Plan during disaster:

Sl no	Activities	Unit	Target	When to do	Who do	Who to do	How to do	Communication
1	Keep ready to volunteers	People	9 Union in 1800	Feb. to March	UP Chairman	UzDM C & NGO & Public	Impart Training & material supply	Representative of Union & Upazila disaster management community
2	Micking of warning	People Number	100 percent Union 9	Rescue of warning messages	Responsible volunteers	Rural police & Rural people	Through siren & dream	UDMC responsible representative
3	Ready to Boat/, Car/ Van	Number	9 Union 80	Before disaster	Responsible person of Union Parishod	UP member	Preserve phone no of boat, car & van drivers	UDMC responsible representative
4	Conduct rescue operation	People Number	135 people were	Before disaster	Responsible person of Union	People of Non-govt. organization & community	Through selecting few volunteers who are capable of rescue activities & using life saving devices	UzDMC & UDMC responsible representative
5	Primary Treatment	Number	99 the Union	Before disaster	Responsible person of Union	People of Non-govt. organization & community	Keep communication with health center	Responsible person of Upazila health center
6	Collection of life saving medicine & keep prepared	Medicine	1450 people	Pre-disaster	Responsible person of UDMC	People of Non-govt. organization & community	Keep communication with health center	Communication with UzDMC & UDMC to the responsible person
7	Dry food,/pulse/rice & house building materials	Taking only dry food total 9 tons			Responsible person of UDMC	local business community and non-governmental organizations people	Through collecting phone no & discation with community people & agencies that capable of provides foods	Communication with UzDMC & UDMC to the responsible person
8	Vaccine of domestic animal	Medicine (people)	1200	Pre-disaster & after disaster	Responsible person of Union	People of Community	Through discation with union responsible worker	Responsible agencies of UDMC & Upazila livestock officer
9	Shelter repairs	Number	18	Pre-disaster	Responsible person of Union	People of Non-govt. organization & community	Solve problems through informing responsible officers by visiting shelters directly	Communication with UzDMC & UDMC to the responsible person
10	Organize reharshell	room	9	Pre-disaster	Responsible person of Union	People of Non-govt. organization & community	Volunteers reharshell in more vulnerable areas	Communication with UzDMC & UDMC to the responsible person
11	operate emergency room	People	9 Union in 1800	Pre-disaster	-	-	Preserve information for emergency room	Communication of district disaster management community

#### **4.2.1 Keep volunteers ready:**

- Organize groups with leadership of UP members at ward level.
- Circulate information and warning message through volunteers
- Organize training for members of volunteers on different responsibilities like signaling, messaging, rescue, disposal and shelter management and risk reduction.

#### **4.2.2 Circulate warning message:**

- Ward UP members will circulate the warning message to every home of all wards as his own responsibilities.
- Circulation of 5 no danger warning should be done through Miking at least once in one hour.

#### **4.2.3 Approach of removing community people**

- Ward UP member will start removing people to shelters just after getting message of taking shelter to shelter centers through radio and TV.
- Miking should be started to take shelter of high risk people immediately after announcement of 8 no warning and volunteers will put pressure of taking shelter by moving house to house. They should be moved if necessary. People having risk must keep informed about their respective shelter.

#### **4.2.4 Rescue & Primary Medical service:**

- This responsibility should be entrusted to the members of District and Upazila Disaster Management Committee of high risk areas.
- A permanent fund should be created under the supervision of District and Upazila Disaster Management Committee for rescue operation.
- Conduct and establish temporary rescue camp.
- Send ill person, aged, children and delivering pregnant women urgently to hospitals.
- UP members with the help of volunteers will put dead animals into grave and dead men to burials.

#### **4.2.5 Maintenance of Shelter centers:**

- Keep cyclone centers ready after doing necessary repair before start of Disaster monsoon.
- Finalize the cyclone centers or safe centers during emergency.
- Ensure security of women, children, and disabled during disasters.
- Ensure safe drinking water and other services.

#### **4.2.6 Keep ready boats:**

- DDMC and UzDMC will update the list of engines driven boats and make a selection for use during disasters.
- Boats owners will provide assistance to them.

#### **4.2.7 Need assessment of damages and send report:**

- Send SOS for within 24 hours of disaster happening and 'D' form within 7 days to UP Chairman.
- UP Chairman will send compiled ward report to Chairmen of Upazila DMC within next 12 hours through UP secretary.

#### **4.2.8 Coordinate of relief activities:**

- UP Chairman will coordinate all relief activities of different relief agencies.
- Maintain a register about the relief materials arrived and inform control room about the operating areas and groups working in those areas.

#### **4.2.9 Collect & keep ready dry foods and life saving medicines:**

- Collect and procure dry foods like Chira, Muri from local hat/bazaars for prompt distribution.
- Collect rice, pulses, Ata, oil and house building materials like Tin,, Perek, and nylon ropes from local Bazars.
- Prepare a list of necessary medicines with the help of Health assistant and Family Planing Assistant.

