



Development of Disaster Management Plan at Upazila Level

Upazila: Sitakunda, District: Chittagong

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

Co-ordinated by:



GHARONI

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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: 13.09.2014



Signed

Alhaj S M Al Mamun

Chairman, Upazila Parishad, Sitakunda, Chittagong &
Chairman, Upazila Disaster Management Committee

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1.1 Background

Standing orders on Disasters (SOD) has clearly been stipulated to take initiative for formulating Disaster Management Action Plan at District, Upazila , Pourashava and City Corporation level incorporating Disaster Risk Reduction and contingency plan. Ministry of Disaster Management and Relief have taken this with serious focusing. The Disaster Management Plan will be developed for a period of 5 years.

Bangladesh is one of the most disaster prone countries in the world. In each and every year more or less all districts experiences different kinds of disasters. Among most vulnerable districts Chittagong is among them. Due to geographical location and impact of Climatic Change, almost every year this district has been affected by different natural disasters like Flood, excessive rain, Cyclone, tornado, tidal surge, intrusion of Salinity, Arsenicosis etc. As the district is most close to sea, there is huge risks for disasters like Cyclone, tidal surging, flood and all these in some way or other affect and damage this coastal areas.

Among all upazilas of Chittagong, Sitakundu upazila is more risky and vulnerable to disasters. The mighty Sandwip Channel has flown on the west side of this Upazila. There are nine Unions and one Pourashava under this Upazila. Each and every year one union or other has been severely affected by different natural disasters like flesh food, Tornado, salinity, toxic chemical waste or garbage that is stemmed out from flourishing giant Ship Braking industries along the offshore of this upazila, water stagnation, drought, tidal surging etc.

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 to local areas:

1.3.1 Geographical location of Sitakundu Upazla

The location of Sitakundu is between 23° 29' and 23 to 42 longitude and 90° to 59 and 91" "latitude. Mirarsharai upazila is on the north, Pahartali City gate in on the south, Sandwip Channel is on the west and Hathazari upazila is on the East. The upazila Head quarter is about 37 KM north of Chittagong city. The area is about 484.00 SQ, KM. The upazila has 120 villages, 65 Mouzas, 9 unions, and 1 Pourshava. Total road length is 532.75 KM. Among them 301.40 KM Kutcha, Semi pucca 73.55 KM and paved road is 157.78 KM. There is a large embankment (33 KM) stretching from south to north along East bank of Sandwip Channel.

Sources of Data: Md. Sayed , Office Assistant, Land office, Sitakundu

1.3.2 Areas

Formally the Chittagong district was created in 1966. Its areas are 528.98 Sq. KM having 14 Upazilas. The total areas of Sitakundu upazila is 483.96 Sq. KM. There are nine unions, 1 Pourashava 120 Villages and 65 Mouzas

List of Union wise Mouzas is appended below-

Sl. No	Union	Name of Mouzas
1	Sayadpur	Bagachatar, Bakhali, Zafarnagar, Alikulipur, Saidpur, Kadarkill
2	Baraiyardala	Baharpur, Mahalonga, Farhadpur, Uttar terial, Jungle Terial, Dharmapur, Kalabadia, Dhakkin Terial, Lalanagar
3	Pourashava	Mohadevpur, Sitakundu, Jungla sitakundu, Jungle Mahadevpur, Amirabad, Ayakubnagar
4	Muradpur	Uttar Rahamatnagar, Shah Mahmudnagar, Guptakhali, Guliakali, Golabadia
5	Barabkunda	Nadalia, Mandaritola, Jungla katgar, Katgar
6	Bansbaria	Charbansbaria, Boalia, Bansbaria
7	Kumia	Kumira, Maszidda, LOT 21 Chotta kumira, Bara Kunmira, Lot 8 kumia, Chotta Kumira
8	Sonaichari	Uttar Jungla, Sonaichari, Mada Sonaichari, Lot 66 Sonaichari, Sitalpur, Keshobpur,
9	Bhatiari	Nayakhali, Jaganabad, Khadimpara, Jungle Bhatiari, Bhatiari, Tulatali
10	Salimpur	Uttar Salimpur, Dhakkin Salimpur, Latifpur, Jungle latifpur, Jungle Salimpur

1.3.3 Population-

Total population of Sitakunda upazila are 620695. Among them male are 335583, female are 281059, Children 28355, old 13595, handicapped are 4053. Total households are 733125 and total voters are 264983. Population of different strata is showcased below-

Sl. No	Name of Unions	Male	Female	Children (0-15)	Old (60+)	Handicapped	Total population	Total Households	Total Voters
1	Saidpur	26500	26000	2550	1275	593	52500	9000	25500
2	Barairdala	22400	20800	2855	990	497	43200	5875	19005
3	Pourashava	32000	30000	3230	1720	310	62000	5950	32000
4	Muradpur	19981	20379	2980	1420	412	40360	5045	22500
5	Barabkundu	21000	19000	2760	1375	450	40000	5680	25000
6	Bansbaria	20000	19500	1650	1165	375	39500	8850	15995
7	Kumira	17360	16002	2920	1325	343	33362	5915	24900
8	Sonaichari	40000	30100	3140	1425	334	70100	12000	28000
9	Bhatiari	10834 2	72228	3320	1540	319	180570	7000	39046
10	Salimpur	28000	27050	2950	1360	420	56050	8000	33037
Total		335583	281059	28355	13595	4053	620695	73315	264983

Kha: Source: Upazila Statistical Officer, Sitakunda

1.4 Short description of Infrastructure

1.4.1 Infrastructure-

Ka) Embankment

There are embankment on Sandwip Channel and bank of Khal (rivers) to prevent flood and sea tidal water intrusion. The total length of the embankment is 30 K.M.

Number of union wise Embankment and location is appended below-

- There is an 8 KM embankment from Bsatnagar to Buyarhat under 9, 2, 3, 5, & 6 ward of Saidpur union. Height 15 feet.
- There is a 2.50 KM embankment (Port Connecting) from 9, 2,3,5,6 no ward of Jelypara to Ali Shaha Fakirhat at Salimpur union.

- There is a 5.00 KM embankment (Beribad) from 2,4,7,8 no ward from South west side of Kamal Chairman house to Akilpur at Bansbaria Union.
- There is a 2.00 KM embankment (Beribad) starting from 5,6,7,8 & 9 no ward Kazipar to Alekdia under Kumira union. Height 15 feet.
- There is a 2.00 KM embankment (Beribad) starting from Barigirchara 6 and 7 no ward to Damayarkhal under Bhatiari union. Height 10 feet.
- There is a 3.00 KM embankment (Beribad) starting from Maddam Sonaichari 1,2,3,4 wards to Uttar Goramara at Sonaichari union. Height 10 feet.
- There is a 5.00 KM embankment (Beribad) starting from Guptakhali Khal of 2, 3,4,5,6 and 9 no wards to Sikdarkhal at Barabkunda union. Height 12 feet.
- There is a 5.00 KM embankment (Beribad) starting from Guptakhali Khal of 1, 3, 4, and 5 no wards to Basatnagar under Muradpur union. Barabkunda union. Height 15 feet.

Kha) Sluice gate-

There are a total of 23 Sluice gates in Sitakundu Upazila. Unionwise detail is appended below-

- **Muradpur Union-** Total number of Sluice gates at Muradpur Union is 5. Those are –one on Guptakhali Khal(ward no-5), one on Rajakhali Khal (Ward no- 4), One on Muradpur Khal (Wrad no- 4) One on Guliakhali Khal (Ward no- 3), one on Chotto Kumira Khal (Ward no- 1).
- **Kumira Union:** Total sluice gate at Kumira union is 1. That is on Kumira Khal (Ward no- 8).
- **Saidpur Union:** Total numbers of Sluice gate at Saidpur Union are 3. One is on Bhakkhali Kahal (Ward no- 5), One is on Bakkhali khal (old) (ward no- 5), One is on Badarkhali Khal (ward no- 1)
- **Bansbaria Union:** Total numbers of Sluice gate at Bansbaria union are 4. One is on Hetalia Khal (ward no-9), one is on Korbalia Khal (Ward no-9), and one is on Sikdar Khal (ward no-4).
- **Barabkunda Union:** Total numbers of sluice gate in this union are 5. One is on Guptakhali Khal ((ward no-2), one is on Kaunia khal (ward no- 3), one is on Ulania Khal (ward no-6), one is on Nodialia Khal (ward no- 9) , one in on Tiachura khal (ward no-9)
- **Baraiadhala Union:** Total number of Sluice gate at Bariardala is only 1. It is on Nabalikka Chara (ward no-1).
- **Salimpur Union:** There are 4 number sluice gates at Salimpur Union. One is on Maddam Salimpur Bangalabazar Chara (ward no- 4), Another is on Uttar Salimpur Chaltatali Charra (wrad no-5), another is on Dakkin Salimpur Sonaichari Khal (Ward no-7), another is on Uttarjunapara Ramgovindacharra (ward no-1).

Ga) Bridge:

There are 116 bridges in this upazila. Number of Union wise bridges and their location is provided below-

Ref: Abdur Rahim, Sub Assistant Engineer, Sitakundu, Chittagong, Mobile: 01819-803393

- **Salimpur Union:** Total number of Bridge in this union are 6. One is on Kani Charra (ward no-9), another is on Dhaka- Chittagong highway (ward no-8), another is on same highway (ward no-6), another is near TB hospital on DT road (ward no-5), another is on Banglabazar (ward no-4), another is on Fouzdarhat Bangalbazar Charra (ward no-1). All bridges are in good condition and bridges on DT road are suitable for water drainages.
- **Bhatiari Union-** Total numbers of Bridges in this union are 8. There are 2 bridges on Kadamrasul Khal at ward no 1 and 3, 2 on Isamoti Khal at ward no 2 and 3, another is on Cheringa Khal at ward no 3 and 5, another is on Cheringa Khal at ward no 4, another is on Damai Khal at 6 no ward, another is at Damai Khal (ward no- 9). All bridges are in good condition.
- **Kumira Union:** Total bridges in this union are 8. One is on Kumira Khal (ward no- 6), another is on Bara Kumira Khal rail bridge (ward no- 7), another is on Bakmara Charra (ward no- 4), another 2 are on Masjiddachara (ward no-1), another bridge is on Uttar Masjidda chara (ward no- 2), another is on Chotta kumira Khal (ward no-4), another is on Baro kumira Khal (ward no-7). All bridges are in good condition and running well.
- **Sonaichari Union:** Total Bridge at Sonaichari union is 9. 1 is on Goramora Khal (Ward no-1 & 2), another bridge is on Napitchara (ward no-3&4), 1is another one is on Sonaichari khal (4 & 5), another one is on Ladurmar Chara (ward no-5 & 7), another one is on Morkunna Khal (ward no- 7&8), another one is on Gramoochara (ward no-3), another one is on Grammachara (ward no-7), another one is on Kadamrasul chara (9). All bridges are in good condition and usable. Some bridges are used for flood water discharging.
- **Bansbaria Union:** There are a total of 17 bridges at Bansbaria Union. 2 bridges on Hetalia Khal (ward no- 9), another one is on Karbalia Khal (ward no- 9), 2 bridges on Typatar Sarak (ward no-9), another bridge is on Boalia Khal (ward no-7), another one is on Habib Sarak (ward no-9), 4 bridges are on Dhaka Trunk Road (ward no-1) , another bridge is on D.T Road (ward no-3), 3 bridges on D.T. Road (ward no- 6), another 2 bridges on D.T. Road (ward no-8). All bridges are in good condition and usable.

- Barababkundu Union:** There are 19 bridges in this union. 1 is on Kanichara (ward no-1), 2 rail bridges on Kanichara (ward no-1), another one is on D.T Road (ward no- 1), 2 bridges on Guptakhali Khal (ward no-3) , another one is on Station Road (ward no-4), another one is on D.T. Road (ward no-7), another one is on D.T. Road near P.S.P (ward no-7), 2 bridges on Nodalia Khal (ward no-9) , another one is on Kaunia Khal(ward no-3) , another one is on Amir Khal (ward no-2) , 2 bridges on Guptakhali Khal (Ward no-2) , another one is on Kaunia Khal (ward no-3) , another one is on Amir Khal (ward no-3) , 2 bridges is on Guptakhali Khal, another 4 bridges on Kaunia Khal (ward no-3) .
- Bariradala Union:** There are 8 bridges in this union. 5 bridges on Nabalikka Charra (ward no-8), 2 bridges on BaharpurCharra (ward no-8), and another one is on Mararchra (ward no-2). All bridges are in good condition and usable. Bridges on D.T. Road have been discharging water.
- Saidpur Union:** There are 8 bridges in this union. 1 bridges is on Badarkhal, (ward no-1&2), 2 bridges are on Bakkhali Khal (wad no- 4), 1 bridges is on Basatnagar Khal (ward no-6) and another one is on Bakkhali Khal , 2 bridges are on Bakkhali Khal (ward no- 4 & 7), another one is on Badarkhali Khal (ward no-1). All bridges are in good condition and usable. Bridges on D.T. Road are suitable for flood water discharging.
- Muradpur Union:** There are 21 bridges in this union. 1 bridges is on Guptakhali Khal (ward no- 5), another 1 bridge is on Rajakhali Khal, 2 bridges are on Razakhali Khal (ward no-6), 3 bridges is on Muradpur Khal (Ward no-4), 2 bridges is on Muradpur Khal (ward no-4), 2 bridges are on Guliakhali Khal (ward no-3), 1 bridge is on Dokhali Khal (ward no-2), 2 bridges are on Pathallakhal (ward no-1), another 4 bridges on Megabati Charra (ward no-4), another 2 bridges are on Rahamatnagar Charra (Ward no-9), 3 bridges are on Dalipara Charra(ward no-8). 3 bridges are on Dallipara Charra (ward no-8), All bridges are in good condition and usable. Bridges on D.T. Road are suitable for flood water discharging.
- Pourashava:** There are 14 bridges in this union. 1 bridges is on SKM Charra (ward no-6) , 3 bridges are on D.T. Road (ward no-6), another bridge is on D. T. Road (ward no-3), another 2 bridges are on Edurpurcharra, another 2 bridges are on Nunacharra (ward no-1), another one is on Yakubnagar Charra, another one is on Mahadevpur Charra (ward no-4), another one is on Jungle Mahadevpur Charra, another one is on D.T. Road, another one is on Gurguricharra (ward no-5), another one is on BayshabariCharra. All bridges are in good condition and usable. Bridges on D.T. Road are suitable for flood water discharging.

GHA) Culverts:

There are 397 culvers at Sitakundu Upazila. Those culvers help speedy water flow of canals and Khals.

1. **Salimpur Union:** There are 25 culverts at Salimpur union. 2 are in Samadarpara (ward no-1), 2 in Jalapara Road (ward no-2), 3 in Elias Chowdhury Road (ward no-3), 3 in Kamar Ali Road (ward no-4), 2 in fouzdarhat Road (ward no-5), 5 in Amudar bari and Nur Ahamad bari Road under 6 no ward, 4 nos in post office road and Baribad Road, 2 in Fakirhat Road at 8 no ward, 2 at Nilambar talukdar Road at ward no-9.
2. **Bhatiari Union:** There are 28 culverts in this union. 4 at Kadamrasul gramma Road in ward no 1, 3 at Jahanabad gram Road in 2 no ward, 4 at Kadempara Road, Mahatab bibi road, & rail sarak road, 3 at Hasnabad sarak, naniar sarak, Purba hasnabad sarak at 4 no ward, 3 at Batiari gram Road, Jahanabad Road, Chairman gata Road under 5 no ward, 3 at Jungle Bhatiari Road, Bhatiari Gram Road, Kadam Rasul Road under 6 no ward, 2 at Tulatoli Road, Mizan nagar Road under 7 no ward, 5 at Imamamnagar road, loharbari road under 8 no ward, 1 at Bhatiari gram road and Maribari road under 9 no ward.
3. **Kumira union:** There are 28 culverts in this union. 3 culverts in Uttar Masjudda and Sham road at ward no-1, 5 culverts on Borhanuddin road, Beribad road, Nimtala road, Habib road at ward no-2, 4 culverts on Habib road, Dakurani road, Masjidda road at ward no- 3, 3 culverts on Gulum Mohammad road, Hamedia road, Mollahpara road at ward no- 4, 3 culverts on Kazipara road and Beribad road at ward no-5, 4 culverts on Kumira U.P.road, Ferrigat road, Bazarpara road under ward no-7, 4 culverts on Kumira ghat road, Gram road, Mazar road under ward no-8, 4 on Katp[ara road, Alekdia road, Dakkin kortpara road under ward no 9.
4. **Sonaichari Union:** There are 18 culverts in this union. 1 culverts on Hada Gazi road under ward no 2, 2 culverts on A. Mottalab road, Jama Majzid road under ward no 3, 7 culverts on Anwar Member Bari road, Haji Tayab road, Mottalab road under ward no 4, 2 culverts on Community Center road, Tripurapara road under ward no 5, 3 culverts on Sonaichari road, Railline road under ward no 6, 2 culverts on Hakim Chowdhury road, Mowlana road under ward no 7. 1 culvert on Giringibala road under ward no 9. There are no culverts at ward no 1 and 8.
5. **Bansbaria Union:** There are 37 culverts in this union. 6 culverts on Nurul Haque, Kamal Ahmad Chowdhury road, Toapara road, Kabir Zamadar road, Habib road under ward no1, 4 culverts on Kumadia road, Habib road under ward no 2, 4 culverts on Shankarpara road, Kala jama road, Ariful Alam road under ward no 3, 3 culverts on Chan Sikdar road and Baribad road under ward no 4, 3 culverts on Mukti Monowar road, Jelapara road under ward no 5, 4 culverts on Akilpur road and Bansbaria road under

ward no 6, 3 culverts on Boalia road, Boalia kul road, under ward no 7, 2 culverts on Mozaffar road under ward no 8, 8 culverts on Advocate Azizul Haque road, Samsidda road and Hospital road.

6. **Barabkundu Union:** There are 72 culverts in this union. 7 culverts on A. Wahab road, Niaz Mollahbari road, Atulna road under ward no 1, 6 culverts on Oli Ahmad road, Baribad road under ward no 2, 9 culverts on Mandaritolla C road, Amir Mohammad road, Mowlana Obaidul road under ward no 3, 9 culverts on Barabkundu bazaar road, Station road, Forest Office road, Olinagar road under ward 4, 9 culverts on Rahmatullah road, Bgupta road, Maddammahmudabad road under ward no 5, 8 culverts on Rahamatullah road, Sahabani road, Baribad Road under ward no 6, 9 culverts on Amidala road, Hashimnagar road, Ahmad Ali road under ward no 7, 9 culverts on Bulipara road, Amir Mohammad road, Nadalia Khalpar road under ward no 8, 6 culverts on Goafakir road, Kabilla Madar road, Jamadar Bari road under ward no 9.
7. **Barirdala Union:** Total numbers of culverts in this union are 53. 7 culverts on Bill Banda Sree Road, Begendra Bari Road, Hazarihat Road at 1 no ward. 5 Culverts on Babalikka Road, Abul Monsur Grammo Road, Kanco Dighi Road at ward no 2, 8 culverts on Dhakkin Kalabaria Road, Kadar Bari Road at ward no 3, 6 culverts on Bulbur Bazar Road, Batpukur Road, Fafur Shah Road in ward no 4, 7 culverts on Badamtali Road, Chowdhury gram Road, Terrial Road at ward no 5, 9 culverts on Uttar Mahalanga Road, Narayan Asram Road at ward no 6, 5 culverts on Hasimiarhat Road, Napitbari road at ward no 7, 4 culverts on Terrial Road, Terrial Bazar Road, ChoottaDagarhat Road at ward no 8, 2 culverts on Hasimiarhat Road at ward no 9.
8. **Saidpur Union-** Total number of culverts in this union are 40. 6 culverts on Bhuiyarhat Road, Bagachatar Road, Beribad Road at ward no 1, 5 culverts on Ahmad Chowdhury Road, Basaratnagar Road, Kamar Ali Road at ward no 2, 4 culverts on Terrial Road, Mahanagar Bazar Road, at ward no 3, 5 culverts on Hazari Bridge Road, Badarkhali Road at ward no 4, 3 culverts on Saidpur Basaratnagar Road at ward no 5, 4 culverts on Sea Road, Akhtar Sowdagar Road at ward no 6, 4 culverts on Bakkhali Road, Purba Bakkhli Road at ward no 7, 5 culverts On Daliapara road, Doabari road & Madinullah road at ward no 8, 2 culverts on Dhakkin Rahamatnagar Road, A.K. Siddique Road at ward no 9.
9. **Muradpur Union** - Total numbers of Culverts in this union are 40. 7 culverts on Gutakhali Road, Basatnagar Road, Sattar Contractor Road at ward no 1; 5 culverts on Guliakhali Road, Batirkhal Road at ward no 2; 4 culverts on Muradpur Road, Killapukur Road at ward no 3; 5 culverts on Muradpur bazar Road, Ferrighat Road at ward no 4; 4 culverts on Razakhali Road, U.P. Road at ward no 5; 2 culverts on Sheik Rezaul Karim Road at ward no 6; 6 culverts on Doazipara Madrasha Road, Peshkarpara Road, Megabati Road at ward no 7; 5 culverts on Daliapara Road, Doabari Road, Madinullah

Road at ward no 8; 2 culverts on Dhakkin Rahamatnagar Road, A.K. Siddique Road at ward no 9.