#### **4.2.10 Treatment/ Vaccination of Domestic animals:**

- Keep ready medicines at Union Parishad Bhaban or Health centers from upazila livestock office.
- Members of Union disaster Mannagemnent Committee (UDMCs) should be imparted training on Animal treatment.
- Experienced men must be involved in Animal treatment activity during disasters.

#### **4.2.11 Organize drill:**

- Drills should be organized on warning, forecasting, removal, recovery, and management of primary relief operation.
- Disasters drills should be organized periodically in cyclone/ flood prone areas.
- Examine the strength of preparation through drills on April and May of each year with vulnerable communities.
- During drills focus should be given to move ill, disables, lactating mothers/ pregnant women and children towards shelters.
- Drills should be conducted in areas risky for disasters on how move people to shelters.

#### **4.2.12 Conduction of emergency control room:**

- Emergency control rooms must be organized at unions/upazila/district offices just after disaster occurrence. Presence of Gram police members and 3/4 volunteers must be ensured by turns in these centers.
- Secretary of union Parishad and responsible person will be in duties of EOCs. Each team should consist of at least 3 members and 3 volunteers will deliver duties at EOC by turns. UP secretary will supervise activities all the time.

#### **4.2.13 Shelters / safe places -**

- Places which are safe from inundation during floods and away from river erosion can be used as Shelters.

Selected shelters, local schools and colleges, government and non-governmnet institutions, high road, and embankments can be used as shelters.



### 4.3 List and description of Upazila safe places-

#### List of safe places during disasters

Name of shelter center	Name	Name Union	power
School cum shelter	Borohatia Govt. Pri. School	Borohatia	Almost 1000 people
	Borphatia Govt. Pri. School	Borohatia	About 800 people
	Amirabad Govt. Pri. School	Amirabad	Almost 900 people
	Shukchari Govt. Pri. School	Amirabad	around 1100 people
	South Amirabad Govt. Pri. School	Amirabad	Almost 950 people
	Mallik Choya Govt. Pri. School	Amirabad	Almost 1150 people
	Podua High School	Podua	Almost 1200 people
	Fariyadi Govt. Pri. School	Podua	Almost 1000 people
	Podua Govt. Pri. School	Podua	Almost 850 people
	Dhalibila Govt. Pri. School	Charamba	People ৯০০
	Charamba Govt. Pri. School	Charamba	Almost 850 people
	Maizbill Govt. Pri. School	Charamba	Almost 1000 people
	Madham Kalowjan Govt. Pri. School	Kalowjan	Almost 900 people
	Azad Govt. Pri. School	Kalowjan	Almost 2100 people
	West Kalowjan Govt. Pri. School	Kalowjan	Get people 1950
	Niju Govt. Pri. School	Kalowjan	Almost 1600 people
	Abdul Hakim Govt. Pri. School	Chunti	Almost 1300 people
	Chunti Govt. Pri. School	Chunti	Almost 900 people
	Firingi Govt. Pri. School	Chunti	Almost 2100 people
	Union Parishad	Putibila Govt. Pri. School	Putibila
Gorosthan Govt. Pri. School		Putibila	Almost 1600 people
Adhunagar Govt. Pri. School		Adhunagar	Almost 1000 people
Harina Ferryghat region Govt. Pri. School		Adhunagar	Almost 900 people
Barohatia Parishad		Barohatia	Almost 900 people
Kalowjan Parishad		Kalowjan	Almost 1000 people
Adhunagar Parishad		Adhunagar	around 1100 people
Chunti Parishad		Chunti	Almost all of the 2000 people
Putibila Parishad		Putibila	Almost 950 people

#### 4.4 shelter center list of disaster management committee

Disaster management of shelters is an important part.

- During disaster save lives and property
- During disaster save livestock
- Shelter center and maintenance to make sure

Shelter Center	Name of shelter center	Responsible person	Mobile no.
School cum center	Chunti Govt. Pri. School	Ana Das	01715-024405
	Firingi Govt. Pri. School	Md. Ahsan Ullah	01813-147007
	Putibila Govt. Pri. School	Rahima Akter	01746-962500
	Gorasthan Govt. Pri. School	Milan Das	01619-821647
	Adhunagar Govt. Pri. School	Jaya Chakrabarti	01718-001455
	Harina Ferryghat region Govt. Pri. School	Alam Biswas	01814-895540
	Chunti Govt. Pri. School	Hasina Khatun	01813-669812
	Amirabad Govt. Pri. School	Manirul Islam	01914-774010
	Shukhchari Govt. Pri. School	Al-Amin	01716-112045
	South Amirabad Govt. Pri. School	Solayman Khandkar	01914-491420
	Mallik Govt. Pri. School	Sabina Yasmin	01914-244580
	Podua High School	Mohammad Ali	01835-319003
	Amirabad Govt. Pri. School	Nurul Islam	01819-808048
	South Amirabad Govt. Pri. School	Ahmed Syed	01770-205063
center shelter in	There is no shelter center	-	-
Building U P	Barohatia Parishad	Mohammad Joynal	01818-442619
	Kalowjan Parishad	Md. Abdul Wahid	01942-709054
	Adhunagar Parishad	Md. Sirajul Islam	01814-307360
	Chunti Parishad	Zainul Abedin	01819-631198