Ref: Nazrul Islam, Assistant Engineer, LGRD, Sitakundu, Chittagong, Mobile- 01775-810834

Uma) Roads-

There are total 532.75 KM roads under Sitakundu Upazila. Among them 157.78 KM are Pucca, 301.40 Km Kacha and 73.55 KM HBB. Unionwise number of Roads and Location are appended below-

1. **Bhatiari Union-** Pucca road are 45 KM, Kacha road are 7 KM and 28.35 KM HBB. Among them 13 KM (ward no 1,3,5,6 & 9) Kacha and HBB are on risky condition.
2. **Sonaichari Union-** Pucca road 8 KM, Kacha road 22.50 KM, HBB 7.50 KM. Among them about 9 KM (ward no 2, 5, 6, 8) Kacha and HBB road are in risky condition.
3. **Kumira Union-** There are 14 KM Pucca road, and 24.50 KM HBB road in this union. Among them 10 KM (ward no- 1, 2, 4, 6) HBB road are on risky condition.
4. **Bansbaria Union-** There are 15.50 KM Pucca road, 13.80 KM Kacha road, 10.50 KM HBB road in this union. Among them 7.50 KM (ward no- 1, 3, 7, and 9) Kacha and HBB road are in risky.
5. **Barabkunda Union-** There are 43 KM Pucca road, 24 KM Kacha road, 12.20 KM HBB road in this union. Among them 16 KM (ward no- 1, 2, 3, 4, 7 & 9) Kacha and HBB road are in risky.
6. **Salimpur Union-** There are 17 KM Pucca road, 7 KM Kacha road, 5 KM HBB road in this union. Among them about 8 KM (ward no- 1, 3, 7 & 8) Kacha and HBB road are in risky.
7. **Barirdala Union-** There are 21.50 KM Pucca road, 12.50 KM Kacha road, 9.50 KM HBB road in this union. Among them about 6 KM (ward no- 2, 3, 4 & 6) Kacha and HBB road are in risky.
8. **Saidpur Union-** There are 24 KM Pucca road, 11 KM Kacha road, 5 KM HBB road in this union. Among them about 7 KM (ward no- 3, 5 & 6) Kacha and HBB road are in risky.
9. **Muradpur Union-** There are 21 KM Pucca road, 24 KM Kacha road, 7 KM HBB road in this union. Among them about 11 KM (ward no- 1, 2, 7, 8 & 9) Kacha and HBB road are in risky.

Ref: Nazrul Islam, Assistant Engineer, LGRD, Sitakundu, Chittagong, Mobile- 01775-810834

Cha) Irrigation system-

It is found that there is less use of Tube wells for crop production in this upazila. Most Deep tube wells are used for drinking water, homestead use and in rare cases for crop production. Total number of Deep tube wells in this Upazila are 23750 and among them 25 are Deep tube well, 23725 are shallow tube wells. A brief description about tube wells are showcased below-

Sl. no	Sources of Water	Number	Land covered by Irrigation	Land damaged by Flood	Post flood condition
1	Deep tube well	25	3576	1520 acre	Government support can lessen damage
2	Shallow tube wells	26750	No		
3	Hand pump	No	No		
4	Tube wells driven by Engine	No	No		

Ref: Tarik Mahmud Islam, Agricultural Officer, DAE, Sitakundu, Mobile: 01718-114480

Cha) Hatbazar

There are 36 hat and Bazar in Sitakundu Upazila. Information gathered from field suggests that a hat sits 2 times per week and a Bazar sits 7 days per week. Unionwise detail information about Hat and Bazaar is exhibited below-

Sl.no	Name of Union	Name of Hat Bazar	Hat Bazar day	Number of Shops at bazaar
1	Salimpur	Fakirhat	2 days in a week	25
		Fouzdarhat	2 days in a week	90
		Pucca Rastar matha Bazar	Everyday	30
		Station Bazar	Everyday	40
2	Bhatiari	Madam bibirhat	2 days in a week	500
		Kadam Rasul Bazar	Everyday	230
		Banu bazaar	Everyday	300
		Bhatiari Bazar	Everyday	500
		BMA Bazar	Everyday	150
		Bobazar	Everyday	250
3	Sonaichari	Madanhat	2 days in a week	150
		Joramtal Bazar	Everyday	100
		Fultala Bazar	Everyday	100
4	Kumira	Kumirahat	2 days in a week	300
		Maszidda Bazar	Everyday	200
		Baro Kumira Bazar	Everyday	30
5	Bansbaria	Bansbaria	2 days in a week	150
		Cotta Bazar	Everyday	60
		Kazipara bazar	Everyday	20
6	Muradpur	Muradpur Bazar	Everyday	200
7	Barabkundu	Ali Akbar Suklarhat	2 days in a week	200
		Barabkundu Bazar	Everyday	400
		Telli Bazar	Everyday	100
8	Barairdala	Bora Dagarhat	2 days in a week	200
		Chotta Dargarhat	2 days in a week	120
		Terrial Bazar	Everyday	100
		Barigram Bazar	Everyday	60
		Baida Pukur Bazar	Everyday	35
		Gatgar Bazar	Everyday	52

9	Saidpur	Mirarhat bazaar	Everyday	150
		Shekarhat Bazar	Everyday	80
		Mahanagar Bazar	Everyday	60
		Tohar Ali Bhuiyar bazar	Everyday	80
10	Pourashava	Fakirhat	2 days in a week	100
		Sitakundu Bazar	Everyday	2300

Ref: Jalal Ahmad, Office Assistant, Statistical Office, Sitakundu , Chittagong, Mobile: 01811552657

1.4.2 Social Assets-

Ka) House – Homes:

Total number of Houses at Sitakundu Upazila are 70306. Among them 50409 are Kutcha, 7810 Pucca and 12087 semi pucca. Here Pucca houses are built with bricks, Sands, Cements, rod and Kutcha houses are built with Bamboo, Timbers, Tin, Clay, Chan, Wire, bolts, rope and bamboo. Kutcha houses are not disaster resilient. Almost 50% houses are below flood level. Information on houses are appended below-

Sl. No.	Name of unions	Number of Houses			Detail of Materials that are used in building Houses
		Kutcha	Pucca	Semi Pucca	
1	Sonaichari	8991	1002	2007	Kutcha house are built with clay, bamboo fence, timber and Tin or <i>shan (a kind of forest plant)</i> and Pucca houses are built with bricks, sands, cements and rods.
2	Salimpur	4070	2355	1575	
3	Kumira	2989	1115	1811	
4	Bansbaria	7299	379	1172	
5	Barabkundu	4778	321	581	
6	Bairyardala	4200	482	1193	
7	Saidpur	7276	311	1413	
8	Bhatiari	3975	1369	1656	
9	Muradpur	3039	509	1497	
10	Pourashava	3792	969	1189	
Total=		50409	7810	12087	

Ka) Water-

The major sources of drinking water at Sitakundu Upazila are – Deep tube wells, Shallow Tube wells and water of very small tributary/ stream.

Total numbers of tube wells are 26775 and among them deep tube well are 25 and shallow tubes well are 26750.

Total tube well are 26775 and 22080 are in good condition, 4695 are out of order and number of above sea level approximately 17189, total number of useable tube well during flood approximately 17591. Almost 80% inhabitants of this upazila use tube well water for drinking purpose. But scarcity of water is found during flood.

Ga) Sanitation situation:

Total number of sanitary latrines at Sitakundu upazila are 69315. Among them pucca latrines are 28967 and Kutcha latrines are 40348. Information suggests that Katcha latrines are affected during disasters.

Total numbers of Hyginic latrines at Sitakundu Upazial are 65849 and above flood level are 29726 and remain usable during flood 49520 and about 95% population uses sanitary latrines.

Gha) Educational Institutions/ Libraries:

There are 221 educational intuitions at Sitakundu upazila. There is one university, 5 colleges, 22 madrasahs, 33 high schools (including one government), 4 Girls high schools, 103 government primary schools, 11 non governments registered primary school, 41 kindergarten schools, and literacy rate of this upazila is 59.20%. Union based information are showcased in below table-

Educational Institution	Govt./ Non govt. / Regi.	Name of Institution	Location / Ward	Number of Learners	Teache rs	Whether it is used as Shelter
Primary school	Government	Shekarhat Govt. Pri. school	Saidpur	427	07	Yes
Primary school	Government	Dakkin Bagasatar Govt. Pri. School	Saidpur	145	04	Yes
Primary school	Government	Uttar Bagasatar Govt. Pri. School	Saidpur	325	04	Yes
Primary school	Government	Mahanagar Govt. Pri. School	Saidpur	290	05	Yes
Primary school	Government	Madda Bagasatar Govt. Pri. School	Saidpur	109	04	Yes
Primary school	Government	Kadarkill Govt. Pri. School	Saidpur	367	08	No

Educational Institution	Govt./ Non govt. / Regi.	Name of Institution	Location / Ward	Number of Learners	Teache rs	Whether it is used as Shelter
Primary school	Government	Pachim Saidpur Govt. Pri. School	Saidpur	251	04	Yes
Primary school	Government	Purba Saidpur Govt. Pri. School	Saidpur	400	07	Yes
Primary school	Government	Zafarnagar Govt. Pri. School	Saidpur	490	09	No
Primary school	Government	Bakkhali Govt. Pri. School	Saidpur	220	05	Yes
Primary school	Government	Uttar Pachim Saidpur Govt. Pri. School	Saidpur	284	06	Yes
Primary school	Government	Jamal Misir Govt. Pri. School	Saidpur	270	04	No
Primary school	Government	Ala Kulipur Govt. Pri. School	Saidpur	260	03	Yes
Primary school	Government	Masterpara Reg. Pri. School	Saidpur	170	04	No
Primary school	Government	Bagachattar Gulbahar Reg. Pri. School	Saidpur	190	03	Yes
Primary school	Government	Maddar Dari Reg. Pri. School	Saidpur	225	06	Yes
Primary School	Kindergarten	Mahanagar Ideal Kindergarten	Saidpur	210	05	No
Primary School	KG School	Little flower KG school	Saidpur	170	04	No
Primary school	Government	Madda Baharpur Govt. Pri. School	Bariardala	234	06	No
Primary School	Government	Pachim Baharpur Govt. Pri. School	Bariardala	248	04	No
Primary School	Government	Darogarhat Govt. Pri. School	Bariardala	422	08	No
Primary School	Government	Mahalonka Govt. Pri. School	Bariardala	237	03	Yes
Primary School	Government	Terrial Govt. Pri. School	Bariardala	496	08	Yes
Primary School	Government	Kalabaria Govt. Pri. School	Bariardala	292	10	Yes
Primary School	Government	Bariardala Govt. Pri. School	Bariardala	452	09	No
Primary School	Government	Pachim Lalanagar Govt. Pri. School	Bariardala	167	05	Yes

Educational Institution	Govt./ Non govt. / Regi.	Name of Institution	Location / Ward	Number of Learners	Teache rs	Whether it is used as Shelter
Primary School	Government	Purba Lalanagar Regd. Pri. School	Bariardala	180	04	No
Primary School	Reg. Pri. School	Darmapur Reg. Pri. School	Bariardala	160	03	No
Primary School	In. KG School	Holy cross In. KG School	Bariardala	160	04	No
Primary School	Shisu Nikaton	Baro Dagarhat JK Shisu Nikaton	Bariardala	160	04	No
Primary School	Government	Yakubnagar Govt. Pri. School	Pourashava	171	06	No
Primary School	Government	Nuna chara Govt. Pri. School	Pourashava	217	06	No
Primary School	Government	Sheikpara Obayadia Govt. Pri. School	Pourashava	305	08	No
Primary school	Government	Pontichila Govt. Pri. School	Pourashava	152	06	No
Primary school	Government	Sitakundu Govt. Pri. School	Pourashava	673	09	No
Primary school	Government	Dattabari Govt. Pri. School	Pourashava	130	05	No
Primary school	Government	Upazila Sadar Govt. Pri. School	Pourashava	254	06	No
Primary school	Government	Sitakundu Uttar A. Govt. Pri. School	Pourashava	576	09	No
Primary school	Government	Shibpur Govt. Pri. School	Pourashava	248	08	No
Primary school	Government	Dakkin Idilpur Reg. Pri. School	Pourashava	140	05	No
Primary school	Government	Dakkin Rahamatnagar Govt. Pri. School	Muradpur	562	11	No
Primary school	Government	Muradpur Govt., Pri. School	Muradpur	336	08	Yes
Primary school	Government	Gondakhali Govt., Pri. School	Muradpur	290	06	Yes
Primary school	Government	Sadak Mostan Govt., Pri. School	Muradpur	332	08	Yes
Primary school	Government	Peskarpara Govt. Pri. School	Muradpur	294	06	No
Primary school	Government	Doazipara Govt. Pri. School	Muradpur	271	05	No

Educational Institution	Govt./ Non govt. / Regi.	Name of Institution	Location / Ward	Number of Learners	Teache rs	Whether it is used as Shelter
Primary school	Government	Bhatarkill Govt. Pri. School	Muradpur	151	06	Yes
Primary school	Government	Guliakhali Govt. Pri. School	Muradpur	472	06	Yes
Primary school	Government	Basratnagar Govt. Pri. School	Muradpur	211	07	Yes
Primary School	Government	Golabaria Govt. Pri. School	Muradpur	220	07	Yes
Primary School	Government	Hasnabad Govt. Pri. School	Muradpur	170	04	No
Primary school	Government	Mandaritola Govt. Pri. School	Barabkundu	267	06	No
Primary School	Government	Katgar Govt. Pri. School	Barabkundu	574	08	No
Primary school	Government	Mahudabad Govt. Pri. School	Barabkundu	520	07	No
Primary School	Government	Barabkundu Govt. Pri. School	Barabkundu	206	06	No
Primary school	Government	Nadalia Govt. Pri. School	Barabkundu	214	04	No
Primary school	Government	Olinagar Govt. Pri. School	Barabkundu	504	06	No
Primary school	Government	DDT factory Govt. Pri. School	Barabkundu	444	07	No
Primary school	Government	Alhaj Sirajul Islam Reg. Pri. School	Barabkundu	250	05	No
Primary school	Government	Bansbaria Govt, Pri School	Bansbaria	402	09	No
Primary school	Government	Dakkin Bansbaria Govt, Pri. School	Bansbaria	601	07	No
Primary school	Government	Uttar Bansbaria Govt. Pri. School	Bansbaria	287	06	Yes
Primary school	Government	Madda Bansbaria Govt, Pri. School	Bansbaria	382	06	Yes
Primary school	Government	Akilpur Govt. Pri. School	Bansbaria	114	04	No
Primary school	Government	Uttar Masjidda Govt. Pri. School	Kumira	485	06	Yes
Primary school	Government	Kotpara Govt. Pri. School	Kumira	435	07	yes

Educational Institution	Govt./ Non govt. / Regi.	Name of Institution	Location / Ward	Number of Learners	Teache rs	Whether it is used as Shelter
Primary school	Government	Kazipara Govt. Pri. School	Kumira	442	07	no
Primary school	Government	Kumira Govt. Pri. School	Kumira	680	10	yes
Primary school	Government	Masjidda 1 Govt. Pri. School	Kumira	563	06	yes
Primary school	Government	Masjidda 2 Govt. Pri. School	Kumira	511	07	No
Primary school	Government	Dakkin Masjidda Govt. Pri. School	Kumira	192	05	Yes
Primary school	Government	Goramora Govt. Pri. School	Sonaichari	443		No
Primary school	Government	Razapur Govt. Pri. School	Sonaichari	543		No
Primary school	Government	Sitalpur Govt. Pri. School	Sonaichari	693		No
Primary school	Government	Bara Aulia Govt. Pri. School	Sonaichari	546		yes
Primary school	Government	Dakkin Goramara Govt. Pri. School	Sonaichari	390		Yes
Primary school	Government	Imamnagar Govt. Pri. School	Bhatiari	424		Yes
Primary school	Government	Bhatiari Govt. Pri. School	Bhatiari	1130	10	Yes
Primary school	Government	Madam bibirhat Govt. Pri. School	Bhatiari	425	06	No
Primary school	Government	Hosania Govt. Pri. School	Bhatiari	360	06	Yes
Primary school	Government	Kadamrasul Govt. Pri. School	Bhatiari	456	08	Yes
Primary school	Government	Fakirhat Govt. Pri. School	Salimpur	916	10	No
Primary school	Government	Fouzdarhat Govt. Pri. School	Salimpur	505	08	No
Primary school	Government	Latifpur Govt. Pri. School	Salimpur	1307	10	Yes
Primary school	Government	Madda Salimpur Govt. Pri. School	Salimpur	517	10	Yes
Primary school	Government	Uttar Salimpur Govt. Pri. School	Salimpur	536	10	Yes

Educational Institution	Govt./ Non Govt. / Regi.	Name of Institution	Location / Ward	Number of Learners	Teachers	Whether it is used as Shelter
Primary school	Government	Fauzdarhat Cadet College Govt. Pri. School	Salimpur	298	09	No
Secondary School	Non-Government	Latifpur Aljhaj Abdul Jalil High School	Salimpur	410	15	No
Secondary School	Non-Government	Sabuj Niketon High School	Salimpur	380	14	No
Secondary School	Government	Sitakundu Govt. High School	Pourashava	860	17	No
Secondary School	Non-Government	Bangladesh Military Academy High School	Bhatiari	860	17	No
Secondary School	Non-Government	Barabkundu High School	Barabkundu	740	15	No
Secondary School	Non-Government	Terral High School	Bairdala	365	12	No
Secondary School	Non-Government	Bhatiari Hazi TSC High School	Bhatiari	345	11	No
Secondary School	Non-Government	Fouzdarhat Collegiate High School	Salimpur	680	15	No
Secondary School	Non-Government	Hamidullaharhat Collegiate High School	Murudpur	590	13	Yes
Secondary School	Non-Government	Captain Shamsul Huda High School	Murudpur	580	12	No
Secondary School	Non-Government	Mahmudabad High School	Muradpur	530	12	No
Secondary School	Non-Government	CCC High School	Barabkundu	555	13	No
Secondary	Non-	Fouzdarhat KM High	Salimpur	680	14	No

Educational Institution	Govt./ Non Govt. / Regi.	Name of Institution	Location / Ward	Number of Learners	Teachers	Whether it is used as Shelter
School	Government	School				
Secondary School	Non-Government	Madambibirhat Shahajahan High School	Bhatiari	710	15	No
Secondary School	Non-Government	R R Textile Mills High School	Bansbaria	540	11	No
Secondary School	Non-Government	Bansbaria High School	Bansbaria	420	10	No
Secondary School	Non-Government	Kumira Abasik High School	Kumira	390	12	No
Secondary School	Non-Government	Sitalpur High School	Sonaichari	560	13	No
Secondary School	Non-Government	Panthisila High school	Pourashava	610	13	No
Secondary School	Non-Government	Shekerhat High School	Saidpur	465	12	No
Secondary School	Non-Government	Masjidda High school	Kumira	395	11	No
Secondary School	Non-Government	Barodargarhat A. R. Memorial High School	Bariardala	420	14	No
Secondary School	Non-Government	Kumira Abasik Girls High School	Kumira	525	15	No
Secondary School	Non-Government	Sitakundu Girls High School	Pourashava	640	14	No
Secondary School	Non-Government	M.A. Kasem Raza High School	Sonaichari	470	12	No
Secondary School	Non-Government	Bhatarkill High School	Muradpur	510	13	Yes