#### 4.5 List of Upazila resources:

Infrastructure / resources	Number	Choose	As a brief
shelters	-	Responsibilities are given instantly.	Almost all items are in damaged condition.  Cyclone shelters have been useless and unprotected.
Godawn	2		
Small megaphones	1 set		
Wireless	1		
Lifejackets	-		
Gumboats	-		
Sirens	1		
Helmets	-		
Bi-cycles	-		
Torch lights	-		
Apron	-		
Flagstand ( with flag)	-		
Engine driven boats	-		
Rescue tool boxes	-		
Wireless sets	1		
Strechers	-		
Mikes	1		
Radios	1		
First AID Box	1		
Tables	3		
Chairs	7		
Almirah	1		

## 4.6 Financing/Funding:

The income of union parishad comes from local tax, lease of hat/ bazaars and issuing of trade license of some specific business. But Union Pradshad has no authority to lease large hat/Bazars and Khall / Bills. But now government transfers 1% tax to union parishad from land registration.

(a) Own Resources: (Union Kar, rate and Fees).

Type of source	Annual income								
	Padua	Barohatia	Amirabad	Putibila	Chunati	Adhunagar	Charamba	Lohagara	Kalowjan
Annual residential house tax	100000	2, 00, 000/=	50, 000/=	1, 00, 000/=	3, 00, 000/=	2, 00, 000/=	45, 000/=	84, 000/=	40, 000/=
By the license and license issue fees for permits	-	1, 00, 000/	30, 000/=	-	95, 000/=	1, 00, 000/=	75, 000/=	278000	80, 000/=
For the lease (, Market, Ghat, ponds, etc)	144300	-	-	4, 98, 820/=	-	-	-	-	-
Income property	200000	2000000	-	-	-	-	-	-	-
General Fund of Union	-	-	-	10, 000/=	81, 936/=	-	-	-	-
Others	-	-	-	-	1, 30, 000/=	3, 00, 000/=	-	-	-

(b) Government donation:

Type of source	Annual income								
	Padua	Barohatia	Amirabad	Putibila	Chunati	Adhunagar	Charamba	Lohagara	Kalowjan
Allowance of Chairman & Mambers	4, 58, 520/=	3, 30, 000/=	5, 59, 200/=	2, 06, 000/=	1, 74, 300/=	3, 30, 000/=	1, 55, 000/=	3, 30, 000/=	3, 59, 600/=
Salary of secretary & other workers	5, 40, 000/=	5, 27, 300/=	6, 40, 000/=	5, 02, 000/=	3, 81, 852/=	5, 47, 000/=	3, 00, 600/=	2, 37, 792/=	3, 78, 600/=
Developing fund of reparing road/L.G. S.P	1, 50, 000/=	20, 00, 000/=	16, 50, 000/=	1, 00, 000/=	9, 00, 000/=	6, 00, 000/=	19, 00, 000/=	7, 00, 000/=	-
1% of Land	2, 00000/=	8:00, 000/=	9, 00000/=	4, 00000/=	21, 00, 000/=	6, 00, 000/=	6, 00, 000/=	22, 00, 000/=	5, 60, 000/=
Construction and home repair, the development Fund	-	3, 00, 000/=	-	1, 50, 000/=	3, 00, 000/=	-	-	-	-

c) Local Government:

Local government	Annual income								
	Padua	Barohatia	Amirabad	Putibila	Chunati	Adhunagar	Charamba	Lohagara	Kalowjan
Upazila Parishad	-	-	300000	-	2200000	7,00,000/=	-	-	-
District Council	-	-	-	-	-	-	-	-	-

(d) Developing non-govt. organization:

Non-govt developing organization	Annual income								
	Padua	Barohatia	Amirabad	Putibila	Chunati	Adhunagar	Charamba	Lohagara	Kalowjan
CDMP	-	-	-	-	-	-	-	-	-
ADP	-	-	4,00,000/=	-	3,50,000/=	-	450000	2000000	500000

#### 4.7 Assessment of Planning and Work Plan:

S.I No	Name	Designation	Member	Mobile No
1	Advocate Farid Uddin Khan	Upazila Chairman	Chairman	01711-381128
2	Mohammad Fiznur Rahman	Upazila Nirbahi Officer	Co-Chairman	01851-826153
3	Uma Khan kafi	Project Implementing Officer	Member Secretary	01721-112198
4	Farida Aktar	Upazila Engineer, LGED	Member	01736-402987
5	Mainuddin Sarkar	Upazila Health officer	Member	01912-391430
6	Md. Nurul Islam	Upazila Krishi Officer	Member	01815-408184
7	Md.RaselChowdhury	Cooperative officer	Member	01717-023762

## 5<sup>th</sup> Chapter: Rescue & Rehabilitation Plan

### 5.1 Assessment of damage

Ballots	Description
Agriculture	The amount of total firm land is 39545 acres. About 3722 acres Aman, Aus, Boro, and Robi crops and cultivation of Guava and vegetables can badly be affected by land slide similar to 1991 occurs of hits this upazila. About 13395 acres crop can be damaged each year by flood/tornado. Partly damage of 1350 acres crop is occurred by tornados. About 1540 aces crop can be damaged by draught. Soil fertility is decreasing day by day. About 300 acres river erosion acres crop can be affected if a draught. About 1030 acres crop can be affected if a major water logging in this upazila.
Fisheries	Fishes of about 250 ponds out of total 1273 are flown away if a flood hits the Upazila. Fishes of about 50-60 ponds out of 1273 ponds are washed away if a tornado/water logging/flood in the upazila. About 40-45 ponds ponds are affected by river erosion.
Health	People of about 17600 families can be affected with various diseases. 6500 families are being affected by draught/water logging/flood/land slide & river erosion etc. In addition, Water scarcity is found due to lowering of underground water of tube wells during dry monsoon.
Livelihoods	About 56200 farmers, 56820 day laborers lost employment due to flood. In addition, goods of 320 small and large shops are damaged. About 30820 day laborers lost their employment due to tornado. In addition drought takes away employment of 22500 day laborers and 56200 farmers. Besides 2650 fishermen directly or indirectly affected by drought/flood.
Sanitation	There are a total 68245 latrines at Lohagara upazila. 55320 are Pucca and 12925 are Kacha. About 12925 latrines can be affected if a flood occurs. About 12400 latrines can be affected by tornedo.
Infrastructure	About 60 KM Kacha road & HBB road 54 km. out of total 409 KM, inundation of 5900 homes out 68245 homes, 6 educational institutions out 85 , 8 Hatbazars out of 30 Hatbazars, 5900 Kacha homes out of 68245 homes and 28 culverts can be affected by floods, land Slide, tornedo & water logging.



## 5.2 Early Recovery:

### 5.2.1 Re-establishment of Administration

S.L No.	Name	Designation	Member	Mobile no
1	Advocate Farid Uddin Khan	Upazila Chairman	Chairman	01711-381128
2	Mohammad Fiznur Rahman	Upazila Nirbahi Officer	Co-Chairman	01851-826153
3	Uma Khan kafi	Project Implementing Officer	Member Secretary	01821-112198
4	Md. Abdul Kuddus	Upazila Education officer	Member	01679-786404
5	Prapod Deowan	Upazila Engineer, LGED	Member	01829-354483
6	Md. Gagi Dewon	Upazila Accounts Officer	Member	01718-331228

### 5.2.2 Cleaning of Garbage:

S.L No.	Name	Designation	Member	Mobile no
1	Advocate Farid Uddin Khan	Upazila Chairman	Chairman	01711-381128
2	Mohammad Fiznur Rahman	Upazila Nirbahi Officer	Co-Chairman	01851-826153
3	Uma Khan kafi	Project Implementing Officer	Member Secretary	01821-112198
4	Md. Abdul Kuddus	Upazila Education officer	Member	01679-786404
5	Prapod Deowan	Upazila Engineer, LGED	Member	01829-354483
6	Md. Gagi Dewon	Upazila Accounts Officer	Member	01718-331228
7	Md. Shahjahan	Thana in Charge	Member	01713-373650

### 5.2.3 Resumes of Public Services:

S.L No.	Name	Designation	Member	Mobile no
01	Advocate Farid Uddin Khan	Upazila Chairman	Chairman	01711-381128
02	Mohammad Fiznur Rahman	Upazila Nirbahi Officer	Co-Chairman	01851-826153
03	Uma Khan kafi	Project Implementing Officer	Member Secretary	01821-112198
04	Md. Abdul Kuddus	Upazila Education officer	Member	01679-786404
05	Prapod Deowan	Upazila Engineer, LGED	Member	01829-354483
06	Md. Gagi Dewon	Upazila Accounts Officer	Member	01718-331228
07	Md. Shahjahan	Thana in Charge	Member	01713-373650

#### 5.2.4 Emergency Livelihood Assistance:

S.L No.	Name	Designation	Member	
01	Advocate Farid Uddin Khan	Upazila Chairman	Chairman	01711-381128
02	Mohammad Fiznur Rahman	Upazila Nirbahi Officer	Co-Chairman	01851-826153
03	Uma Khan kafi	Project Implementing Officer	Member Secretary	01821-112198
04	Md. Abdul Kuddus	Upazila Education officer	Member	01679-786404
05	Prapod Deowan	Upazila Engineer, LGED	Member	01829-354483
06	Md. Gagi Dewon	Upazila Accounts Officer	Member	01718-331228
07	Anil Bikas Chakma	Upazila Food Controller	Member	01811-503201

## Annexure 1

### Checked List of Implementing Planning:

Sl no.	subject	YES/NO
1.	Call to start publicity of danger calling member of volunteers selected for miking of warning.	Yes
2.	Whether formation or organized or responsible person has been done to rescue people of vulnearable areas.	Yes
3.	Whether publicity has been made to keep dry foods and safe drinking water for 2/1 days beneath soil.	Yes
4.	Life jakets for the security of volunteers members have been supplied	Yes
5.	Necessary manpower have been deployed to keep control room runing till the time.	Yes
6.	Necessary security for union food godwon/relief godawn are in place.	Yes
7	Others	

- The checklist for the various faults can be seen in the field will be reconstructed to take steps.
- By Union Council or any source of fund volunteers from members of the team for special needs life jacket collection.

checklist

- Every year on April 15 the date/month of May between disaster Union Management Committee meeting the discussion below: fill in the following table: list the Executive Officer of the sub-district and will be sent to the district magistrate.