Educational Institution	Govt./ Non Govt. / Regi.	Name of Institution	Location / Ward	Number of Learners	Teachers	Whether it is used as Shelter
University	Non-Government	International Islamic University	Sonaichari	22000	280	No
College	Non-Government	Sitakundu University College	Pourashava	1150	19	No
College	Non-Government	Bijoy Saroni University College	Bhatiari	990	17	No
College	Non-Government	Latifa Siddique Degree College	Kumira	930	16	No
College	Non-Government	Sitakundu Mohila College	Pourashava	540	14	No
Madrasha	Non-Government	Hazarat Khaza kalu Shah Senior Madrasha	Salimnpur	380	11	No
Madrasha	Non-Government	Madrashai Mohammadia Ahamadia Sunnia	Bhatiari	365	11	No
Madrasha	Non-Government	Sitalpur Gousia Islamia Dakil Madrasha	Sonaichari	510	12	No
Madrasha	Non-Government	Al Amin Islamia Dakkil Madrasha	Muradpur	470	11	No
Madrasha	Non-Government	Nuria Islamia Alim Madrasha	Muradpur	510	12	No
Madrasha	Non-Government	Bansbaria Islamia Dakkil Madrasha	Bansbaria	420	10	No
Madrasha	Non-Government	Sitakundu Kamil Madrasha	Pourashava	610	16	No
Madrasha	Non-Government	Ponthisila Islamia Madrasha	Barirdala	420	11	No
Madrasha	Non-Government	Lalanagar Islamia Dakil Madrasha	Barirdala	390	10	No
Madrasha	Non-Government	Baradagarhat Sirajul Ullom Islamia Dakil Madrasha	Saidpur	420	1	No
Madrasha	Non-Government	Bagachator Ganiul Ullom Islamia Fazil Madrasha	Saidpur	510	13	No

Uma) Religious institution/ Place of religious gatherings

There are a total 408 mosques in Sitakundu upazila. EIDGAH maidan are 12 and Temples are 139. It may be mentioned here that as the number of mosques are less than worshipers, Muslims offer their EID prayer at mosques. Unionwise information is appended below-

Sl. No	Name of Union	Masjid/ Mondir/ Eidgah	Locations	Brief Description
1	Saidpur	Mosjid	There are 35 mosques at Saidpur Union. 3 are at 1 no ward, 4 are at 2 no ward, 3 at 3 no ward, 5 at 4 no ward, 4 at 5 no ward, 3 at 6 no ward, 4 at 7 no ward, 5 at 8 no ward, 4 at 9 no ward.	There are 2 Edgah venues but people pray at Mosques.
	Saidpur	Edgah venue	There are 2 Eidgah venues in this union. One is at Bagasatar Edgah maidan at 2 no ward, another is Bhuiyanbari Edgah maidan at 6 no ward.	There are 2 Edgah venues but people pray at Mosques
	Saidpur	Temples	There are 20 Temples in this union. 2 at 1 no ward, 1 at 2 no ward, 1 at 3 no ward, 3 at 4 no ward, 4 at 6 no ward, 2 at 7 no ward, 2 at 8 no ward, 6 at 9 no ward	
2	Bariardala	Mosque	There are 54 mosques in Bariardala mosques. 6 at ward no 1, 4 at ward no 2, 3 at ward no 4, 5 at ward no 5. 7 at ward no 5, 6 at ward no 6, 7 at ward no 7, 8 at ward no 7, 8 at ward no 9.	There are 2 Edgah venues but people pray at Mosques.
	Bariardala	Temples	There are 6 no Temples in Bariardala union. 1 is at 1 no ward, 2 at 4 no ward, 2 at 5 no ward, 1 at 8 no ward	
	Bariardala	Edgah	There is only 1 EIDGAH maidan in this union. It is at 2 no ward.	There are only 1 Edgah venue but people pray at Mosques
3	Muradpur	Mosques	There are 42 mosques in Muradpur union. 4 at ward no 1, 3 at ward no 2, 5 at ward no 3, 6 at ward no 4. 3 at ward no 5, 4 at ward no 6, 6 at ward no 7, 6 at ward no 7, 4 at ward no 8 and 7 at ward no 9.	There are 2 Edgah venues but people pray at Mosques.
	Muradpur	Temples	There are 6 Temples at Muradpur. 1 at ward no 2, 1 at ward no 3, 2 at ward no 6, 1 at ward no 4, 1 at ward no 8.	
		Edgah Maidan	There is only 1 Eidgah maidan at Muradpur. It is in ward no 4.	There are 2 Edgah venues but people

Sl. No	Name of Union	Masjid/ Mondir/ Eidgah	Locations	Brief Description
	Muradpur			pray at Mosques.
4	Barabkundu	Mazjid	There are 34 mosques in Barabkundu union. 3 mosques at ward no 1, 4 mosques at ward no 2, 3 mosques at ward no 3, 5 mosques at ward no 4, 3 mosques at ward no 5, 4 mosques at ward no 6, 3 mosques at ward no 7, 4 mosques at ward no 8, 5 mosques at ward no 9.	Do
	Barabkundu	Temples	There are 7 Temples in this union. 1 Temple at 1 no ward, 1 Temple at ward no 2, 2 Temple at ward no 4, 1 Temple at ward no 5, 2 Temple at ward no 9.	
	Barabkundu	Eidgah Maidan	There is only 1 Eidgah maidan in this union and it is at the ward no 3.	
5	Bansbaria	Mosques	There are 35 mosques in Barabkundu union. 2 mosques at ward no 1, 3 mosques at ward no 2, 3 mosques at ward no 3, 4 mosques at ward no 4, 3 mosques at ward no 5, 3 mosques at ward no 6, 6 mosques at ward no 7, 6 mosques at ward no 8, 5 mosques at ward no 9.	There are Edgah venues but people pray at Mosques
	Bansbaria	Temples	There are 9 Temples in this union. 2 Temples at 1 no ward, 2 Temples at ward no 4, 1 Temple at ward no 5, 1 Temple at ward no 6, 2 Temples at ward no 9.	
	Bansbaria	Eidgah Maidan	There are 3 Eidgah maidan in Bansbaria union. 1 is at ward no 2, 1 is at ward no 3, 1 is at ward no 8.	There are 3 Edgah venues but people also pray at Mosques
6	Kumira	Mosques	There are 33 mosques in Barabkundu union. 2 mosques at ward no 1, 4 mosques at ward no 2, 3 mosques at ward no 3, 2 mosques at ward no 4, 5 mosques at ward no 5, 5 mosques at ward no 6, 4 mosques at ward no 7, 3 mosques at ward no 8, 5 mosques at ward no 9.	There are Edgah venues but people also pray at Mosques
	Kumira	Temples	There are 16 Temples in this union. 2 Temples at 1 no ward, 1 Temples at ward no 2, 1 Temple at ward no 3, 4 Temple at ward no 4, 2 Temples at ward no 5, 7 temples at ward no 6, 3 temples at ward no	

Sl. No	Name of Union	Masjid/ Mondir/ Eidgah	Locations	Brief Description
			7, 2 temples at ward no 8, 1 temple at ward no 9.	
	Kumia	Eidgah	There is only 1 Eidgah maidan at Kumira union and it is in 7 no ward.	
7	Sonaichari	Mosques	There are 42 mosques in Barabkundu union. 4 mosques at ward no 1, 2 mosques at ward no 2, 3 mosques at ward no 3, 5 mosques at ward no 4, 6 mosques at ward no 5, 5 mosques at ward no 6, 7 mosques at ward no 7, 5 mosques at ward no 8, 5 mosques at ward no 9.	There are Edgah venues but people also pray at Mosques
	Sonaichari	Temples	There are 8 Temples in this union. 1 Temples at 1 no ward, 1 Temples at ward no 2, 1 Temple at ward no 3, 4 Temple at ward no 4, 1 Temples at ward no 5, 1 temples at ward no 6, 3 temples at ward no 7, 2 temples at ward no 8, 1 temple at ward No 9.	
	Sonaichari	Eidgah maidan	There are no Eidgah maidan.	
8	Bhatiari	Mosques	There are 38 mosques in Barabkundu union. 3 mosques at ward no 1, 5 mosques at ward no 2, 4 mosques at ward no 3, 6 mosques at ward no 4, 4 mosques at ward no 5, 3 mosques at ward no 6, 4 mosques at ward no 7, 5 mosques at ward no 8, 4 mosques at ward no 9.	There are Edgah venues but people also pray at Mosques
	Bhatiari	Temples	There are 13 Temples in this union. 3 Temples at 1 no ward, 2 Temples at ward no 2, 2 Temple at ward no 3, 1 Temple at ward no 4, 1 Temples at ward no 5, 1 temples at ward no 6, 1 temples at ward no 7, 1 temples at ward no 8, 2 temple at ward No 9.	
	Bhatiari	Eidgah maidan	There are only 2 Eidgah maidan in this union. 1 is at ward no 3, 1 is at ward no 6.	
9	Salimpur	Mosques	There are 49 mosques in Barabkundu union. 4 mosques at ward no 1, 5 mosques at ward no 2, 4 mosques at ward no 3, 5 mosques at ward no 4, 8 mosques at ward	There are Edgah venues but people also pray at Mosques

Sl. No	Name of Union	Masjid/ Mondir/ Eidgah	Locations	Brief Description
			no 5, 7 mosques at ward no 6, 4 mosques at ward no 7, 6 mosques at ward no 8, 6 mosques at ward no 9.	
	Salimpur	Temples	There are 12 Temples in this union. 1 Temples at 1 no ward, 1 Temples at ward no 2, 2 Temple at ward no 3, 1 Temple at ward no 4, 3 Temples at ward no 5, 1 temples at ward no 6, 2 temples at ward no 7, 1 temples at ward no 8, 2 temple at ward No 9.	
	Salimpur	Eidgah Maidan	There are no Eidgah Maidan	
10	Pourashava	Mosques	There are 46 mosques in Barabkundu union. 3 mosques at ward no 1, 4 mosques at ward no 2, 5 mosques at ward no 3, 5 mosques at ward no 4, 4 mosques at ward no 5, 6 mosques at ward no 6, 6 mosques at ward no 7, 7 mosques at ward no 8, 6 mosques at ward no 9.	There are Edgah venues but people also pray at Mosques
	Pourashava	Temples	There are 42 Temples at Pourashava. 5 Temples at 1 no ward, 6 Temples at ward no 6, 4 Temples at ward no 3, 5 Temples at ward no 4, 3 Temples at ward no 5, 8 temples at ward no 6, 3 temples at ward no 7, 8 temples at ward no 8, 4 temples at ward No 9.	
	Pourashava	Eidgah Maidan	There are only 1 Eidgah maidan. 1 Eidgah at 4 no ward	

Cha) Health services-

There are 30 Health & family Planning Welfare centers in this Upazila. Among them 1 is Upazila Health & family Welfare Center. There are 9 union Health and family Welfare centers and satellite Clinics are 20. Total doctors working in these hospitals are 38. There are other support staffs apart from attending doctors. But there are insufficient doctors and nurses in these centers particularly in satellite clinics. So the service quality is not up to the mark. It is important to put more attention to aged and pregnant women during disasters. But it becomes difficult to provide medical services due to lack of sufficient doctors and nurses. So it is necessary to have sufficient doctors, nurses and medicines during disasters and normal period.

Health Services centers	Locations	Number of Doctors in each center	Number of Nurses in each center	Quality of services
Health & family welfare Centers	Upazila	9	14	Good
Health & family welfare Centers	Saidpur	1	No	Good
Health & family welfare Centers	Bariardala	1	No	Good
Health & family welfare Centers	Muradpur	1	No	Good
Health & family welfare Centers	Barabkundu	1	No	Good
Health & family welfare Centers	Bansbaria	1	No	Good
Health & family welfare Centers	Kumira	1	No	Good
Health & family welfare Centers	Bhatiari	1	No	Good
Health & family welfare Centers	Salimpur	1	No	Good
Health & family welfare Centers	Sonaichari	1	No	Good
Health & family welfare Centers	All union	20	No	Average

Sources of Information: Asrafudowla, Upazila Family Planning Assistant, Mobile - 01558-419123

Cha) Bank /Post Offices-

There are 34 Bank branches at Sitakundu upazila. There are 11 Branchs at upazila Sadar and 23 branches at union level. All Banks provides Credit service, SME loan, and all Banking transactions to its clients. Unionwise information of banks is provided below-

SI No	Name of Union	Name of Banks
1	Sitakundu Sadar	1. Islami Bank Ltd, 2. Pubali Bank Ltd, 3. Agrani Bank Ltd, 4. Janata Bank Ltd, 5. Bangladesh Krishi bank Ltd, 6. BRAC Bank Ltd, 7. AB Bank Ltd, 8. Sonali Bank Ltd, 9. Rupali Bank Ltd, 10. Uttara Bank Ltd
2	Salimpur	1. Agrani Bank Ltd, 2. Janata Bank Ltd, 3. Grameen Bank Ltd
3	Bhatiari	1. Sonali Bank Ltd, 2. Agrani Bank Ltd, 3. Bank Asia Ltd, 4. Jamuna Bank Ltd, 5. National bank Ltd, 6. South East bank Ltd, 7. UCBL Ltd, 8. Standard Chartered Bank Ltd, 9. One Bank Ltd, 10. NCC Bank Ltd, 11. Grameen Bank Ltd, 12. Islami Bank Ltd
4	Sonaichari	1. One Bank Ltd, 2. EXIM Bank Ltd
5	Kumira	1. Janata Bank Ltd, 2. Bangladesh Krishi Bank Ltd, 3. First Security Islami Bank Ltd
6	Bansbaria	1. Grameen Bank
7	Barabkundu	1. Janata Bank Ltd
8	Barirardala	1. Bangladesh Krishi Bank Ltd, 2. Islami Bank Bangladesh Ltd, 3. Grameen Bank Ltd
9	Saidpur	1. No Bank
10	Muradpur	1. No Bank

Unionwise Post Offices-

There are 16 post offices in Sitakundu Upazila. These offices provide different services including remittances services. Unionwise list of post offices is appended below-

Sl. No	Union	Name of Post Offices
1	Salimpur	Jafarabad Post office - 1
2	Bhatiari	Bhatiari Post office -1 & Madambibirhat -1
3	Sonaichari	Sitalpur Post office -1, Islami University -1, Hafij Jute Mill-1
4	Barabkundu	Barabkundu Bazar Post Office -1
5	Sitakundu	Sitakundu post office -
6	Saidpur	Mahanagar Post office -1, Shekarhat post Office-1, Jafarnagargar Post office -1
7	Kumira	Masjida Post Office-1, Kumira post office -1
8	Bansbaria	Bansbaria -1
9	Muradpur	Muradpur post office-1
10	Barirdala	Barairdala post office -1

Jha) Club & Cultural Centers-

There are approximately 90 cultural clubs in Sitakundu but activities of many clubs have almost been closed. Now approximately 35 club activities are on running. All these clubs supports different social development activities. Unionwise list of those clubs are outlined below-

Sl.No.	Name of union	Name of Club & Cultural centers	Support to social welfare and developmental works
1	Muradpur	Muradpur Club	They support and assist to different cultural and social welfare events
		Udayan Club	
		Surjamuki Club	
		Akata Club	
2	Bariradala	Bangabandu Sriti Sanga	They support and assist to different cultural and social welfare events
		Surja Sena Sanga	
3	Saidpur	Baishaki Club	They support and assist to different cultural and social welfare events
		Dishari Sanga	
		Bibortan Sansritik Protistan	
		Surja Tarun Sanga	
4	Barabkunda	Kalsilata Club	They support and assist to different cultural and social welfare events
		Chetana Club	
		Kakali Club	
		Rupnagar club	
5	Bansbaria	Jonaki Sanga	They support and assist to different cultural and social welfare events
		Surkja Saroti	
6	Kumira	Udayman Samity	They support and assist to different cultural and social welfare events
		Jorna Club	
		Agradut Club	
		Chakrabak Club	
7	Sonaichari	Basanta dut Sanga	They support and assist to different cultural and social welfare events
		Sitalpur Muslim Club	
		Sharonika Club	
8	Bhatiari	Alodani Club	They support and assist to different cultural and social welfare events
		Jonkar Club	
		Akata Sanga	

		Nabarun Sanga	
		Bhatiari Akadosh Sangha	
9	Salimpur	Anirban	They support and assist to different cultural and social welfare events
		Anirudda	
		Adarsha Al Helal Samity	
10	Sitakundu	Manab Kalyan Samity	They support and assist to different cultural and social welfare events
		Monisha	
		Sri Sri Loknath Seba Sanga	
		Nirapad Sanga	

JHA) NGOs/ Voluntary organizations

There are 28 NGOs and voluntary organizations have been working with different development activities in Sitakundu. Unionwise NGOs activities are outlined below-

Sl. No	Name of NGO	Type of works	Numbers of Beneficiaries	Duration of
1	EPSA	Disasters, Women & Child Development, Water & sanitation, Education, Micro-credit	730	Some projects are 3 years, some are 5 years
2	CODEC	Education, Fishermen Development, Micro-credit	680	3 Years
3	PROSHIKA	Education & Micro- Credit	1100	Long term & On going
4	VERC	Sanitation, Women Development & Health & Micro-credit	990	Long term & On going
5	ASA	Micro-credit	1080	Long term & On going
6	BRAC	Women Development, Education, Health & Micro – credit	1830	Long term & On going
7	Marry Stops	Micro-credit	640	Long term & On going
8	SUS	Health	549	3 years term
9	SDI	Micro-credit, Education, Disaster	894	5 years term
10	PADAKEP	Micro-Credit	679	Long term & On going
11	TMMS	Micro-Credit	547	Long term &

Sl. No	Name of NGO	Type of works	Numbers of Beneficiaries	Duration of
				On going
12	DSK	Health & Micro credit	612	Long term & On going
13	Bureau Bangladesh	Micro-credit	598	Long term & On going
14	Shakti Foundation	Micro-credit	612	Long term & On going
15	Sajida Foundation	Micro-credit	695	Long term & On going
16	GHARONI	Education	2203	5 years duration
17	Handicap International	Disasters & Disability	950	5 years duration
18	Red Crescent	Disasters	1150	Long term & On going
19	Janasheba	Micro-credit	580	Long term & On going
20	PROTYSHI	Micro-credit	630	Long term & On going
21	Badan	Micro-credit	410	Long term & On going
22	Bihanga	Micro-credit	640	Long term & On going
23	Overbright	Education & Cultural	550	3 Years duration
24	Projanmoo	Micro-credit	410	Long term & On going
25	NIRAPAD	Education & Cultural, Micro-credit	390	Long term & On going
26	PROTIVA	Education & Cultural	320	3 years duration
27	C Deep	Micro-credit	470	Long term & On going
28	LEPROSY MISSION	Heath	520	5 years duration

UMA) Playground

There are 49 play ground for recreation and play. Unionwise information is appended below-

Sl No	Name of union	Locations	Use in Disasters
1	Salimpur	Latifpur Govt. Primary School, Salimpur U.P Paly Ground, Fouzdarhat High school Maidan, Chalk Primary Biddalay Maidan, T&T Maidan	Men & livestock can use during Disasters
2	Bhatiari	Imamnagar Govt. Pri School Maidan, TSE High School Maidan, Shahajania High School Maidan, Military Academy High School Maidan, Bijoy Saroni Maidan, Hasnabad Play ground, BM High school, BM Maidan	
3	Sonaichari	Sitalpur High Schoo Maidan, Goramara Govt. Primary School Maidan, Sonaichari U.P. Maidan, Keshobpur Prymari School Maidan, Baroaulia Primary School Maidan, Hafij Jute Mill Maiden	
4	Kumira	Masjidda High School Maidan, Kumira Residential High School Maidan, Kumira Govt. Primary School Maidan, Kumira U.P. Play ground	
5	Bansbaria	Bansbaria High School Maidan, Bansbaria U.P. Play Ground,	
6	Barabkundu	Barabkundu Govt. Pri. School, Olinagar Govt. Pri. School Maidan, CC High School Maidan, Katgar Govt. Pri. School Maidan, Mahmudabad Govt. Pri. School Maidan	
7	Muradpur	Bhaterkill Govt. Pri School Maidan, Guptkhali Govt. Pri School Maidan, Doazipara Govt. Pri School Maidan, Rahamatnagar Govt. Pori School Maidan	
8	Bariradala	Terikhal High School Maidan, Baharpur Govt. Pri. School, Darogarhat Govt. Pri. School Maidan, Lalanagar Govt. Pri. School Maidan, Barodargarhat Govt. Pri. School Maidan	
9	Saidpur	Shekarhat Govt.Pri. School Maidan, Mahanagar Govt. Pri. School maidan, Saidpur Govt. Pri. School Maidan,	

SI No	Name of union	Locations	Use in Disasters
		Jafarnagar Govt. Pri. School Maidan	
10	Pourashava	Sitakundu Govt. High School Maidan, Pontichilla Govt. Pri. School Maidan, Sitakundu University College Maidan, Aykubnagar Govt. Pri. School Maidan	

Ta) Graveyard/ Crematories:

There are a total a bit large 476 family graveyards in Sitakundu Upazila. Among them 2 are government owned. Other family graveyards are close to Mosques, Mazars. Union wise description of Graveyards are outlined below-

Pourashava – Total graveyard at Pourashava are 44. Among them 1 is govt. railway graveyard.