SL no.	subject	Signs of its proper place
1	Union food store there is an adequate amount of storage?	No
2	It is risky for the children vaccines/vaccine has been given?	Yes
3	1 and 6 when the mother and children have been fed on vitamin K?	Yes
4	Up clinic hospitals are presive in Salain?	Yes
5	The annual volunteer training has been given to members?	No
6	For the shelter to primary treatment is medicine equipment	No
7	As for the shelter to Rural Doctors are present in the area	No
8	There are tube-wells to center shelter in	No
9	To center shelter in doors and windows there are right	No
10	As for shelter to the center for alternative care taker?	Yes
11	Shelter for women to the center there is a separate system for	No
12	To prenancy center shelter in women elected to local midwife to care for There are area	No
13	cows and goats for the position of high places or has been determined for the emphasized reforesting	No
14	The responsibility of members of the party have been aware about	Yes
15	At shelter installations/latrin there is.	No
16	The weather broadcast and danger signal necessary for developed speaker microphone incredible pixel there is.	Yes
17	At least 2 or 1 days of taking only dry food, drinking water, to be alert to the people has been to?	Yes
18	Others	

## Annuxer 2

### List of Upazila Disaster Management Committee

Sl.no	Name/Designation	Member	Mobile No
1	Advocate, Farid Uddin Khan, Chairman	Chairman	01711-381128
2	Mohammad Fizzur Rahman, UNO	Co: Chairman	01851-826153
3	Nurul Absar, Vice-Chairman, Male	Member	01711-630704
4	Gulshan Ara Begum, Vice-Chairman, Female	Member	01818-442984
5	Farida Akhtar, Women's Affairs	Member	01736-402987
6	Md: Barkatul Alam, Upazila Fisheries officer	Member	01717-410538
7	Pratripada Dewan, Upazila Engineer	Member	01829-354483
8	Md. Mainuddin Sarker, Social Service Officer	Member	01912-391430
9	Md: Tanbirul Haque, Youth Development Officer	Member	01712-717808
10	Mohammad Iqbal Hossain, Public Health Engineer	Member	01820-231191
11	Abhijeet Bhattacharya Upazila statistics officer	Member	01815-345445
12	Md. Nurul Islam, Upazila secondary Education officer	Member	01815-508184
13	Md. Abdul Kuddus, Upazila primary Education officer	Member	01679-786404
14	Md. Gazi Solaiman, Account officer	Member	01718-331228
15	Abdullah Al Baker, BRDB,	Member	01814-545234
16	Md. Rasel Chowdhury, co-operative officer	Member	01717-023762
17	Kazi Rafikuzaman, Upazila Animals resource officer	Member	01716-290288
18	Md. Jahangir Alam, Upazila Agriculture Officer	Member	01194-077459
19	Anil Chakma, Upazila food control officer	Member	01811-503201
20	Al Mamun, Election Officer	Member	01714-669393
21	Chairman, Podua union	Member	01819-362919
22	Chairman, Charamba union	Member	01813-191909
23	Chairman, Amirabad union	Member	01711-353418
24	Chairman, Barohatia Union	Member	01818-442619
25	Chairman, Chunti union	Member	01819109959
26	Chairman, Adhunagar Union	Member	01814-307360
27	Chairman, Kalowjan Union	Member	01830-924092
28	Chairman, Putibila Union	Member	01819-631198
29	Chairman, Lohagara Union	Member	01819-351836
30	Mohammad Shahjahan Upazila station-in-charge	Member	01713-373650
31	Uma kafi Khan, Project Implementing officer	Member Secretary	01721-112198

### Annuxer 3

#### List of Volunteers of Lohagara Union

SI No	Name	Ward No.	Training	Mobile no.
01	Nasrin Begum	1	Micking of signal	01824-827310
02	Selina Begum	1	Rescue	01727-239068
03	Julufa Begum	3	Rescue assistance	01819-857974
04	Samsur Rahman	3	Warning assistance	01816-607065
05	Sohag Sheikh	3	Primary treatment	01915-203552
06	Bipul Chandra De	4	Primary treatment	01916-854644
07	Mohosena Begum	4	Relieve assistance	01915-836459
8	Ashit Roy	5	Shelter	01921-866327
9	Jasmine Aktar	5	Shelter assistance	-
10	Mohammad Zakaria	6	Relieve	01813 and 55835
11	Rahima Begum	7	Primary treatment	01815-379285
12	Moyna Khatun	7	Relieve	01822-766640
13	Al Amin	7	Micking of signal	01197-216620
14	Mahidul Islam	8	Shelter	01813-166730
15	Asma Aktar	9	Rescue	01814-267317
16	Hena Aktar	9	Shelter	01820-278847
17	Reshma Aktar	9	Rescue	01824-903130
18	Khadija Begum	8	Micking of signal	01813-267220