Salimpur Union- Total numbers of family graveyards are 42. 5 graveyard are in ward no 1, 6 graveyard in ward no 2, 5 graveyard in ward no 3, 7 graveyards in ward no 4, 5 graveyards in ward no 5, 4 graveyards in ward no 6, 6 graveyards in ward no 7, 4 graveyards in ward no 8, 5 graveyards in ward no 9.

Bhatiari Union- Total numbers of family graveyard at Bhatiari union are 49. 4 graveyard are at ward no 1, 5 graveyard at ward no 2, 5 at ward no 3, 4 at ward no 4, 6 at ward no 5, 5 at ward no 6, 9 at ward no 7, 6 at ward no 8, 5 at ward no 9.

Sonaichari Union- - Total numbers of family graveyard at Bhatiari union are 48. Among them 1 is government owned – Baro Aulia Mazar Graveyard, it is situated at ward no 5. Number of family graveyard are 47. 6 graveyard are at ward no 1, 5 graveyard at ward no 2, 4 graveyards are at ward no 3, 6 graveyards are at ward no 4, 7 graveyards are at ward no 5, 5 at ward no 6, 4 graveyards are at ward no 7, 6 at ward no 8, 5 at ward no 9.

Kumira Union- Total numbers of family graveyard at Kumira union are 46. 6 graveyards are at ward no 1, 7 graveyards are at ward no 2, 5 graveyards are at ward no 3, 3 graveyards are at ward no 4, 7 graveyards are at ward no 5, 5 at ward no 6, 4 graveyards are at ward no 7, 6 graveyards are at ward no 8, 3 graveyards are at ward no 9.

Bansbaria Union- Total numbers of family type graveyard at Kumira union are 43. 5 graveyards are at ward no 1, 6 graveyards are at ward no 2, 4 graveyards are at ward no 3, 5 graveyards are at ward no 4, 7 graveyards are at ward no 5, 4 at ward no 6, 3 graveyards are at ward no 7, 4 graveyards are at ward no 8, 5 graveyards are at ward no 9.

Barabkundu Union- Total numbers of family type graveyard at Barabkundu Union are 47. 6 graveyards are at ward no 1, 4 graveyards are at ward no 2, 5 graveyards are at ward no 3, 7 graveyards are at ward no 4, 6 graveyards are at ward no 5, 4 at ward no 6, 5 graveyards are at ward no 7, 4 graveyards are at ward no 8, 6 graveyards are at ward no 9.

Muradpur Union- Total numbers of family type graveyard at Barabkundu Union are 45. 4 graveyards are at ward no 1, 5 graveyards are at ward no 2, 6 graveyards are at ward no 3, 5 graveyards are at ward no 4, 3 graveyards are at ward no 5, 8 at ward no 6, 4 graveyards are at ward no 7, 6 graveyards are at ward no 8, 4 graveyards are at ward no 9.

Saidpur Union- Total numbers of family type graveyard at Barabkundu Union are 67. 10 graveyards are at ward no 1, 8 graveyards are at ward no 2, 5 graveyards are at ward no 3, 7 graveyards are at ward no 4, 6 graveyards are at ward no 5, 9 at ward no 6, 5 graveyards are at ward no 7, 9 graveyards are at ward no 8, 8 graveyards are at ward no 9.

Barairdala Union- Total numbers of family type graveyard at Barairdala Union are 45. 4 graveyards are at ward no 1, 6 graveyards are at ward no 2, 4 graveyards are at ward no 3, 5 graveyards are at ward no 4, 7 graveyards are at ward no 5, 4 at ward no 6, 5 graveyards are at ward no 7, 6 graveyards are at ward no 8, 4 graveyards are at ward no 9.

Tha) Crematories -

There is no government crematories at Sitakundu Upazila. The upzila have 140 notable crematories. Apart from these, there are small size families and Temple based crematories in Sitakundu Upazila. Unionwise information of crematories is outlined below-

Pourashava- Total number of crematories at Pourashav areas are 21. 1 crematory is at ward no 1, 2 crematory are at ward no 2, 2 crematory are at ward no 3, 3 crematory are at ward no 4, 3 crematory are at ward no 5, 2 crematory are at ward no 6, 1 crematory are at ward no 7, 2 crematory are at ward no 8, 3 crematory are at ward no 9.

Sonaichari- Total numbers of incarnation at Sonaichari union are 15. 2 crematories is at ward no 2, 2 crematories are at ward no 4, 3 crematories are at ward no 7, 1 crematory is at ward no 3, 1 crematories is at ward no 4, 2 crematories are at ward no 5, 1 crematory is at ward no 6, 2 crematories are at ward no 8, 1 crematory is at ward no 9.

Kumira- Total numbers of crematories at Kumira union are 16. 2 crematories are at ward no 1, 3 crematories are at ward no 8, 1 crematories is at ward no 2, 2 crematories are at ward no 3, 1 crematories at ward no 5, 2 crematories are at ward no 6, 3 crematories are at ward no 7, 2 incarnations are at ward no 9.

Bansbaria- Total numbers of crematories in this union are 14. 1 crematory is in ward no 1, 1 crematories is in the ward no 2, 2 crematories is in the ward no 3, 1 crematory is in the ward no 4, 2 crematories is in the ward no 5, 3 crematories is in the ward no 6, 1 crematory is in the ward no 7, 2 crematories are in the ward no 8, 1 crematory graveyard is in the ward no 9.

Barabkundu- Total numbers of crematories in this union are 18. 2 crematories are in ward no 1, 1 crematory is in the ward no 2, 3 crematory are in the ward no 3, 1 crematory is in the ward no

4, 2 crematories are in the ward no 5, 3 crematories are in the ward no 6, 1 crematories are in the ward no 7, 2 crematories are in the ward no 8, 1 crematory is in the ward no 9.

Saidpur- Total numbers of crematories in this union are 11. 1 crematories are in ward no 1, 2 crematories are in the ward no 2, 1 crematory is in the ward no 3, 2 crematory are in the ward no 5, 2 crematories are in the ward no 6, 1 crematory is in the ward no 7, 2 crematories are in the ward no 9.

Bariardala- Total numbers of crematories in this union are 14. 2 crematories are in ward no 1, 1 crematory are in the ward no 2, 3 crematories are in the ward no 4, 1 crematory are in the ward no 5, 1 crematory are in the ward no 6, 2 crematories are in the ward no 7, 1 crematory is in the ward no 8. 3 crematories are in the ward no 9.

Salimpur- Total numbers of crematories in this union are 15. 3 crematories are in the ward no 1, 1 crematory is in the ward no 2, 1 crematory is in the ward no 3, 2 crematories are in the ward no 4, 1 crematory is in the ward no 5, 1 crematory is in the ward no 6, 2 crematories are in the ward no 7, 3 crematories are in the ward no 8. 1 crematories is in the ward no 9.

Bhatiari - Total numbers of crematories in this union are 16. 1 crematory is in the ward no 1, 1 crematory is in the ward no 2, 1 crematory is in the ward no 4, 3 crematories are in the ward no 3, 2 crematories are in the ward no 6, 3 crematories are in the ward no 7, 2 crematories is in the ward no 8, 3 crematories are in the ward no 9.

TTA) Means of Communication & Transport -

There are two way communications access to communicate between Sitakundu upazila to Chittagong district. One is road and another is railway. Major transports are Bus, Truck, Lorry, Cargo, Rickshaw, Van and Train. Buses services are available for communication between all unions to Upazila Sadar. In addition, other mode of transports like CNG, Rickshaw, VAN, Auto-rickshaw, VATBATI (a kind of local motorized vehicles) ply between unions and upazila. Total number of buses in this upazila are 53, CNG 289, Rockshaw , Van , VATVATI And Auto –Rickshaw are 327 and truck & lorry are 48.

- Total numbers of CNG at Salimpur union are 42, Rickshaw and Van 105.
- Total numbers of CNG at Bhatiari union are 64, Rickshaw and Van 130.
- Total numbers of CNG at Barabkundu union are 71, Rickshaw and Van 94.
- Total numbers of CNG at Muradpur union are 89, Rickshaw and Van 98.
- Total numbers of CNG at Bansbaria union are 105, Rickshaw and Van 124.
- Total numbers of CNG at Saidpur union are 95, Rickshaw and Van 135.

Da) Forest & Plantation-

There are 373930 acres forest areas in Chittagong district. Among them, Sitakunda upazila covers 19508 acres. Extended forest is seen in this upazila. But some forest areas are on the verge of extinction due to human induced causes and natural adversities. Apart from existing hilly forest, there are social forest at embankment and western side of embankment i.e., besides Sandwip channel and roadsides. In addition, there is government sponsored forest. Trees of these forests are Gadan, Akashmoni, Segun, Campbal, rain tree, Koroi, Epil Epil, Garjan, gamari, Neem, jam, Mangoo, jackfruit, amda, guava, pineapple, bamboo, rubber etc. Besides, some trees are found in homesteads. But no afforestation is done through NGO and individual initiatives. The unionwise detail of forest is exhibited below-

- Salimpur- There are 400 acres forest areas at Jungla salimpur and Latifpur of Salimpur union.
- Bhatiari- There are 2000 acres forest areas at BMA, Isamoti, Bhatiari, Madambibirhat areas.
- Sonaichari- There are 3600 acres forest at Goramora, Baro- Aulia, Sitalpur, and Dhakkin Goramora.
- Kumira- There are 1200 acres forest at Kumira, Masjidda, Uttar Masjidda, Mollapara, Takurani, Alekdia, Hamadia areas.
- Bansbaria- There are 2500 acres forest (including Rubber Garden) at Uttar bansbaria, Boalia, Hetalia, Mogpukur, Cotta, Madda Bansbaria, and Dhakkin Bansbaria of this union.
- Barabkundu- There are 3000 acres forest at Mahmudabad, Nadalia, Hatiluda, Chadargandi and eastern side of rail line in this union.
- Barairdala- There are 498 acres forest at Dhakkin Barigram , Baharpur, Pacchim Lalanagar , Mahalonga of this union.
- Saidpur – There are 2000 acres forest at Purba Bakkhali, Bastnagar, c road, Badarkhali, Terial, Bagachattar areas of this union.
- Murudpur- There are 2300 acres forest at Golabaria, Guliakhali, Murudpur, Basatnagar, Bhatarkill, Hasnabad areas of this union.
- Pourashava- There are 2010 acres forest at Amirabad, Shibpur, Mahadevpur, Kedarkill, Edelpur, Yakubnagar, Barodargarhat, Sheikpara, & both side of rail line areas of this union.

1.4.3. Weather & Climate

If an analysis is done on rain pattern of Sitakundu upazila, it will be found that the average rainfall is almost same. After 1965, 1985, 1995, and 2005 the daily average rainfall is more than 1, 6, 5 and 6 Millimeter. But more research is needed to be ascertaining whether this change is the outcome of climatic Change. The timings of Mooson rain is being delayed as a result of changing rainfall pattern. So traditional agricultural patter is now changing. As a result production cost is increasing but instead production is getting low. Production and cultivation is being interrupted due to erratic and untimely rainfall and it has been impacted negatively to the lives and livelihoods of people.

Kha) Temperature-

Extreme temperature is seen due to barren hills and indiscriminate cutting of trees. Now the highest and lowest temperature of Sitakundu upazila is highest 40.5 Degree Celsius and lowest 18.50 Degree Celsius. During rainy season the average temperature becomes 24.5 Degree Celsius. In most cases, temperature remains normal. But it is known from people's view that temperature is gradually increasing specially during the last 5-6 years, the temperature has risen so high that people's normal lives are being paralyzed. The reason for raising temperature is increasing of humidity in air. Agricultural sector is facing severe threat due to increasing temperature. Future risks will be increasing if present temperature trend continues. According to Public Health Engineering Department two times survey are conducted in each year to assess level of underground water. It has been found that underground water level lowers considerably during the month of April and May that is why availability of safe drinking water is gradually getting hard. It is bad for future development.

GHA) Underground water level-

According to PHE every year survey is conducted to assess level of underground water level. It has been found that in 2003 the underground water level for deep tube well were 275-280 feet, shallow tube well 40-42 feet. In 2004 the level was 270-280 feet for deep tube wells, 30-32 feet for shallow tube wells. In 2005 it was 270-280 feet for deep tube wells and 63-66 feet for shallow tube wells. In 2006 it was 375-379 feet for Deep tube wells and 35-38 feet for shallow tube wells. In 2007 it was 455-458 feet for deep tube wells. In 2008 it was 445-450 feet for deep tube wells and 43-46 feet for shallow tube wells . In 2009 it was 447-450 feet for deep tube wells and 66-68 feet for shallow tube wells. In 2010 it was 454-457 for deep tube wells and 65-68 feet for shallow tube wells. In 2012 it was 447-450 for deep tube wells, 63-66 feet for shallow tube wells. The water level comes down during May month and the layer remains 15-17 feet. Peoples think that water level is gradually lowering and it is a danger for sustainable development.

1.4.4. Others

Ka) Land & use of Land-

Total land mass of this upazila are 68725 acres (27245 hectars). Among them one crop land are 2840 acres, two crops 13585 acres, three crops are 5229 acres. Khas land 9240 acres, protected forest 24980 acres, coastal forest 2698 acres, homestead 10037 acres, fellow land 80 acres, Marsh land 36 acres. Unionwise detail is presented below-

- Salimpur – Total crop land in this union are 910 acres, among them one crop land are 30 acres, two crop land 670 acres, three crops 210 acres.
- Saidpur- Total crop lands in this union are 5500 acres, among them one crop are 300 acres, two crops are 5000 acres and three crops are 200 acres.
- Muradpur- Total crop lands in this union are 5432 acres, among them one crop are 3309 acres, two crops are 2023 acres and three crops are 100 acres.
- Barirardala - Total crop lands in this union are 4700 acres, among them one crop are 1000 acres, two crops are 2700 acres and three crops are 1000 acres.
- Sonaichari- Total crop lands in this union are 3500 acres, among them one crop are 3500 acres and there are no two crops and three crops land in this union.
- Barabkundu- Total crop lands in this union are 1425 acres, among them one crop are 125 acres, and two crops land are 1300 acres.
- Bhatiari- Total crop lands in this union are 8000 acres, among them one crop are 2500 acres, two crops are 3000 acres and three crops are 2500 acres.
- Kumira- Total crop lands in this union are 4750 acres, among them one crop are 1200 acres, two crops are 2800 acres and three crops are 750 acres.
- Bansbaria: Total crop lands in this union are 4550 acres, among them one crop are 500 acres, two crops are 2000 acres and three crops are 550 acres.
- Bansbaria- Total crop lands in this union are 4550 acres, among them one crop are 1800 acres, two crops are 2200 acres and three crops are 550 acres.
- Sitakundu Pourashava- - Total crop lands in this areas are 5000 acres, among them one crop are 500 acres, two crops are 2000 acres and three crops are 2500 acres.

Kha) Agriculture & Food:

Principal crops of Sitakundu upazila are rice and fish. Apart from these Potatoes, Sugarcane and Maize, water melon, Guava, Pineapple, Bangi, Papaya, Jam, mangoes and jackfruit are known as income generation crops. It may be mentioned here that huge vegetables are grown like Cauliflower, Cabbage, Kakrol, Barboti, Bringal, sweet gourd, Panikumra, Ladies finger, Chilies, Raddish, Tomatoes, Cucumber, Koirala, Puishak, Lalshak, Kachushak in this upazila. `

The total crop production of this upazila is 140050 Matric ton. Main foods are rice, fish, pulse, and bread or ruti and food habit of this upazila is 1 meal in the morning, 1 in the supper and another one is in night. Union base crop production figure are appended below-

- Total production of rice, fish, potatoes, pulse, guava, pineapples, Papya, jam, mangoes, jackfruits and different kinds of vegetables and fruits in Sitakundu Pourashava are 8250 matric tons.
- Total production of rice, fish, potatoes, pulse, guava, pineapples, Papya, jam, mangoes, jackfruits and different kinds of vegetables and fruits in Salimpur union are 1501.5 matric tons.
- Total production of rice, fish, potatoes, pulse, guava, pineapples, sugarcane, Maize, water melon, Papya, jam, mangoes, jackfruits and different kinds of hilly vegetables and fruits in Saidpur union are 9075 matric tons.
- Total production of rice, fish, potatoes, pulse, guava, pineapples, sugarcane, Maize, water melon, Papya, jam, mangoes, jackfruits and different kinds of hilly vegetables and fruits in Muradpur union are 8962.5 matric tons.
- Total production of rice, fish, potatoes, pulse, guava, pineapples, sugarcane, Maize, water melon, Papya, jam, mangoes, jackfruits and different kinds of hilly vegetables and fruits in Bariradhala union are 7755 matric tons.
- Total production of rice, fish, potatoes, pulse, guava, pineapples, sugarcane, Maize, water melon, Papya, jam, mangoes, jackfruits and different kinds of hilly vegetables and fruits in Sonaichari union are 5775 matric tons.
- Total production of rice, fish, potatoes, pulse, guava, pineapples, sugarcane, Maize, water melon, Papya, jam, mangoes, jackfruits and different kinds of hilly vegetables and fruits in Barabkundu union are 2351.25 matric tons.
- Total production of rice, fish, potatoes, pulse, guava, pineapples, sugarcane, Maize, water melon, Papya, jam, mangoes, jackfruits and different kinds of hilly vegetables and fruits in Bhatiari union are 13200 matric tons.
- Total production of rice, fish, potatoes, pulse, guava, pineapples, sugarcane, Maize, water melon, Papya, jam, mangoes, jackfruits and different kinds of hilly vegetables and fruits in Kumira union are 7337.50 matric tons.

- Total production of rice, fish, potatoes, pulse, guava, pineapples, sugarcanes, Maize, water melon, Papaya, jam, mangoes, jackfruits and different kinds of hilly vegetables and fruits in Bansbaria union are 7342.50 metric tons.

Kha). 3 Information of damage:

Union based information of affected crops for disasters are shown in below-

- Salimpur Union: Total crop lands are 910 acre. Crops of 320 acres out of total 910 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are 48 lakh taka.
- Saidpur Union: Total crop lands are 5500 acres. Among them crops of about 800 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are approximately 61 lakh taka.
- Muradpur Union: Total crop lands are 5432 acre. Among them crops of about 834 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are approximately 65 lakh taka.
- Barairdala Union: Total crop lands are 4700 acre. Among them crops of about 780 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are approximately 59 lakh taka.
- Sonaichari Union: Total crop lands are 690 acre. Among them crops of about 800 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are approximately 50 lakh taka.
- Bhatiari union- Total crop lands are 8000 acre. Among them crops of about 795 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are approximately 61 lakh taka.
- Barabkundu union- Total crop lands are 1425 acre. Among them crops of about 340 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are approximately 52 lakh taka.
- Kumira union- Total crop lands are 4750 acre. Among them crops of about 785 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are approximately 62 lakh taka
- Bansbaria union- Total crop lands are 4550 acre. Among them crops of about 695 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are approximately 60 lakh taka
- Sitakundu Pourashava - Total crop lands are 5000 acre. Among them crops of about 760 acres are damaged due to flood, drought, excessive rain, hilly flood, snow rain and salinity and damaged value are approximately 55 lakh taka.

Ga) Rivers-

There is no river in Sitakundu upazila but Sandwip Channel has flown on the west bank of this upazila. The Sandwip channel is 33 KM in width. This Channel brings many benefits to local people but in some cases make damages to its people. Benefits are – many fishes including valuable hilsha fish are available in this Channel. Many people lives on this livelihoods. In addition, many people are engaged in ferrying peoples and cargoes to and from Sitakundu shore and lives on this business. Moreover, there has been flourishing ship breaking business and country's hub for this new enterprise. Many people get employed in this profession and many employments have been generated by ferry services that carry people from shore to other areas including Sanwip Island.

This ship breaking yards has also brought new hazards which damages environment substantially. As a result many fishes die unnaturally and fishes are not available in some small rivers surrounding to this ship breaking industry. Moreover many people become affected by skin diseases, extents of damages increases by floods; huge damage is done by saline water intrusion, land erosion due to river embankment break and embankment damages is happen due to severe current of channel and paddy land decreasing due to erosion of embankment. The Sanwip channel has flown through different union of Sitakundu. A brief description is being provided below-

- Muradpur: The channel has flown through ward no 1,3,4,5 of this union.
- Barirardala: There is no river or Canals in this union.
- Sonaichari: The channel has flown through ward no 1, 3, 4, of this union.
- Bhatiari: The channel has flown through ward no 6 and 7 of this union.
- Barabkundu: The channel has flown through ward no 2, 3,5,6,8 and 9 of this union.
- Kumira: The channel has flown through ward no 5,6,7,8 and 9 of this union.
- Bansbaria: The channel has flown through ward no 1,4,7,8 and 9 of this union.
- Salimpur: The channel has flown through ward no 3, 4,5,6,7 8 and 9 of this union.
- Saidpur: The channel has flown through ward no 1, 2, 3, 5, and 6 of this union.

GHA.1 Ponds:

Total numbers of ponds in this upazila are 2865. Besides, there are families owned small scale ponds. Usually fishes are cultivated in these ponds and people take bath and use ponds water for cloth washing purposes. In some cases domestic animals are washed in these ponds. In some cases, people use ponds water for vegetable cultivation.

- Total numbers of ponds at Salimpur union are 200. There are 23 ponds at ward no 1, 23 pond at wards no 2, 21 no ponds at ward no 3, 20 ponds at ward no 4, 22 number ponds

at ward no 5, 24 number ponds at ward no 6, 23 number ponds at ward no 7, 23 number ponds at ward no 8, 21 no ponds at ward no 9.

- Total numbers of ponds at Saidpur union are 350. There are 30 ponds at ward no 1, 43 pond at wards no 2, 41 no ponds at ward no 3, 46 ponds at ward no 4, 40 number ponds at ward no 5, 44 number ponds at ward no 6, 45 number ponds at ward no 7, 37 number ponds at ward no 8, 31 no ponds at ward no 9.
- Total numbers of ponds at Murudpur union are 400. There are 43 ponds at ward no 1, 43 pond at wards no 2, 48 no ponds at ward no 3, 46 ponds at ward no 4, 50 number ponds at ward no 5, 49 number ponds at ward no 6, 45 number ponds at ward no 7, 47 number ponds at ward no 8, 32 no ponds at ward no 9.
- Total numbers of ponds at Kumira union are 200. There are 23 ponds at ward no 1, 23 pond at wards no 2, 21 no ponds at ward no 3, 20 ponds at ward no 4, 22 number ponds at ward no 5, 24 number ponds at ward no 6, 23 number ponds at ward no 7, 23 number ponds at ward no 8, 21 no ponds at ward no 9.
- Total numbers of ponds at Barirdala union are 450. There are 48 ponds at ward no 1, 46 ponds at wards no 2, 53 no ponds at ward no 3, 51 ponds at ward no 4, 55 number ponds at ward no 5, 54 number ponds at ward no 6, 50 number ponds at ward no 7, 54 number ponds at ward no 8, 39 no ponds at ward no 9.
- Total numbers of ponds at Barabkundu union are 380. There are 41 ponds at ward no 1, 46 ponds at wards no 2, 45 no ponds at ward no 3, 38 ponds at ward no 4, 39 number ponds at ward no 5, 38 number ponds at ward no 6, 49 number ponds at ward no 7, 47 number ponds at ward no 8, 32 no ponds at ward no 9.
- Total numbers of ponds at Bansbaria union are 300. There are 30 ponds at ward no 1, 33 ponds at wards no 2, 31 no ponds at ward no 3, 40 ponds at ward no 4, 29 number ponds at ward no 5, 34 number ponds at ward no 6, 36 number ponds at ward no 7, 27 number ponds at ward no 8, 40 no ponds at ward no 9.
- Total numbers of ponds at Bhatiari union are 300. There are 30 ponds at ward no 1, 33 ponds at wards no 2, 31 no ponds at ward no 3, 40 ponds at ward no 4, 29 number ponds at ward no 5, 34 number ponds at ward no 6, 36 number ponds at ward no 7, 27 number ponds at ward no 8, 40 no ponds at ward no 9.
- Sitakundu Pourashava : Total numbers of ponds are 190. There are 22 ponds at ward no 1, 20 ponds at wards no 2, 24 no ponds at ward no 3, 19 ponds at ward no 4, 23 number ponds at ward no 5, 27 number ponds at ward no 6, 25 number ponds at ward no 7, 23 number ponds at ward no 8, 33 no ponds at ward no 9.
- Total numbers of ponds at Sonaichari union are 195. There are 25 ponds at ward no 1, 23 ponds at wards no 2, 24 no ponds at ward no 3, 20 ponds at ward no 4, 24 number ponds at ward no 5, 27 number ponds at ward no 6, 25 number ponds at ward no 7, 23 number ponds at ward no 8, 30 no ponds at ward no 9.

Uma) Khal (small rivers):

There are total 24 canals / khall at Sitakundu upazila. Union based information of Khal are provided in below-

- Muradpur: Total numbers of Khals at Sonaichari union are 5. One is known as Chotta Kumira Khal and it is situated at ward no 1 and 2.5 KM length. Another one is known as Guliakhali Khal.
- Bariradhala: There is no Khal in Bariradhala union.
- Sonaichari: There are 3 Khal at Sonaichari union. One is known as Goramora khal and it is situated at ward no 1 and 2 and its length are 5 KM. One is known as Sonaichari Khal and it is in the ward no 3,4,5 and its length are 4.50 KM. Another one is known as ‘ Murkunda ‘ Khal and its in the ward no 5,7,8 and 9 and its length are approximately 5 KM.
- Bhatiari: There are 3 Khal in this union. One is known as ‘ Damaur Khal and it is in the ward no 4 and 6 and its length are 2.75 KM. Another one is known as ‘Isamoti’ Khal and it is in the ward no 1, 2 and 3 and its length are 4 KM.
- Barabkunda: There are 5 Khal in this union. One is known as ‘Guptakhali Khal’ and it is in the ward no 2 and 3 and its length are 5 KM. Another one is known as ‘Kaunia Khal’ and it is in the ward no 5 and its length are 6 KM. Another one is known as ‘Ulania Khal; and it is in the ward no 6 and its length are approximately 4 KM. Another one is known as ‘Nadalia Khal’ and it is in the ward no 9 and its length are approximately 4 KM. Another one is called ‘Tiyachura Khal’ and it is in the ward no 9 and its length are approximately 6 KM.
- Kumira: There are 2 Khals at Kumira union. One is known as ‘Chotta Kumira’ Khal and it is situated at ward no 4, 5 and 6 and its length are 7 KM. Another one is known as ‘Baro Kumira’ Khal and it is in the ward no 5,7, and 8 and its length are 8 KM. Another one is known as ‘ Murkunda ‘ Khal and its in the ward no 5,7,8 and 9 and its length are approximately 5 KM.
- Bansbaria: There are 2 Khals at Bansbaria union. One is known as ‘ Boalia Khal’ and it is situated at ward no 7 and its length are 4.50 KM. Another one is known as ‘Sikdar Khal’ and it is in the ward no 4 and its length are approximately 5 KM.
- Salimpur : There is 1 Khal at Salimpur union. One is known as ‘Salimpur Beribad’ or Salimpur Embankment and it is situated at ward no 7 and its length are approximately 3 KM.
- Saidpur: There is 3 Khals at Salimpur union. One is known as ‘ Bakkhali Khal and it is situated at ward no 4 and its length are approximately 6 KM. Another one is known as ‘Badarkhali Khal’ and it is in the ward no 1, 2 and 5 and its length are approximately 5 KM. Another one is known as ‘Basadnagar Khal’ and it is in the ward no 4 and 5 and its length are approximately 5 KM.
- Sitakundu Pourashava: There is no Khal in the Sitakundu Pourashava.

Uma) 1 Streams / Charra-

Streams are created by flow of water from hills during excessive rain. There are 27 streams in Sitakundu. Unionwise information of stream are appended below-

- Muradpur : There are 3 streams at Muradpur union. These are 'Megbati Stream at ward no 7 , Dhakkin Rahmatnagar Stream at ward no 9 and Dalipara stream at Ward no 8.
- Barirdala: There are 5 Streams at Bariardala union. These are 'Mora Chara' & 'Nanda Chara' at ward no 2 , 'Barpur Stream' at ward no 8 and 'Nabalika Chara' at Ward no 8.
- Sonaichari: There are 5 Streams (Chara) at Sonaichari union. These are 'Napita Chara' at ward no 3 and 4 Jannaya Chara at ward no 1 and 4 , Laturmar Chara (Stream) at ward no 2 and 6 , Kani chara at ward no 6 and 7, Kadamrasul Chara at Ward no 9.
- Barabkundu: There is only one Chara at Barabkundu union. Kanichara of 1 no ward.
- Kumira Union: There are 3 Streams (Chara) at Kumira union. These are 'Bagmara Chara at ward no 4 and Uttarmasjidda Chara at ward no 1, Masjidda Chara of ward no 2.
- Bansbaria union: There is no CHARA at Bansbaria union.
- Salimpur union: There are 2 Streams (Chara) at Salimpur union. These are 'Banglabazar Chara at ward no 4 and ChaltachaliChara at ward no 5, Ramgobinda Chara at ward no 1.
- Saidpur union: There is no CHARA at Saidpur union.
- Bhatiari: There is 1 Chara (Stream) at Bhatiari union. It is called ' Boiragir Chara' and located at 6 and 7 no ward.
- Sitakundu Pourashava: There are 7 Streams (Chara) in Sitakundu Pourashava areas. One is called ' Pontichilla Chara' and located in ward no 5, another one is Nunachara and it is situated in ward no 1, another one is Edilpur Chara and it is located in ward no 3, another one is Mohadevpurchara and it is located in ward no 4, another one is Gudguri Chara and it is located in the ward no 5, another one is Boishachara and it is located in the ward no 5 and another one is SKM Chara and it is located in the ward no 6.

Ta) Salinity:

Sitakundu upazila is closed to sea. Two Joar and Bhatta are occurring within 24 hours. That is why lands of this upazila are becoming more saline. So production of crops has considerably decreased due to losing soil fertility. On the other hand scarcity of safe drinking water becoming scares gradually. In some cases, saline water logging turning lands into salinity. Now people of this upazila consider salinity as a hazard. Unionwise saline areas are given below-

- Salinity is found at ward no 1, 2,3,5,8 and 9 of Kumira union because those wards are close to Sandwip Channel.
- Salinity is found at ward no 8 and 9 of Bansbaria union because those wards are close to Sandwip Channel.

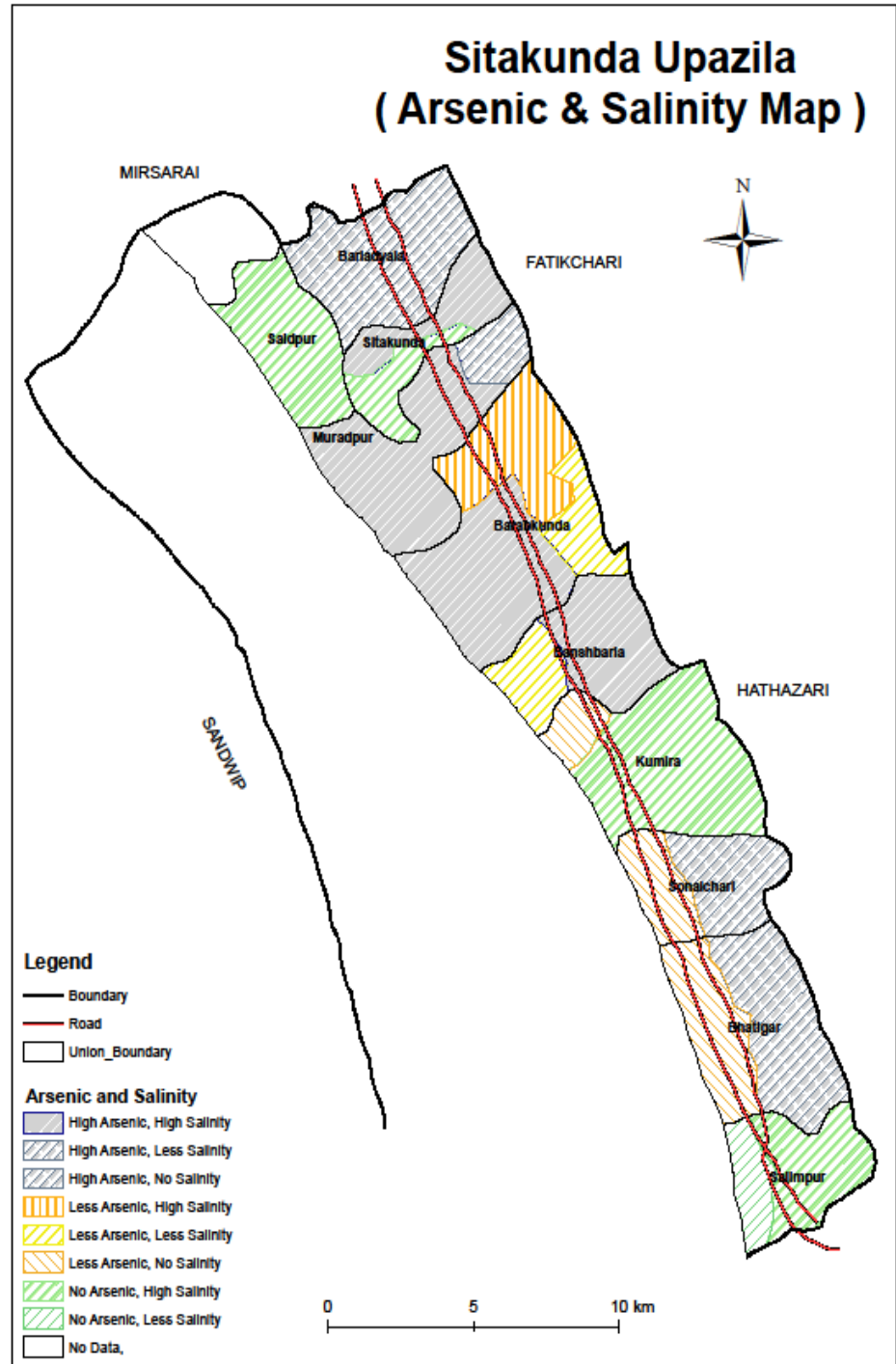
- No salinity is found in Bariardala union.
- Salinity is found at ward no 1, 2,3,4,5 and 6 of Saidpur union because those wards are close to Sandwip Channel.
- Salinity is found at ward no 2, 3, 4 and 5 of Murudpur union because those wards are close to Sandwip Channel.
- Salinity is found at ward no 2, 3, 5, 6, 8 and 9 of Barabkundu union because those wards are close to Sandwip Channel.
- Salinity is found at ward no 5, 6, and 7 of Sitakundu Pourashava because those wards are close to Sandwip Channel.
- No salinity has found in Bhatiari union.
- Salinity is found at ward no 7, 8, and 9 of Salimpur union because those wards are close to Sandwip Channel.
- No salinity has found in Sonaichari union.

Ta) Arsenic contamination-

On average 12.10% arsenic are found in Sitakundu upazila. Inhabitant cannot use water of all areas. Now it is found that arsenic level is gradually increasing. People say that many diseases are spreading due to this cause. People opined that if such trend continues than there will have huge deficit of safe drinking water. Now people have begun to treat arsenic contamination as one of the hazard.

- Bansbaria: Arsenic has been found at 8 and 9 no ward of Bansbaria union. It is approximately 12%.
- Bariardala: Approximately 10% arsenic has been found at all wards of Bariardala union.
- Muradpur union: 18% arsenic is found in almost all wards of Muradur union.
- Barabkunda union: 19% arsenic is found in almost all wards of Barabkundu union.
- Sitakunda Pourashava: Almost 20% arsenic is found in almost all wards of Sitakundu Pourashava.
- Bhatiari union: There is 19% arsenic is found in almost all wards of Barabkundu union.
- Sonaichari union: Approximately 5% arsenic is available in almost all wards of this union.

Arsenic & Salinity Map Sitakundu



2nd Chapter: Disasters, Hazards and Vulnerability

2.1 General history of Disasters

Sitakundu upazila of Chittagong district is one of the most risky upazila. This upazila is affected by any kind of disasters in each and every year. Natural disasters like flash flood, Tornado and heavy inflow of hilly rain water have been put people's lives in danger and causes serious damage to resources.

In 1991, this upazila was severely affected by cyclone with high speed wind and high tidal surge. Most unions including Pourashava were badly affected by this cyclone and tidal surge. Affected unions were Salimpur, Kumira, Saidpur, Sonaichari, Bhatiari, Barabkunda, Bansbaria and Muradpur.

The speed of 1991 cyclonic disaster was 220-243 KM per hour. It was started at 11.30 PM and finished at 4.30 AM. The cyclone completely inundated Dhaka Chittagong highway. Many people died by this cyclone and it brought heavy damage to Agriculture, Fishery, Livestock, Trees and infrastructures. High tidal surge damaged fishing of 1500 ponds; many educational institutions including 30 primary schools and standing crops of 13500 acres, 120 KM Kacha road, 150 culverts, 20 bridges, 9000 houses were completely damaged. In addition, 630 deep tube wells, 3500 cows, 430 buffalos, 30 sheep, 3500 duck, 6000 chicks, 20 mosques, washing away of goods of 1530 shops, 5 temples were badly damaged in this cyclone. It may be mentioned here that as many as 1200 people died in different ways like stranding & sweeping away. Apart from this, 80-90 people were disappeared. During this period government, non-government and many international development agencies came forward to provide assistance to the affected people. Besides, they provided all support including financial support for rescue and recovery, primary treatment and medication, dry food distribution, rehabilitation of victims.

In 2012, Cyclone 'Iyla' visited this upazila. Though there was no death incident but 200 acres crops partly damaged. In addition, Kacha houses, shops, trees, domestic cattle, ponds, education institutions were also partly damaged

In 2013 cyclone 'Mohasen' affected this upazila. Though this did not brought huge damage but the upazila was partly affected.

Time of disasters, extent of damage and affected sectors

Name of Disasters	Year	Extent of Damages	Affected sectors
1.Flood	Every year but it was severe in 1991	High	Crops, Human Resources, Cattles & Infrastructures.
2.Hilly water flow/ rush	Every year	High	Agriculture, Houses, Fish & domestic animals
3. Storm/ tornado	Every year	High	Crops, Monsoon fruits, Homes, Domestic Animal & Infrastructures.
4.Chemical waste	Everyday	High	Agriculture, Fish, Environment Pollution, Human body
5. River erosion	Every year / Occasional	High	Agriculture, Fish, Homes & Infrastructures.
6. Salinity	Every year	High	Agriculture, scarcity of Safe water, Trees
7. Arsenic	Every year	High	Human body, scarcity of Safe drinking water, Trees
8. Snow rain / <i>Shila Bristi</i>	Every year	High	Crops, Monsoon fruits, Homes, Domestic Animals & Infrastructures.
9. Drought	Every year	High	Crops, Safe drinking water, Trees / Flora & Fauna

2.2 Identification of Hazards & Prioritization:

Sl. No.	Name of Disasters	Sl no.	Prioritization:
1.	River Erosion	1	Flood
2.	Flood	2	Hilly water rush
3.	Drought	3	Tornado
4.	Chemical waste	4	Chemical waste
5.	Tornado	5	River Erosion
6.	Excessive rain	6	Salinity
7.	Silla Bristi / Snow rain	7	Arsenic
8.	Salinity	8	Silla Bristi / Snow rain
9.	Arsenic	9	Drought

2.3 Different Hazards and its present and future description:

1. Flood:

Sitakundu upazila is affected by flood every year. The Flood inundates and damages 3500 acres standing crops, fish of 430 ponds, 55 Kacha road, 3090 kacha homes and 360 tube wells every year. Apart from this domestic animals and educational intuitions are extensively damaged.