#### List of Volunteers of Kolawjan Union

SI No	Name	Ward No.	Training	Mobile no.
1	Sudhir Kanti Das	1	Micking of signal	01715-922541
2	Shambhu Nath	1	Rescue	01824-422914
3	Adhir Das	2	Rescue assistance	01714-282793
4	Parveen Akhtar	2	Warning assistance	01840-411375
5	Mohammad Yusuf Ali	3	Primary treatment	01814-186416
6	Md. Jamal Uddin	4	Primary treatment	01815-024942
7	Mohammad Ayub Ali	4	Relieve assistance	01830-118253
8	Azizur Rahman	5	Shelter	01716-735392
9	Mohan Nath	5	Shelter assistance	01813-814278
10	Md. Nur Ahmed	6	Relieve	01817-760234
11	Birandra Nath	6	Primary treatment	01822-906203
12	Santosh Kumar Barua	7	Relieve	01812-910296
13	Abdus shukkur	7	Micking of signal	01825-380163
14	Jasmine Akhtar	8	Shelter	01818-415503
15	Habibur Rahman	8	Rescue	01814-281875
16	Mokbul Hossain	9	Shelter	01824-457793
17	Anjan Barua	9	Rescue	01839-227168

### List of Volunteers of Borahatia Union

Sl No	Name	Ward No.	Training	Mobile no.
1	Jane Alam	01	Micking of signal	01812-684163
2	Zafar Ahmed	01	Rescue	01830-315604
3	Jahir Uddin	03	Rescue assistance	-
4	Md. Rafiq	03	Warning assistance	01817-237691
5	Muhammad Saifuddin	05	Primary treatment	01819-115832
6	Ershadul Haque	05	Primary treatment	01818-092344
7	Md. Khorshed	06	Relieve assistance	-
8	Ashraf Ali	06	Shelter	01715-064607
9	Jahangir	07	Shelter assistance	01812-093321
10	Nurul Alam	07	Relieve	-
11	Abchhar Uddin	08	Primary treatment	-
12	Mohammad Yusuf	08	Relieve	01819-093286
13	Nuruchafa	09	Micking of signal	01816-907623
14	Nasir Uddin	09	Shelter	-
15	Muhammad Ismail	02	Rescue	01819-023421

### List of Volunteers of Chunati Union

Sl No	Name	Ward No.	Training	Mobile no.
1	Sharmin Akhtar	01	Micking of signal	01825-967302
2	Julia Jahan	01	Rescue	01829-038980
3	Mahfuza Khatun	02	Rescue assistance	01815-267291
4	Zahidul Islam	02	Warning assistance	01823-764203
5	Parvin Sultana	03	Primary treatment	01837-378030
6	Taslima Begum	03	Primary treatment	01811-841853
7	Md. Farid	04	Relieve assistance	01815-596803
8	Milon Sarker	04	Shelter	01822-987331
9	Mousumi Begum	05	Shelter assistance	01835-551074
10	Baby Begum	05	Relieve	01839-626730
11	Alauddin	06	Primary treatment	01837-842670
12	Mohammad Hossain	06	Relieve	01829-588027
13	Shirin Akhtar	07	Micking of signal	01827-716560
14	Arun Das	07	Shelter	01815-596402
15	Shajid Khan	08	Rescue	01832-315124
16	Fatima Akhtar	08	Shelter	01832-709620
17	Selina Akhtar	09	Rescue	01827-202690
18	With	09	Micking of signal	01832-877983

### List of Volunteers of Putibila Union

SI No	Name	Ward No.	Training	Mobile no.
1	Ekramul Haque	01	Micking of signal	01556-534040
2	Lavly Das	01	Rescue	01823-606044
3	Md. Rhydeyan	02	Rescue assistance	-
4	Md. Younus	02	Warning assistance	01815-114711
5	Mojaffar Master	03	Primary treatment	01190-180112
6	Md. Bulbul	03	Primary treatment	01818-195683
7	Abdul Malek	04	Relieve assistance	01814-320775
8	Tajul Islam	04	Shelter	01818-553052
9	Abdul Kamal Uddin	05	Shelter assistance	01834-081592
10	Shamima Akhtar	05	Relieve	01803-108861
11	Haji Abul Hashem	06	Primary treatment	-
12	Muhammad Kawsar	06	Relieve	01823-093345
13	Shamsul Islam	07	Micking of signal	-
14	Nasir Uddin	07	Shelter	01821-093217
15	Zahed Hossain	08	Rescue	-