Now intensity of floods is increasing during rainy monsoon due to siltation / sedimentation of rivers / Khall and Sandwip channel. If this trend continues Unabatedly the extent of damage will be increased in future.

2. Hilly water rush(dall) :

Sitakundu upazila is known as a hilly upazila. There are hills in almost every union. Huge damage is caused to homes, standing crops, tress and kacha roads due to hilly water rush. In addition, many people lost their lives in avalanches or landslides that resulted from excessive rain. The extent of damage may be more if rehabilitation of people living in hills is not done.

3. Tornadoes:

Tornado visits Sitakundu upazila in each and every year. The upazila is close to sea and due to impact of climatic Change, it is affected by tornadoes. It is roughly estimated that each year tornedo damages 2050 acres crops, 2200 kacha homes and uprooted 50% trees. So the damages may increase if disaster resilient homes are not built.

4. Chemical waste:

Sitakundu upazila is an Industrial upazila. A large number of industries have been established in this upazila. Roughly 988 small scale and 53 large scale industries have been established in this upazila. The country's single and largest ship breaking industries have been flourished in the coastal areas of this upazila. Many industries have been established in unplanned way

That discharge chemical wastage or industrial wastage and as a result fishes has now a day's become scarce in rivers / streams close to this industry. Besides people of this areas are now infecting many skin diseases. Moreover, farm land is losing their fertility.

5. River Erosion:

There is virtually no river in Sitakundu Upazila. But people consider Sandwip Channel as river. River erosion are see in some unions like Salimpur, Bhatiari, Kumira, Barabkundu and Bansbaria union during rainy season. Every year it is estimated that 150- 200 acres crop land and approximately 150 homes close to channel feel pray to river erosion, fish cultivation is effected badly, and coastal forest is gone to destruction. The risk can be reduced by paving concrete block and by planting more rooted tress on the embankment.

6. Salinity:

As the upazila is very close to Bay of Bengal, unions like Salimpur, Kumira, Barabkundu, Bansbaria, Muradpur and Saidpur including Pourashava have prevalence of salinity. Roughly lands of 1200 acres are damaged every year. Due to this fact, safe drinking water is gradually becoming scares and huge damage is happening to coastal forestry. Cultivation of in crop land, afforestation and scarcity of safe drinking water will be badly affected if this trend continues.

7. Arsenic :

5.10% arsenic has been found in unions of Bansbaria, Bariardala, Muradpur, Barabkundu, Bhatiari and Sonaichari including Sitakundu Pourashava. As many as 1212 deep tube wells are arsenic contaminated. People s are affecting by various skin diseases. Arsenic mitigation can be done through making people more aware and installing more deep tube wells and scarcity of safe drinking water will be addressed.

8. Shilabristi / Snow rain:

Every year the upazila is experienced by snow rain. This affect more or less to almost all unions but particularly 200-250 acres crop of Muradpur, Barabkundu ,Saidpur, Bansbaria, Bariardala, Kumira and Barabkundu union are damaged in each year. The damage can be reduced through cultivation of disaster resilient crops.

9. Drought:

Drought emerges during dry monsoon at Sitakunda upazila. Drought damages crops, trees, forestry and even brings scarcity of safe drinking water. Water is not available in deep tub wells due to lowering of underground water level. The risk can be minimized through sinking more deep tube wells by government and non government initiatives and increase of forest.

2.4 Vulnerability & potentiality /Ability;

Ka) **Vulnerability** means present Materials, socio-economic and environmental condition that signals for diastral damage and community people becomes unable to encounter.

Kha) **Ability** means a total condition or process that is created by natural, social and environment etc that men or any organization face the adverse effect of disasters by using existing resources and reduces the severe impacts of disasters.

Vulnerability and ability are exhibited in below table-

Hazards	Vulnerability	Ability
1.Flood	<ul style="list-style-type: none"> Narrowing of rivers & Khall/ streams due to siltation Less and weak embankments No plantation on both sides of embankment No construction of disaster resilient houses 	<ul style="list-style-type: none"> Dredging to increase flow of water Plantation on both sides of embankment Construct embankment newly or strengthen old embankment through complete repair. Construction of disaster resilient houses.
2.Hilly water rush	<ul style="list-style-type: none"> Construction of homes at hilly slops and hill sides Poor awareness on this disaster Non-construction of strong houses 	<ul style="list-style-type: none"> Construction of homes away from hills Construct homes that can be disaster resilient Make community people aware about the danger of hilly watter rush.
3.Torned oes	<ul style="list-style-type: none"> Non-construction of disaster resilient houses Non cultivation of cyclone resilient crop varity Excessive cutting of trees Non- avilability of trees and bushes around houses Poor construction of Kacha latrines Poor construction of Cattle homes Less shelter centers in contrast to needs. 	<ul style="list-style-type: none"> Construct disaster resilient houses. Cultivation of disaster resilient crop varieties. Plant more trees Plant more trees in and around homes Construct disaster resilient kacha latrines Construct disaster resilient cattle houses. Construct more Disaster/ cyclone shelter centers
4.	<ul style="list-style-type: none"> Construction of industries in 	<ul style="list-style-type: none"> Construct industrial units

Hazards	Vulnerability	Ability
Chemical wastes	<ul style="list-style-type: none"> unplanned way. Not to dispose industrial wastages in areas designed for its disposal. Death of fish due to disposing of industrial wastage in khalls or streams 	<ul style="list-style-type: none"> through planned way. Manage / dispose of industrial wastes In a specific point. Not to dispose of industrial wastages into water or rivers/ streams.
5. River erosion	<ul style="list-style-type: none"> People lost all resources by river erosion Weak embankment No afforestation on river side. Broken embankment 	<ul style="list-style-type: none"> Construct houses away from rivers There are scopes for planting more trees around embankment that can strengthen soil. Plant trees in both sides of roads
6. Salinity	<ul style="list-style-type: none"> Extensive damage of crop through intrusion of saline water as existing varieties can not tolerate saline water. Scarcity of water is emerged due to salinity in dry monsoon Scarcity of fooder is emerged due to increase of salinity Health and skin affected by salinity 	<ul style="list-style-type: none"> Start cultivation of saline resistant crop varieties and there is scope for grass production in fellow land. Pond exevation and instatlation of deep tube wells for drinking water. Plant or cultivate NAPIER variety grass in high land
7. Arsenic	<ul style="list-style-type: none"> Peoples low understanding or low awareness on Red colour and green colour of arsenic Spread of different diseases Less arsenic free tube wells in comparision to needs 	<ul style="list-style-type: none"> Aware people about red and green colour. Increase quality of treatment at health centers Install deep tube wells as per need.
8. Shila bristi / Snow rain	<ul style="list-style-type: none"> Non construction of disaster resilient homes Non cultivation of disaster resilient crop varieties Excessive cutting of trees 	<ul style="list-style-type: none"> Construction of disaster resilient homes Cultivation of disaster resilient crop varieties Plantation of more trees
9. Drought	<ul style="list-style-type: none"> Lack of sufficient trees and forest Number of deep tube wells are less for cultivation Crop damage occurs No rain water hervesting system safe drinking water 	<ul style="list-style-type: none"> Plant more trees and create forest Increase number of tube wells Cultivate drought resistant crops Install rain water hervesting system

2.5 Most vulnerable areas:

Hazards	Most vulnerable areas	Reasons for vulnerability	Vulnerable population
Flood	<ul style="list-style-type: none"> • 5,8, and 9 no wards of Kumira union • 8 and 9 no wards of Bansbaria union • 1,7,8 and 9 no wards of Bariardala union • All wards of saidpur union • 3,4 and 5 no ward of Muradpur union • 2,3,5,6,8, and 9 no wards of Barabkunda union • 7 and 9 no wards of Sitakunda Pourashava • 1,2,5 and n6 no wards of Bhatiari union • 3,5,7 amd 9 no ward of Salimpur union • All wards of sonaichari union 	<ul style="list-style-type: none"> • Sinking of rivers and Khall • Less and weak embankments. • No plantation or no trees on both sides of embank,emts • Non –construction of disaster resilient homes. 	Approximately 28000 Housholds
Hilly water rush	<ul style="list-style-type: none"> • 5 and 8 no wards of Kumira union • 3 and 5 no wards of Bansbaria union • 1,7,8 and 9 no wards of Bariardala union • 1,2,3,4,5,6 and 9 no wards of Saidpur union • 3,5,7 and 8 no wards of Muradpur union • 1,2,4 and 7 no wards of Barabkunda union • 5 and 6 no wards of Bhatiari union • 5 and 7 no wards of Sonaichari union 	<ul style="list-style-type: none"> • No plantation or no trees on both sides of embank,emts • Non –construction of disaster resilient homes. 	Approximately 10000 Housholds

Hazards	Most vulnerable areas	Reasons for vulnerability	Vulnerable population
Tornado	<ul style="list-style-type: none"> • All wards of Kumira union • All wards of Bansbaria union • All wards of Bariardala union • All wards of Saidpur union • All wards of Muradpur union • All wards of Barabkunda union • All wards of Sitakundu Pourashava union • All wards of Bhatiari union • All wards of Salimpur union • All wards of Sonaichari union 	<ul style="list-style-type: none"> • Non-construction of Disaster resilient homes. • Non-cultivation of disaster resilient crops. • Excessive cutting of trees. • Non-availability of trees and bushes in and around Homsteads. • Poor construction of latrines. • Weak construction of cattle habitat. • Less shelter centers in contrast to need. 	No of affected population 22600
Chemical Waste	<ul style="list-style-type: none"> • 1,5,8 and 9 no wards of Kumira union • Only 9 no ward of Bansbaria union • No areas of Bariardala union • No areas of of Saidpur union • No areas of of Muradpur union • No areas of Barabkunda union • No areas of Sitakundu Pourashava • 3,4 and 9 no wards of Bhatiari union • 1,3, and 7 no wards of Salimpur union • 1,2,3, and 4 no wards of Sanaichari union 	<ul style="list-style-type: none"> • Establish industries through unplanned way • Non-disposal of industrial wastes in a specific point/ place. • Fishes are destroyed by industrial wastage. 	No of affected population 19000
River erosion	<ul style="list-style-type: none"> • 5, 8 & 9 no ward of Kumira union. 	<ul style="list-style-type: none"> • People lost everything due to 	No of affected families 19500

Hazards	Most vulnerable areas	Reasons for vulnerability	Vulnerable population
	<ul style="list-style-type: none"> • 8 & 9 no ward of Bansbaria union. • No river erosion at Bariardala union • No river erosion at Saidpur union • No river erosion at Muradpur union • 2,3,5,6 8 & 9 no ward of Barakundu union. • No river erosion at Sitakundu Pourashava • 1, 2, 3, & 4 no wards of Bhatiari union. • 3, 5, 7 & 9 wards of Salimpur union. • No river erosion at Sonaichari union 	<ul style="list-style-type: none"> river erosion • Weak embankments • No plantation or forest beside rivers • Broken embankment 	
Salinity	<ul style="list-style-type: none"> • 1,2,3,5,8 and 9 no wards of Kumira union • 8 & 9 no wards of Bansbaria union • No salinity at Bariardala union • 4,5 & 6 no wards of Saidpur union • 1,2,3 , 4 & 5 no wards of Muradpur union • 2,3 , 5,6 & 8 no wards of Barakundu union • All wards of Sitakundu Pourashava. • 1,2,6 & 8 no wards of Bhatiari union • 7 & 8 no wards of Salimpur union • No salinity at Sonaichari union 	<ul style="list-style-type: none"> • Substantial damage to crops occurs due to Salinity. This is happen because local varieties of crops can not tolerate salinity. • Scarcity of drinking water occurs during dry monsoon due to salinity. • Foder scarcity creas due to intrusion of saline water. • Salinity affect human body and skin and occures many diseases to cattle. 	Total no of affected families 20600
Arsenic	<ul style="list-style-type: none"> • No arsenic at Kumira union 	<ul style="list-style-type: none"> • People are not 	Total no of

Hazards	Most vulnerable areas	Reasons for vulnerability	Vulnerable population
	<ul style="list-style-type: none"> • 4,8 & 9 no wards of Bansbaria union • All wards of Bariardala union • No arsenic at Saidpur union • 7, 8 & 9 no wards of Muradpur union • All wards of Barabkunda union • All wards of Sitakundu Pourashava • All wards of Bhatiari union • No arsenic at salimpur union • All wards of Sonaichari union 	<p>aware about red and Green colour</p> <ul style="list-style-type: none"> • Creates many diseaseases to human bodies • Less arsenic free tube wells in contrast to needs. 	<p>affected families 19000</p>
Snow rain	<ul style="list-style-type: none"> • All wards of Kumira union • All wards of Bansbaria union • All wards of Bariardala union • All wards of Saidpur union • All wards of Muradpur union • All wards of Barabkundu union • All wards of Sitakundu Pourashava • All wards of Bhatiari union • All wards of Salimpur union • All wards of Sonaichari union 	<ul style="list-style-type: none"> • Non – construction of Disaster resilient homes • Non- cultivation of disaster resilient crops • Excessive cutting of trees 	<p>Total no of affected families 20900</p>
Drought	<ul style="list-style-type: none"> • All wards of Kumira union • All wards of Bansbaria union • 2,3,4,5,6 & 8 no wards of Bariardala union • 5 and 8 no wards of Saidpur union • All wards of Muradpur 	<ul style="list-style-type: none"> • Lack of sufficient trees and forest • Leess deep tubewells for cultivation • Damage crops • Lack of rain water harvesting system 	<p>Toatl no of affected families 18500</p>

Hazards	Most vulnerable areas	Reasons for vulnerability	Vulnerable population
	union <ul style="list-style-type: none"> All wards of Barabkundu union All wards of Sitakundu Pourashava All wards of Bhatiari union All wards of Salimpur union All wards of Sonaichari union 		

2.6 Major sectors of development:

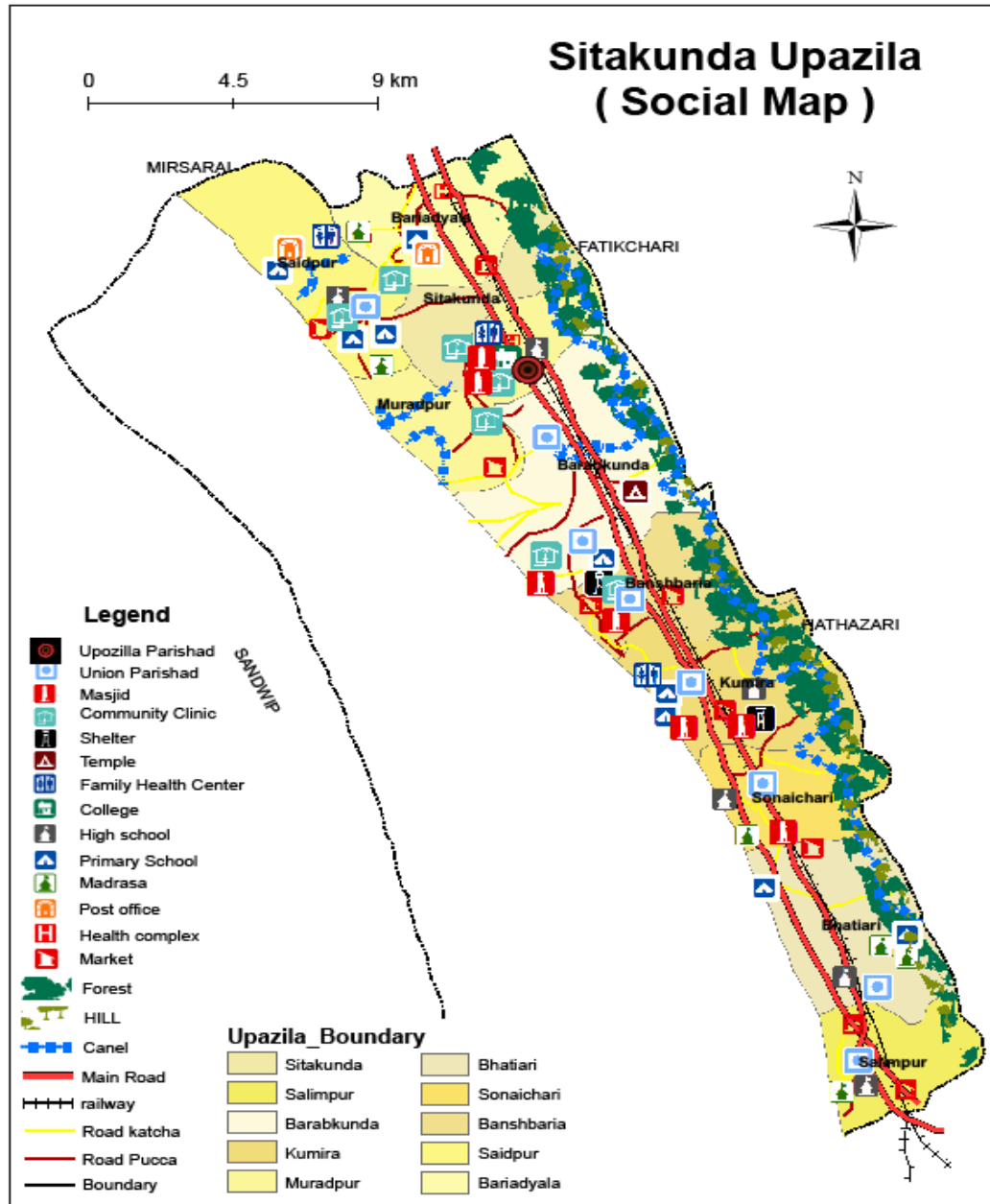
Major sectors	Detail description	Coordination with Disaster Risk minimization
1. Agriculture	<ul style="list-style-type: none"> Total cultivable lands of this upazila are 21654 acres. If a flood / tidal surge of 1988 magnitude and havoc are occurred, then cultivation of Guyava, Vegetables and 15500 Aman, Boro and Aus can be hugely damaged. 150-200 acres crop land out of total 21654 acres can be affected by erosion of Sanwip Channel / river erosion. 1200 acres crops out of 21654 acres crop land can be affected by Salinity. If a snow rain occurs like 2012, 400-450 acres crop out of 21654 crop land can be damaged. The upazila has been affected by droght in almost every year. If a large scale dought occurs 300-350 acres crop out of 21654 acres can be affected. Every year the upazila is affected by hilly water rush and 650-700 acres crop land out of 21654 acres can be affected. 	<ul style="list-style-type: none"> Strengthen embankment by repairing. Improve disposal of water Use rain water for production of Aman sidling. Use organic manure in soil. Improve river excavation and irrigation system Cultivate and expand saline resitance variety of Boro, Aman and Aus. Bend standing crop towards soil
	<ul style="list-style-type: none"> Total numbers of ponds of this upazla are 2865. If a tornedoes or tidal surge 	<ul style="list-style-type: none"> Elevation of Ponds embankment

Major sectors	Detail description	Coordination with Disaster Risk minimization
2. Fish	<p>occurs fishes of 1430 ponds out of 2865 ponds can be washed away.</p> <ul style="list-style-type: none"> • There are 24 khals in this upazila. Fishes of 15 Khals out of 24 are damaged due to chemical wastages or by-products. Virtually there are no fishes in those khals. • 220 ponds out of 2865 ponds are affected by river erosion. • The upazila is affected by flood in each and every year. Fishes of 950 ponds out of total 2865 are affected by flood. 	<ul style="list-style-type: none"> • Repair & strengthen embankments • Impart training to fish farmers • Cultivate three tier fish • Fix nets during floods and water stagnation. • Support poor fishermen. • Develop marketing opportunities
3. Livestock	<ul style="list-style-type: none"> • If a Tornado or tidal surge hit Sitakundu upazila, then 10500 cows out of 58242, 14535 goats out of 25642, 225 VERA out of 552, 50400 Chiken out of total 711431, 4080 ducks out of 17255 and other animals and birds can be flown away. 42000 households out of 73315 households can be affected having damage of natural beauties. • If a tornado hits this upazila, then 4030 cows out of 58242, 8535 goats out of 25642, 70 VREA out of 552, 42200 chiken out of 711431, 2280 ducks out of 17255 and other forest birds and animals can be flown away. 31200 households out of 73315 households can be affected including damage of natural beauties. • 1820 cows out of 58242 cows, 4800 goats out of 25642, 125 VERA out of 552 can face food shortage due to salinity. 	<ul style="list-style-type: none"> • Build earthen Killa • Create cows grazing land at government owned fellow and Khas land • Motivate people to rear disaster resilient variety of birds & animals. • Ensure vaccination to animals. • Build disaster resilient cattle sheds • Aware community people about cattle diseases and treatment. • Establish fodder processing mills. • Motivate people to cultivate rice and Fish culture simultaneously.
4. Health	<ul style="list-style-type: none"> • Due to unplanned establishment of 35% of 53 large and 988 small scale industries, it is most likely that 5100 households out of 73315 households can be affected by many diseases. • There is 5.10% arsenic in this upazila. As a result, it is likely that 15500 	<ul style="list-style-type: none"> • Increase awareness on health • Organize training for doctors on health risk of disasters. • Increase quality of services at union level health centers and community clinics.