### List of Volunteers of Charamba Union

SI No	Name	Ward No.	Training	Mobile no.
1	Abul Hossain	01	Micking of signal	01824-352735
2	Mina Chowdhury	01	Rescue	01822-771840
3	Mehedi Hasan	02	Rescue assistance	01811-648066
4	Monira Begum	02	Warning assistance	01825-110943
5	Nurul abchhar	03	Primary treatment	01832-592637
6	Roxana Akhtar	03	Primary treatment	01852-937970
7	Mumtaj Begum	04	Relieve assistance	01820-791802
8	Abul Hassan	04	Shelter	01828-893712
9	Khadija Begum	05	Shelter assistance	01829-678022
10	Monir Hossain	05	Relieve	01823-378230
11	Faruk Hossain	06	Primary treatment	01832-529707
12	Sobhan Sarkar	06	Relieve	01816-258777
13	Masuma Begum	07	Micking of signal	01813-257837
14	Josna Akhtar	07	Shelter	01812-378382
15	Rina Parveen	08	Rescue	01825-773280
16	Md. Monir Khan	08	Shelter	01833-967021
17	Rina Akhtar	09	Rescue	01837-396203
18	Suja, Das	09	Micking of signal	01828-373960



### List of Volunteers of Adhunagar Union

Sl No	Name	Ward No.	Training	Mobile no.
1	Sirajul Islam	01	Micking of signal	01827-447901
2	Joynal Abedin	01	Rescue	
3	Ahmed Kabir	02	Rescue assistance	01818-235571
4	Jahangir Alam	02	Warning assistance	01713-023577
5	Mukunda Debasish	03	Primary treatment	
6	Shafiqur Rahman	03	Primary treatment	01813-093212
7	Md. Abu Bakkar	04	Relieve assistance	01815-093251
8	Md. Ismail	04	Shelter	
9	Md: Ilias	09	Shelter assistance	01817-092154
10	Md: Manzoor Alam	09	Relieve	01913-093265
11	Md: Nurul Islam	09	Primary treatment	
12	Md: Ashraf Mia	09	Relieve	01818-092144
13	Md: Jakaria	07	Micking of signal	01819-816902
14	Nazrul Islam	07	Shelter	
15	Nurul Islam	07	Rescue	

### List of Volunteers of Amirabad Union

Sl No	Name	Ward No.	Training	Mobile no.
1	Md. Azizul Haque	01	Micking of signal	01819-624744
2	Sirajul Islam	01	Rescue	01819-394401
3	Abul Hashem	02	Rescue assistance	01819-964042
4	, Shafiul Alam	02	Warning assistance	01816-762709
5	Abul Hashem	03	Primary treatment	01818-027904
6	Nizam Uddin	03	Primary treatment	01821-819798
7	Abdul Awal	04	Relieve assistance	01813-676921
8	Md: Rhydyan	04	Shelter	01683-733022
9	Mohammad Yusuf	09	Shelter assistance	01815-114711
10	Md. Tajul Islam	09	Relieve	01818-553052
11	Shamima Akhtar	09	Primary treatment	01831-088615
12	Nezamul Haque	09	Relieve	01833-480999
13	Mohammad Zahir	07	Micking of signal	01813-267140
14	Mohammad Mohiuddin	07	Shelter	-
15	Abdul Malek	07	Rescue	01859-408882
16	Shah Alam	07	Shelter	01858-378621

## Annexure 4

### List of Shelter centre Management Committee

Name of Shelter Centre	Responsible Person	Mobile No
Soil Killa, there is no Killa in this Upazila	-	-
Chunati Govt. Pri. School	Ana Das	01715-024405
Faringi Govt. Pri. School	Md, Ahasan Ullah	01813-147007
Putibila Govt. Pri. School	Rahima Akhter	01746-962500
Adhunagar Govt. Pri. School	Milon Das	01619-821647
North Harina Govt. Pri. School	Joya Das	01718-001455
Amirabad Govt. Pri. School	Alam Biswas	01814-895540
Shukchari Govt. Pri. School	Hasina Khatun	01813-669812
Aouth Amirabad Govt. Pri. School	Mamun Sarkar	01616-018545
Mollik Choya Govt. Pri. School	Monirul Islam	01914-774010

### High road or Embanlment:

Lohagara Upazila to take shelter in a high road or embenkment.

### Health Management Committee

List of health management committee in the table below:

Sl no	Name	Designation	Member	Mobile no.
01	Advocate Farid Uddin Khan	Upazila Chairman	President	01711-381128
02	Mohammad Fiznur Rahman	UNO	Vice-President	01851-826153
03	Uma Khan kafi	Project Implementing officer	Member Secretary	01721-112198
04	Dr. Shah Kibria	Upazila Health doctor	Member	-
05	Patipoda Dewan	Upazila Engineer	Member	01829-354483
06	Gazi Md. Solaiman	Accounts officer	Member	01718-331228
07	Md. Abdul Kuddus	Upaziula Education Officer	Member	01679-786404
08	Anil Bikash Chakma	Upazila Food controller	Member	01811-503201

## Fire Safety Committee:

Fire Safety Committee list of Lohagara Upazila in the table below

Name of Fire station	Name	Designation	Mobile no.
Lohagara fire service and civil defense	Advocate Farid Uddin Khan	Upazila Chairman	01711-381128
	Mohammad Fizzur Rahman	UNO	01851-826153
	Uma Khan kafi	Project Implementing officer	01721-112198
	Md. Shahadat Hossain	Station Officer, Lohagara	01831-540499