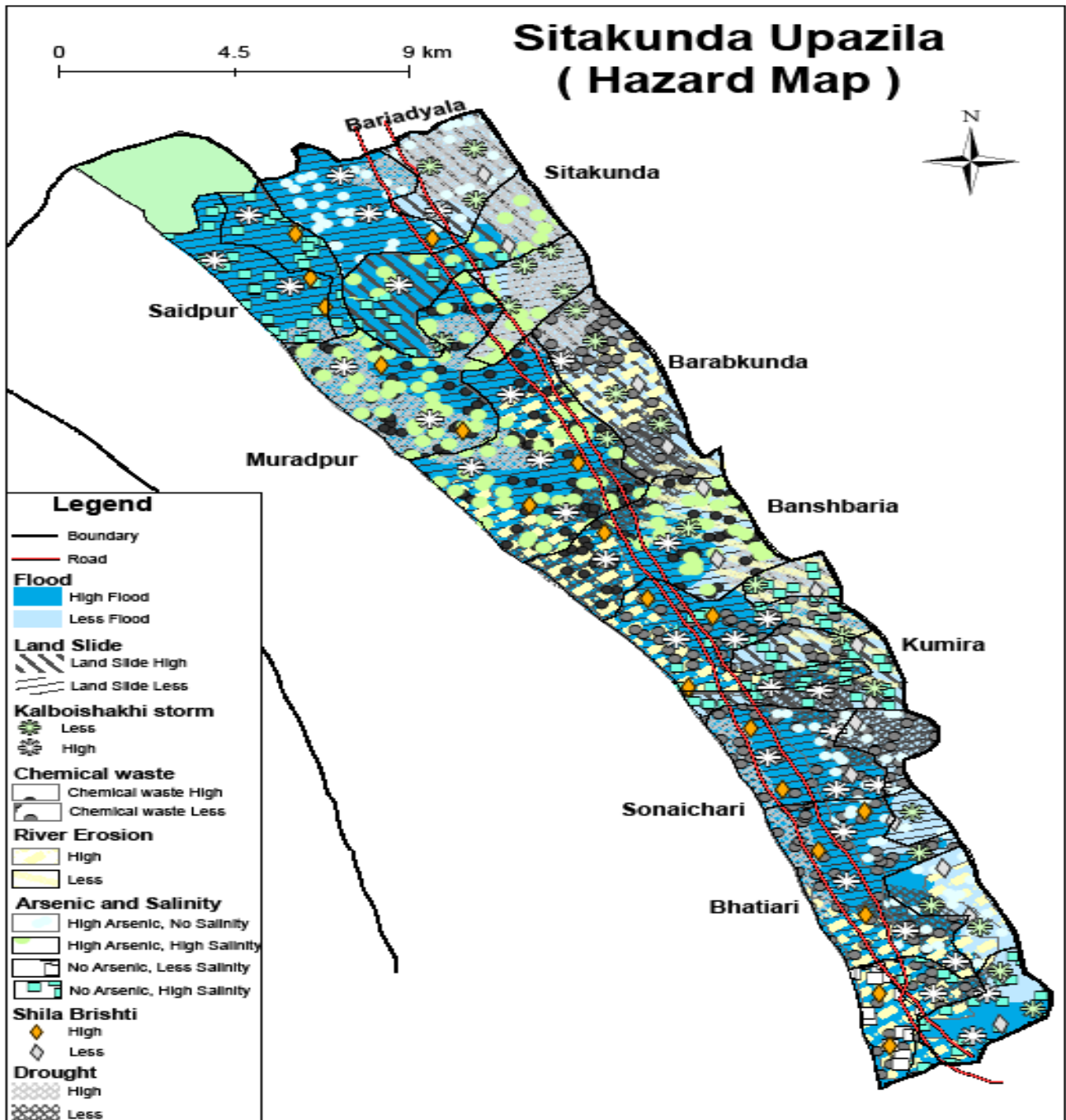
Major sectors	Detail description	Coordination with Disaster Risk minimization
	<p>households out of 73315 can be affected by skin diseases.</p> <ul style="list-style-type: none"> Stagnation is occurs in low lying areas due to flood and this may inflict water born diseases to 11600 families out of 71335 families. 	<ul style="list-style-type: none"> Ensure availability of all medicines of Primary treatment. Ensure supply of pure drinking water. Rehabilitate people with disability during disasters. Keep ready all preventive measures and vaccination. Increase number of doctors and nurses as per need.
5. Livelihoods	<ul style="list-style-type: none"> 9550 fishermen out of total 30325 affected directly or indirectly due to flood 6570 fishermen out of 30325 are directly or indirectly affected by tornedoes. 3980 fisherman out of 30325 are directly or indirectly affected by drought. 80500 farmers out of 248278 and 30200 day labourers out of 62069 find no employment during dry monsoon. 105500 farmers out of 248278 and 20200 day laboureres out of 62069 find no employment due to flood. 61800 farmers out of 248278 and 11800 day laboureres out of 62069 find no employment due to salinity and hilly water rush. 7500 businessmen out of total 55862 are directly or indirectly affected by tornedoes. 	<ul style="list-style-type: none"> Orgnazie training to create sustainable alternative livelihoods. Motivate women to generate income at homestead level. Ensure proper use of local resources. Provide support to ensure livelihoods of vulnerable people.
6. Trees	<ul style="list-style-type: none"> 55200 trees of 13200 families out of total 73315 families can be affected if a tonredo like 1991 hit Sitakundu upazila. 250 nurseries out of total 748 can be affected if a hailstorm occurs in Sitakundu. 50200 trees of 10200 families out of total 71315 and 120 nurseries out of 	<ul style="list-style-type: none"> Motivate people to plant trees in and aroud homes. Increase awareness about environment. Take legal actions and enforce laws to contain illegal tree cutting. Increase social afforestation

Major sectors	Detail description	Coordination with Disaster Risk minimization
	<p>total 748 can be affected due to salinity.</p> <ul style="list-style-type: none"> • 97 nurseries out of total 748 can be affected by Hilly rain rush. • 80500 trees of 18700 families out of 73315 families can be affected by flood and saplings of 220 nurseries out of 748 can be affected. • Saplings of 80 nurseries out of 748 can be affected by severe drought. 	<p>locally.</p> <ul style="list-style-type: none"> • Plant trees in roads, embankment and Khas or fellow land. • Motivate people to plant more trees
<p>7. Homes & infrastructures</p>	<ul style="list-style-type: none"> • 55 Km Kacha roads out of 301.40 KM, 25 KM HBB out of 73.55 KM, kacha houses of 13090 families out of 73415 families, 30 culverts out of 397, 80 educational institutions out of 221, 180 mosques out of 408 mosques, 20 temples out of 139, 8 hat bazaars out of 34 7 health centers out of 33 can be affected by tornado, cyclone and tidal surge like 1991 hit in this upazila. • 32 Km kacha roads out of 301.40 KM , 12 KM HBB out of total 73.55 KM, kacha homes of 3540 families out of 73315 families , 40 educational institution out of 221 , 5 hatbazars out of 34, 4 health centers out of 33 health centers can be affected directly or indirectly . • 20 Km electricity line can be affected by hailstorm. 	<ul style="list-style-type: none"> • Elevate roads and make those pucca • Build necessary culverts and bridges. • Build sufficient cyclone centers • Plant trees around infrastructures, outside of roads and Khals. • Build cyclone centers • Build cyclone / disasters resilient new infrastructures. • Build homes that are disaster resilient • Motivate people to plant more trees around homes

2.7 Social Map



2.8 Hazard Map



2.9 Moonsoon calendar of disasters:

Sl. No	Hazards	Name of Month											
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	Flood						Blue	Blue	Blue	Blue			
2	Land Slide						Purple	Purple	Purple	Purple			
3	Storm				Blue	Blue							
4	Chemical Wast	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple
5	River Erosion						Blue	Blue	Blue	Blue			
6	Salinity				Purple	Purple			Purple	Purple	Purple	Purple	Purple
7	Arsenic						Blue	Blue	Blue	Blue	Blue	Blue	Blue
8	Snow Rain				Purple	Purple	Purple						
9	Drought			Blue	Blue	Blue							

Calendar Analysis:

Sitakundu is a disaster prone upazla of Chittgong district. While working with field to collect information and interacting with people it is known that the upazila is affected by floods, hilly water rush, hailstorms, chemical wastes, river erosion, salinity, arsenic, Snow rain and drought. Timings of those hazards have been shown in above calendar. A detail analysis is provided below on the basis of above calendar.

- **Flood:** It is known that the areas are close to sea and the upazila experiences flood every year due to outcome of Climatic Change. Flood is one of all hazards. Usually flood occurs from Asar to Ashin month.
- **Hill water onrush:** It is known from talking with people of different level that there are hilly areas in most part of this upazila. Hilly water onrush occurs frequently during rainy season and causes huge damage. This is happened during Asar to Ashn month.
- **Tornedoes / Hailstorm:** People opine that tornedoes is a natural hazard that is occurs in almost every year. This causes substamtial damages. It is occurs from Boishak to Jasta months.
- **Chemical wastage:** Few industries have been established in an unplanned way and their wastages have been causing environmental pollution and huanman health hazard. This is happening whole the year round.

- **River erosion:** It is know that river erosion is a great hazard for this upazial. Due to river erosion, houses and crop lands is being devoured by rivers. This is usually happen during Asar to Ashin month.
- **Salinity:** It is know from people that the salinity level is increasing day by day as the area is close to sea. Besides this is damaging soils fertility (salinity usually causes during Boishak, Jestta, Agrahaion, Poush, Magh, Falgun and chaitra months.
- **Arsenic:** Local people tell that arnesic level becomes fatal due to lowering of ground water level. This hazard also creates scarcity of safe drinking water. Arsenic contramination is usually happened from asar to Caittra months.
- **Snow rain:** It is known from interaction with local people that Snow rain is a hazard for this upazila. Every year this storm causes huge damage. This storm is usually occurs from Chaitra , Boishak and Jasta month.
- **Drought:** It is known from local people that drought is a major hazard during dry monsoon. Every year this drought causes huge problem on availability of drinking water including causing huge damage to crops.

2.10 Moonsoon 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			Blue	Blue	Blue	Blue	Blue	Blue		
2	Fishermen			Purple	Purple	Purple	Purple	Purple		Purple	Purple	Purple	Purple
3	Business	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
4	Vatbati/ Van driver	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
5	Day labarer	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	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						
2	Animals resources						
3	Business						
4	Fish						
5	Workers day						
6	Tattati also ply, van driver,						

2.12 Sector wise description of hazards and of risks:

(Ka) What kind of sectors are fell victims by hazards in Lohagara upazila is details 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						

Detail description of sectorwise Hazards & Riskes-

Sectors	Hazards	Description
Agriculture	Flood	<p>910 acres out of total 910 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in salimpur union if a tidal surge like 1091 or fllood like 1988 is occurred in Sitakundu upazila.</p> <p>228 acres out of total 5500 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in Saidpur union. These can affect 2628 families out of 9000 families. 220 acres out of total 5432 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in Muradpur union. These can affect 2780 families out of 5045 families. 210 acres out of total 4700 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in Bariardala union. These can affect 2620 families out of 5875 families. 270 acres out of total 3500 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in Bariardala union. These can affect 2960 families out of 12000 families. 221 acres out of total 8000 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in Bariardala union. These can affect 2870 families out of 7000 families.</p> <p>207 acres out of total 1425 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in Barabkundu union. These can affect 2922 families out of 5680 families.</p> <p>290 acres out of total 4750 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in Kumira union. These can affect 2730 families out of 5915 families</p> <p>240 acres out of total 4550 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in Bansbaria union. These can affect 2755 families out of 8850 families</p> <p>236 acres out of total 5000 acres Aman, Boro, Aus and Robi crop including Guava, vetables cultivation can be affected in Sitakundu Pourashava area. These can affect 3025 families out of 5950 families</p> <p>1600 acres crops land can be damaged partly or wholely in 6 unions out of 10 unions of this upazila if preventive measures are not taken to contain flood.</p>
Domestic animal resources	Flood	<p>It is estimated that there are 58282 cows, 25642 Chicken, 711431 duck, 17255 shepards and bufellow 1275.</p> <p>1887 cows out of 5985, 787 goats out of 2707, 22580 chicken out of 67981 chicken , 602 ducks out of 1809 , 37 shepards out of 114, 51 bufflow out of 155 of Kumira union can be flown away if a flood of 1988 or tidal surge of 1991 is again occurred in Sitakundu upazila. As a result many families can severely be affected.</p>

Sectors	Hazards	Description
		<p>1990 cows out of 5989, 732 goats out of 2209, 22730 chicken out of 68207 chicken, 598 ducks out of 1785, 40 shepherds out of 107, and 50 buffaloes out of 145 of Kumira union can be blown away by flood. As a result many families can severely be affected.</p> <p>1990 cows out of 5989, 732 goats out of 2209, 22730 chicken out of 68207 chicken , 598 ducks out of 1785 , 40 shepherds out of 107, 50 buffaloes out of 145 of Bansbaria union can be blown away by flood. As a result, many families can severely be affected.</p> <p>2045 cows out of 6120, 878 goats out of 2629, 25691 chicken out of 76988 chicken , 567 ducks out of 1692 , 55 buffaloes out of 159 of Bariardala union can be blown away by flood. As a result many families can severely be affected.</p> <p>2332 cows out of 6987, 765 goats out of 2278, 26940 chicken out of 80790 chicken, 609 ducks out of 1810, 44 shepherd out of 128, 38 buffaloes out of 111 of Saidpur union can be blown away by flood. As a result, many families can severely be affected.</p> <p>2430 cows out of 7275, 1036 goats out of 3102, 22765 chicken out of 68285 chicken , 628 ducks out of 1875 , 30 shepherd out of 87, 34 buffaloes out of 98 of Muradpur union can be blown away by flood. As a result, many families can severely be affected.</p> <p>2307 cows out of 6917, 1075 goats out of 3210, 23740 chicken out of 71192 chicken , 542 ducks out of 1620 , 40 shepherd out of 116, 57 buffaloes out of 165 of Barabkundu union can be blown away by flood. As a result, many families can severely be affected.</p> <p>1902 cows out of 6954, 801 goats out of 2987, 23479 chicken out of 70432 chicken, 501 ducks out of 1490, 37 buffaloes out of 107 of Siatkundu Pourashava can be blown away by flood. As a result, many families can severely be affected.</p> <p>1667 cows out of 4986, 761 goats out of 2272, 25171 chicken out of 75485 chicken, 531 ducks out of 1581, 31 buffaloes out of 83 of Salimpur union can be blown away by flood. As a result, many families can severely be affected.</p> <p>1388 cows out of 4141, 731 goats out of 2183, 23629 chicken out of 70874 chicken, 609 ducks out of 1815, and 51 buffaloes out of 145 of Bhatiari union can be blown away by flood. As a result, many families can severely be affected.</p> <p>A total of 6500 cows, 8000 goats, 10000 chicken, 200 sheep and 150 buffaloes of 7 unions out of 10 unions can be affected by flood if effective preventive measures is not taken to contain flood.</p>
		<p>1160 Fishermen out of total 3040 fishermen of 5915 families of Kumira union can be affected if a flood like 1988 hits this upazila.</p>

Sectors	Hazards	Description
Fishery	Flood	1160 fishermen out of 4480 fishermen of 8850 families of Bansbaria union can be affected by flood. 755 fishermen out of 2987 fishermen of 9000 families of Saidpur union can be affected by flood. 698 fishermen out of 2765 fishermen of 5045 families of Muradpur union can be affected by flood. 1160 fishermen out of 2320 fishermen of 5950 families of Pourashava can be affected by flood. 435 fishermen out of 1714 fishermen of 8000 families of Salimpur union can be affected by flood. 1345 fishermen out of 5320 fishermen of 12000 families of Sonaichari union can be affected by flood. 585 fishermen out of 2280 fishermen of 7000 families of Bhatiari union can be affected by flood. 615 fishermen out of 2430 fishermen of 5680 families of Barabkunda union can be affected by flood.
Health	Flood	Water born disease breaks out in Salimpur, Bhatiari, Sonaichari, Kumira, bansbaria, Barabkunda, Muradpur, Pourashava, bariardala and saidpur unions if a flood hits. 11 Community Health centers out of 33 are affected directly or indirectly due to flood.
Roads	Flood	A total of 32 KM Kacha roads and 19 KM HBB (4 KM Kacha and 2 KM HBB of Kumira union, 5 KM Kacha and 3 Km HBB, 4 Km Kacha and 3 Km HBB of Bariardala union, % Km kacha and 2 KM HBB of Saidpur union, 4 Km Kacha and 3 KM HBB of Muradpur union, 2 Km kacha and 2 Km HBB of Bhatiari union, 3 Km Kacha and 2 KM HBB of Sonaichari union, 4 KM Kacha and 2 KM HBB of Barabkunda union) are likely to be affected directly or indirectly if a flood occurs similar to 1988 in Sitakundu upazila.
Homes	Flood	Kacha homes of 3540 families out of 73315 can be affected directly or indirectly if a flood similar to 1988 occurs in Sitakundu upazila.
Educational Institutions	Flood	25 educational institutions can be directly or indirectly affected if a flood similar to 1988 occurs in Sitakundu upazila.
Trees	Flood	9107 fruit, forest, and herbal trees and 19 nurseries of Kumira union can be badly affected by flood if a flood similar to 1988 hits sitakundu. 8251 fruit, forest, and herbal trees and 21 nurseries of Bansbaria union can be badly affected by flood if a flood similar to 1988 hits sitakundu. 8952 fruit, forest, and herbal trees and 21 nurseries of Bariardala union can be badly affected by flood if a flood similar to 1988 hits sitakundu 7982 fruit, forest, and herbal trees and 19 nurseries of Saidpur union can be badly affected by flood if a flood similar to 1988 hits sitakundu

Sectors	Hazards	Description
		<p>8742 fruit, forest, and herbal trees and 23 nurseries of Muradpur union can be badly affected by flood if a flood similar to 1988 hits sitakundu.</p> <p>8921 fruit, forest, and herbal trees and 27 nurseries of Pourashava can be badly affected by flood if a flood similar to 1988 hits sitakundu.</p> <p>8921 fruit, forest, and herbal trees and 27 nurseries of Pourashava can be badly affected by flood if a flood similar to 1988 hits sitakundu.</p> <p>6983 fruit, forest, and herbal trees and 13 nurseries of Salimpur union can badly be affected by flood if a flood similar to 1988 hits sitakundu.</p> <p>7181 fruit, forest, and herbal trees and 19 nurseries of Sonaichari union can badly be affected by flood if a flood similar to 1988 hits sitakundu.</p> <p>7541 fruit, forest, and herbal trees and 24 nurseries of Bhatiari union can badly be affected by flood if a flood similar to 1988 hits sitakundu.</p> <p>6840 fruit, forest, and herbal trees and 40 nurseries of Sonaichari union can badly be affected by flood if a flood similar to 1988 hits sitakundu. Fruit, forest, nurseries and herbal trees of 5 unions can badly be havoc if preventive actions are not taken to contain flood.</p>
Sanitation	Flood	Total numbers of latrines at Sitakundu upazila are 69315. Among them Pucca latrines are 28967 and Kacha latrines are 40348. According to field survey, unions like Muradpur, Saidpur, Barabkundu, Bariardala and Bhatiari becomes worst victims of disasters.
Culverts	Flood	A total of 36 culverts out of total 397 culverts (6 culverts at 3,5,7 and 9 no wards of Kumira union, 5 culverts of 1,2,4,7 and 8 no wards of Bansbaria union, 3 culverts of 5,7, and 9 no wards of Saidpur union, 3 culverts of 1,3, and 6 no wards of Bariardala union, 5 culverts of 3,4, 6 and 8 no wards of Muradpur union, 5 culverts of 1,3,5 and 7 no wards of Sonaichari union, 4 culverts of 2,4,8 and 9 no wards of Bhatiari union, 4 culverts of 3,5,6 and 8 no wards of Barabkundu union) can be affected by flood / tidal surge similar to 1991 hits this upazila.
Agriculture	Hilly water onrush	165 acres crop of Salimpur union can be damaged if a large hilly water onrush happens in Sitakundu upazila. 250 acres crop land of Muradpur union is badly affected, 173 acres crop land of Bariardala union is badly affected, 245 acres crop land of Sonaichari union is badly affected, 200 acres crop land of Bhatiari union is badly affected, 225 acres out of total 1425 acres Aman, boro, aus and