## Engine-driven:

Name Union/Ward	Responsible Person	Mobile no.
Borohatia Union	Md. Jamal	01839-151081
Kalowjan Union	Alamgir	01715-711101
Adhunagar Union	Mohammad Karim	01817-317622
Chunti Union	Abul Fazal	01818-201311
Charamba Union	Nasir Uddin	01812-115309
Amirabad Union	Asim Kumar Nath	01832-330205
Lohagara Union	Suja, Halder	01811-653103
Podua Union	Anwar Hossain	01930-126500
Putibila Union	Liyakat Ali	01831-745033

Local Business:

Name Union/Ward	The local businessman name	Mobile no.
Lohagara Union	Md. Emran	01821-938900
Lohagara Union	Mohammad Shafiq	01816-000729
Lohagara Union	Mohammad Jasim Uddin	01819-956144
Lohagara Union	Md. Kamal	01684-671712
Lohagara Union	Md. Nazim	01818 and 38651
Lohagara Union	Md: Hannan	01824-457676
Lohagara Union	Mohammad Kutub Uddin	01813-131251
Lohagara Union	Dr. Kazi Md: Mohiuddin	01819-624094
Lohagara Union	Md: Faisal	01829-057176
Lohagara Union	Md: Azam	01823-907356
Lohagara Union	Md: Abdul Abdullah Hadi	01835-959475
Lohagara Union	Paritosh Chowdhury	01822-733407
Lohagara Union	Md: Sohail	01823-907356
Lohagara Union	Md: Mafizur Rahman	01816-154736
Lohagara Union	Binay	01814-471684
Lohagara Union	Dilip kidney-bean	01829-057176

## Annuxere 5

At a glance of Lohagara Upazila:

Sl no..	Area	258.87 square km	Sl no..	Culvert	339
1	Union/Upozila	09 Union & 1 Pourashava	21	Eid prayer field	5
2	Mouza	40	22	Bank	19
3	Village	43	23	Post office	12
4	Family	73204	24	Club	25
5	Total people	372325 people	25	Hat/Bazar	26
6	Male	1,85,065 people	26	Graveyard	319
7	Female	1,87,760 people	27	Crematry	25
8	Educational institution	122	28	Deep pump	203
9	Govt. primary school	73	29	Non deep pump	68245
10	Reg.primary school	03	30	Hand pump	22
11	High School	23	31	Engine pump	-
12	Collage	03	32	River	3
13	Temple	57	33	Canel	31
14	Madrassa, dakhil fazil, Ebtadeye	19	34	Beel	-
15	Education rate	57.60%	35	Haore	-
16	Community clinic	5	36	Pond	1273
17	Dam	3	37	Pitch road	152.5 km
18	Sulice gate	2	38	Non Pitch road	109 km
19	Bridge	78	39	HBB road	148 km
20	Mosque	299	40	Field	32

## Annuxere 6

### Some important schdule of Bangladesh radio

Radio center	Broardcasted programme's Name	Broardcast time	Date
Dhaka -ka	Agri samachar	Morning 6.55-7.00	Everyday
	Sukher thikana	Morning 7.25-7.30	Everyday
	Shastoi sukher mul	Morning 11.30-12.00	Except friday
	Sonali fosol	Evening 06.05-6.35	Everyday
	Weather news	Evening 06.50- 7.00	Everyday
Chittagong	Agri kotha	Morning 6.55-07.00	Everyday
	Agri khamar	Evening 06.10-06.50	Everyday
	Sukhi songshar	Night 06.55-08.30	Everyday
Rajshahi	Khet khamar Somachar	Morning 06.55-07.10	Everyday
	Sobuj bangla	Evening 06.05-06.50	Everyday
Khulna	Health information	Morning 06.55-07.00	Everyday
	Chashabad	Evening 06.10-06.50	Everyday
Rongpur	Sukher thikana	Morning 07.25-07.30	Everyday
	Khet khamarqay	Evening 06.05-06.30	Everyday
Shylet	Ajker chashabad	Morning 06.55-07.00	Everyday
	Sukher thikana	Morning 07.25-07.30	Everyday
	Shemol shylet	Evening 06.05-06.25	Except friday
Thakurgoan	Kisan ma desh	Evening 06.05-05.25	Saturday,Monday,wednesday
Cox's bazar	Ajker agri	Afterno. on 03.07-03.25	Everyday
	Sonali prantor	Afterno. on 03.40-03.45	Tuesdat and thursday
Barisal	Agri kotha	Afterno. on 03.15-03.30	Execpt Saturday and Wednesday
	Choto Family	Afterno. on 03.35-03.50	Except Monday,wednesday,Friday
Rangama	Jiboner kotha	nAfternoon 01.40-01.55	Everyday
	Khamar bari	Afterno.on 03.05-03.15	Everyday

All the information has come through take interviews from All Unions, Upazila government office, and the Chairman of the Union Secretary, area of respectable personalities among some senior people of various levels.



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# Development of Disaster Management Plan at Upazila Level

Upazila: Lohagara, District: Chittagong

Plan Developed by-  
Upazila Disaster Management Committee,  
Lohagara, Chittagong

Co-ordinate by:



GHARONI

July 2014

Supported by  
Comprehensive Disaster Management Program  
(CDMP-2)

Ministry of Disaster Management & Relief



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