Sectors	Hazards	Description
		<p>Robi crops including Guava, Vegetables, cultivation can be affected, As a result 2322 families out of 5680 families can be affected, 180 acres crops out of total 4750 of aman, Boro, Aus and Robi crops including Guava, vegetables of Kumira union can be affected. As a result 2330 families out of total 5915 families can be affected.</p> <p>Approximately 200 acres crops out of total 4550 acres aman, Boro, Aus and Robi crops including Guava, vegetables of Bansbaria union can be affected. As a result 3455 families out of total 8850 families can be affected.</p> <p>And approximately 230 acres crops out of total 5000 acres aman, Boro, Aus and Robi crops including Guava, vegetables of Sitakundu Pourashava can be affected. As a result 3000 families out of total 5950 families can be affected.</p> <p>It is most likely that crops of 1700 acres of 7 unions can be fully or partly damaged if preventive measures to contain flood are not taken.</p> <p>Moreover 1450 acres crop land can be affected if preventive actions are not taken.</p>
Homes	Hilly water onrush	5 and 8 no wards of Kumira union, 3 and 5 no wards of Bnasbaria union, 1,7,8 & 9 no wards of Bariardala union, 1,2,3,4,5,6 and 9 no wards of Saidpur union, 3,5,7 and 8 no wards of Muradpur union, 1,2,4 and 7 no wards of Barabkunda union, 5 and 6 no wards of Bhatiari union and 5 and 7 no wards of Sonaichari uunion can be directly or indirectly affected by hilly water onrush.
Trees	Hilly water onrush	11 nurseries can be affected if a Hilly water onrush happens at Kumira Union. 12 nurseries can be affected if a Hilly water onrush happens at Bansbaria Union.10 nurseries can be affected if a Hilly water onrush happens at Bariardala Union. 13 nurseries can be affected if a Hilly water onrush happens at Muradpur Union. 11 nurseries can be affected if a Hilly water onrush happens at Pourashava. 8 nurseries can be affected if a Hilly water onrush happens at Salimpur Union. 10 nurseries can be affected if a Hilly water onrush happens at Sonaichari Union. 12 nurseries can be affected if a Hilly water onrush happens at Bhatiari Union. 11 nurseries can be affected if a Hilly water onrush happens at Barabkundu Union. Saplings of 5 unions' nurseries can be affected if preventive mreasures is not taken to contain Hilly water onrush in this Upazila.
Agriculture	Tornado	<p>Huge damage occurs in each year due to affect of tornado in Sitakundu upazila.</p> <p>Crops of Aman, Aus, Robi, guava and vegetables of 105 acres out of 910 acres at Salimpur union can severely be affected due to tornado.</p>

Sectors	Hazards	Description
		<p>As a result, 1870 families out of 8000 families can be affected. Crops of Aman, Aus, Robi, guava and vegetables of 110 acres out of 5500 acres at Saidpur union can severely be affected due to tornado. As a result, 2140 families out of 9000 families can be affected. Crops of Aman, Aus, Robi, guava and vegetables of 100 acres out of 5432 acres at Muradpur union can severely be affected due to tornado. As a result, 2350 families out of 5045 families can be affected.</p> <p>Crops of Aman, Aus, Robi, guava and vegetables of 122 acres out of 4700 acres at Bariardala union can severely be affected due to tornado. As a result, 2150 families out of 5875 families can be affected.</p> <p>Crops of Aman, Aus, Robi, guava and vegetables of 130 acres out of 3500 acres at Sonaichari union can severely be affected due to tornado. As a result, 2213 families out of 12000 families can be affected.</p> <p>Crops of Aman, Aus, Robi, guava and vegetables of 120 acres out of 8000 acres at Bhatiari union can severely be affected due to tornado. As a result, 2360 families out of 7000 families can be affected.</p> <p>Crops of Aman, Aus, Robi, guava and vegetables of 125 acres out of 1425 acres at Barabkundu union can severely be affected due to tornado. As a result, 2182 families out of 5680 families can be affected.</p> <p>Crops of Aman, Aus, Robi, guava and vegetables of 95 acres out of 4750 acres at Kumira union can severely be affected due to tornado. As a result, 2190 families out of 5915 families can be affected.</p> <p>Crops of Aman, Aus, Robi, guava and vegetables of 110 acres out of 4550 acres at Bansbaria union can severely be affected due to tornado. As a result, 2315 families out of 8850 families can be affected.</p> <p>Crops of Aman, Aus, Robi, guava and vegetables of 105 acres out of 5000 acres at Pourashava can severely be affected due to tornado. As a result, 2860 families out of 5950 families can be affected.</p> <p>Crop land of 2350 acres can be partly or fully affected by tornado if preventive measures are not taken.</p>
Trees	Tornado	<p>Approximately 5690 fruit, forest and herbal trees and 10 nurseries can be affected if a tornado similar to 1988 hits Sitakundu upazila. Approximately 6107 fruit, forest and herbal trees and 8 nurseries of Bansbaria union can be affected. Approximately 5890 fruit, forest and herbal trees and 22 nurseries of Bariardala union can be affected. Approximately 6210 fruit, forest and herbal trees and 17 nurseries of Saidpur union can be affected. Approximately 4986</p>

Sectors	Hazards	Description
		fruit, forest and herbal trees and 19 nurseries of Muradpur union can be affected. Approximately 5781 fruit, forest and herbal trees and 23 nurseries of Pourashava can be affected. Approximately 4192 fruit, forest and herbal trees and 18 nurseries of Salimpur union can be affected. Approximately 5127 fruit, forest and herbal trees and 25 nurseries of Sonaichari union can be affected. Approximately 4989 fruit, forest and herbal trees and 52 nurseries of Bhatiari union can be affected. Approximately 6229 fruit, forest and herbal trees and 56 nurseries of Barabkundu union can be affected. More fruit, forest and herbal trees and nurseries can be affected if preventive measures are not taken.
Homes	Tornado	5 and 8 no wards of Kumira union, 3 and 5 no wards of Bansbaria union, 1,7,8 and 9 no wards of Bariardala union, 1,2,3,4,5,6 and 9 no wards of Saidpur union, 3,5,7 and 8 no wards of Muradpur union, 1,2,4 and 7 no wards of Barabkundu union, 5 and 6 no wards of Bhatiari union, 5 and 7 no wards of Sonaichari union can directly or indirectly be affected by tonedo/ tidal surge similar to 1991 in this upazila.
Fisheries	Chemical wastage	Chemical wastage makes huge damage to fisheries of Sitakundu upazila in each and every day. It is most likely that 150 fishermen out of 3040 fishermen of 5915 families of Kumira union can be affected by Chemical wastage. It is most likely that 164 fishermen out of 4480 fishermen of 8850 families of Bansbaria union can be affected by Chemical wastage. 65 fishermen out of 1714 fishermen of 8000 families of Salimpur union can be affected by Chemical wastage. 120 fishermen out of 5320 fishermen of 12000 families of Sonaichari union can be affected by Chemical wastage. 55 fishermen out of 2280 fishermen of 7000 families of Bhatiari union can be affected by Chemical wastage. Approximately 3600 families will directly or indirectly be affected by Chemical wastage if preventive measures are not taken to contain emission of chemical wastages in sitakundu upazila.
Health	Chemical reaction	988 smal scale industries and 53 large scale industries have been established at Sitakundu upazila. The largest ship beaking industry has been established here. Local comminuty peole have been affected by many diseases including skin diseases. Besides, extreme environment pollution has been occurring due to unplanned establishment and absence of proper waste management disposal system. The 1,5, 8 and 9 no wards of Kumira union, 9 no ward of Bansbaria union (Nahar poultry Firm) , 3,4 and 9 no wards of Bhatiari union, 1,3 and 7 no wards of Salimpur union, 1,2,3 and 4 no wards of

Sectors	Hazards	Description
		Sonaichari union are being worstly and hugely affected. The areas will become unsuitable or human living if the trend of pollution continues.
Agriculture	River erosion	<p>River erosion is seen in some unions like Salimpur, Kumira, Bansbaria, Barabkunda and some parts of Bhatiari union during rainy season.</p> <p>Almost 180 acres crop land out of 910 acres of Salimpur union can be affected or 41 acres can be vanished into river if river erosion continues.</p> <p>Almost 180 acres crop land out of 910 acres of Salimpur union can be affected or 41 acres can be devoured by river if river erosion continues. As a result, approximately 4800 families out of 8000 families can be affected by erosion.</p> <p>Almost 130 acres crop land out of 8000 acres of Bhatiari union can be affected or 20 acres can be devoured by river if river erosion continues. As a result, approximately 3590 families out of 7000 families can be affected by erosion. Almost 160 acres crop land out of 1425 acres of Barabkunda union can be affected or 23 acres can be devoured by river if river erosion continues. As a result, approximately 3640 families can be affected by erosion.</p> <p>Almost 135 acres crop land out of 4750 acres of Kumira union can be affected or 27 acres can be devoured by river if river erosion continues. As a result, approximately 4100 families can be affected by erosion. Almost 175 acres crop land out of 4550 acres crop land of Barabkunda union can be affected or 17 acres can be devoured by river if river erosion continues. As a result, approximately 3370 families can be affected by erosion. Approximately 1200 acres crop land can partly or fully be damaged and 120 acres land can be devoured by rivers if preventive measures are not taken.</p>
Fisheries	River Erosion	<p>River erosion is occurred in each year at Sitakundu upazila during rainy season. Fischeing sector is affected by river erosion.</p> <p>Approximately 123 fishermen out of 3040 fishermen of 5915 families of Kumira union can be affected by river erosion.</p> <p>Approximately 137 fishermen out of 4480 fishermen of 8850 families of Bansbaria union can be affected by river erosion.</p> <p>Similarly 56 fishermen out of 1714 fishermen of 8000 families of Salimpur union can be affected by river erosion.</p> <p>Similarly 85 fishermen out of 2430 fishermen of 5680 families of Barabkunda union can be affected by river erosion.</p> <p>Similarly 55 fishermen out of 2280 fishermen of 7000 families of Barabkunda union can be affected by river erosion.</p> <p>Approximately 150 fishermen families can be affected if preventive</p>

Sectors	Hazards	Description
		measures are not taken to contain river erosion.
Homes	River erosion	River erosion is occurred in each year at Sitakundu upazila during rainy season. 5,8 and 9 no wards of Kumira union, 8 and 9 no wards of Bansbaria union, 2,3,5,6,8,and 9 no wards of Barabkundu union, 1,2,3 and 4 no wards of Bhatiari union, 3,5,7 and 9 no wards of Salimpur union can be badly affected if river erosion occurred. Besides some homes can be devoured by rivers.
Trees	River Erosion	River erosion is occurred in each year during rainy season in Sitakundu upazila. Trees become victims if river erosion starts. 3,5,8 and 9 no wards of Kumira union, 2,8,and 9 no wards of Bansbaria union, 2,3,5,6,8 and 9 no wards of Barabkunda union, 1,2 3 and 4 no wards of Bhatiari union and 1,3,5,7 and 9 no wards of Salimpur union can directly or indirectly be affected by erosion.
Fishing	Salinity	Saline water of sea make extensive damage to fishermen as the upazila is close to sea. 1,2,3,5 and 9 no wards of Kumira union, 8 and 9 no wards of Bansbaria union, 4, 5 and 6 no waqrds of Saidpur union, 1,2,3,4 and 5 no wards of Muradpur union, 2,3,5,6,8 and 9 no wards of Barabkunda union, 1,2,6 and 8 no wards of Bhatiari union and 7 and 8 no wards of Salimpur union can be directly or indirectly affected by ntrusion of saline water.
Agriculture	Salinity	Salinity level is day by day increasing due to intrusion od saline water during JOAR and BHATTA as the upazila is very close to sea. And the crop land is becoming more saline. Approximately 60 acres out of 910 acres Aman, Aus, Robi crop is damadged by salinity at Salimpur union. As a result, 1640 families out of 8000 families become directly or indirectly affected. Approximately 60 acres out of 910 acres Aman, Aus, Robi crop is damadged by salinity at Salimpur union. As a result, 1640 families out of 8000 families become directly or indirectly affected. Approximately 75 acres out of 5500 acres Aman, Aus, Robi crop is damadged by salinity at Saidpur union. As a result, 1910 families out of 9000 families become directly or indirectly affected. Similarly 75 acres out of 5432 acres Aman, Aus, Robi crop is damadged by salinity at Muradpur union. As a result, 2160 families out of 5045 families become directly or indirectly affected. Similarly 65 acres out of 4700 acres Aman, Aus, Robi crop is damadged by salinity at Bariardala union. As a result, 1920 families out of 5875 families become directly or indirectly affected. Similarly 65 acres out of 3500 acres Aman, Aus, Robi crop is damadged by salinity at Sonaichari union. As a result, 1983 families out of 12000 families become directly or indirectly affected. Similarly

Sectors	Hazards	Description
		<p>55 acres out of 8000 acres Aman, Aus, Robi crop is damaged by salinity at Bhatiari union. As a result, 2130 families out of 7000 families become directly or indirectly affected. Similarly 65 acres out of 1425 acres Aman, Aus, Robi crop is damaged by salinity at Barabkunda union. As a result, 1952 families out of 5680 families become directly or indirectly affected. Similarly 60 acres out of 4750 acres Aman, Aus, Robi crop is damaged by salinity at Kumira union. As a result, 1960 families out of 5915 families become directly or indirectly affected. Similarly 67 acres out of 4550 acres Aman, Aus, Robi crop is damaged by salinity at Kumira union. As a result, 2085 families out of 8850 families become directly or indirectly affected. Soil fertility will be reduced and 30% agriculture depended families of Siakundu upazila will directly or indirectly be affected if any preventive actions are not taken.</p>
Trees	Salinity	<p>Saline water damages tress as the upazila is close to sea.</p> <p>5982 fruit, forest and herbal trees and 11 nurseries of Kumira union can be affected by salinity intrusion.</p> <p>6189 fruit, forest and herbal trees and 13 nurseries of Bansbaria union can be affected by salinity intrusion.</p> <p>4852 fruit, forest and herbal trees and 09 nurseries of Bariardala union can be affected by salinity intrusion.</p> <p>5132 fruit, forest and herbal trees and 11 nurseries of Saidpur union can be affected by salinity intrusion.</p> <p>6275 fruit, forest and herbal trees and 12 nurseries of Muradpur union can be affected by salinity intrusion</p> <p>5895 fruit, forest and herbal trees and 11 nurseries of Pourashava can be affected by salinity intrusion</p> <p>4985 fruit, forest and herbal trees and 8 nurseries of Salimpur union can be affected by salinity intrusion.</p> <p>5787 fruit, forest and herbal trees and 12 nurseries of Sonaichari union can be affected by salinity intrusion.</p> <p>6896 fruit, forest and herbal trees and 14 nurseries of Bhatiari union can be affected by salinity intrusion.</p> <p>4002 fruit, forest and herbal trees and 19 nurseries of Barabkunda union can be affected by salinity intrusion.</p> <p>Traders involved in 18 nurseries of this upazila can be affected directly or indirectly if effective preventive measures are not taken.</p>
Health	Arsenic	<p>5.10% arsenic has been found at Bansbaria, Bariardala, Muradpur, Barabkunda, Bhatiari, Sonaichari unions of Sitakunda upazila. It is found that about 1212 tybewells are arsenic contaminated, as a result people of 15500 families out of total 73315 families have been</p>

Sectors	Hazards	Description
		<p>affected by skin diseases.</p> <p>Tubewells are identifies as red or green mark to detect arsenic contamination. But some families did not care it and they use arsenic water. So the number of arsenic diseases is increasing day by day. More peole will be attacked by arsenicosis if any preventive measure is not taken to discourage people use arsenic water.</p>
Agriculture	Snowrain	<p>Every year snow rain occurred at Sitakundu upazila. Snow rain of 2012 has affected about 62 acres crops of Salimpur union. As a result, a total of 1700 families are affected directly or indirectly. 71 acres crops of Saidpur union were damaged as a result 1970 families affected directly or indirectly. 75 acres crops of Muradpur union were damaged and as a result 2180 families were affected. 68 acres crop of Bariardala union were affected by snow rain as a result 1980 families were badly affected. 65 acres crops of Sonaichari union were damaged and as a result 2043 families were affected. 70 acres crops of Bhatiari union were damaged; as a result 2190 families were affected. 85 acres crop of Barabkundu union were damaged, as a result 2012 families were affected. 69 acres crop were damaged at Kumira union, as a result 2020 families were affected. 73 acres crop of Bansbaria union were damaged, as a result 2145 families were affected. Advarge affect will go to crops if neceery measures are not taken.</p>
Agriculture	Drought	<p>Almost all unions of Siatkundu upazila are affected by drought in every year.Exrtensive damage is caused to 76 acres crops out of total 910 acres like rice, robi and vegetables at Salimpur union if a drought occurs. As a result, 2180 families out of total 8000 families directly or indirectly affected.</p> <p>Similarly Exrtensive damage is caused to 87 acres crops out of total 5500 acres like rice, robi and vegetables at Saidpur union if a drought occurs. As a result, 1580 families out of total 9000 families directly or indirectly affected.</p> <p>Similarly Exrtensive damage is caused to 100 acres crops out of total 5432 acres like rice, robi and vegetables at Saidpur union if a drought occurs. As a result, 1650 families out of total 5045 families directly or indirectly affected.</p> <p>Similarly Exrtensive damage is caused to 120 acres crops out of total 4700 acres like rice, robi and vegetables at Saidpur union if a drought occurs. As a result, 1960 families out of total 5875 families directly or indirectly affected.</p> <p>Similarly Exrtensive damage is caused to 55 acres crops out of total 3500 acres like rice, robi and vegetables at Sonaichari union if a drought occurs. As a result, 1400 families out of total 12000 families</p>

Sectors	Hazards	Description
		<p>directly or indirectly affected.</p> <p>Similarly Exrtensive damage is caused to 50 acres crops out of total 8000 acres like rice, robi and vegetables at Bhatiari union if a drought occurs. As a result, 1800 families out of total 7000 families directly or indirectly affected.</p> <p>Similarly Exrtensive damage is caused to 86 acres crops out of total 1425 acres like rice, robi and vegetables at Barabkunda union if a drought occurs. As a result, 1900 families out of total 5680 families directly or indirectly affected.</p> <p>Similarly Exrtensive damage is caused to 80 acres crops out of total 4750 acres like rice, robi and vegetables at Kumira union if a drought occurs. As a result, 1640 families out of total 5915 families directly or indirectly affected.</p> <p>Similarly Exrtensive damage is caused to 76 acres crops out of total 4550 acres like rice, robi and vegetables at Bansbaria union if a drought occurs. As a result, 2000 families out of total 8850 families directly or indirectly affected.</p> <p>Crop cultivation will have adverse affect if preventive actions are not taken in future.</p>
Health	Drought	<p>Severe drought or heat wave is seen in Sitakunda upazila during dry monsoon. This affect more or less to almost all unions. Scarcity of dring water is found due to lowering of ground water level. So many people are affected by skin diseaseas. The level of diseases will increase if preventive measures are not taken in future.</p>
Trees	Drought	<p>Severe drought or heat wave is seen in Sitakunda upazila during dry monsoon. This affects nurseries. 9 nurseries of Kumira union , 8 nurseries of Bnasbaria union, 7 nurseries of Bariardala union, 8 nurseries of Saidpur union , 11 nurseries of Muradpur union , 7 nurseries of Salimpur union, 10 nurseruies of Sonaichari union, 9 nurseries of Bhatiari union, 8 nurseries of Barabkunda union are affected by heat wave. Natural beuty will lose and people involved in nursery business will directly or indirectly be affected.</p>

2.13 Climatic Change and its potential Impact:

Sectors	Hazards	Description
Agriculture	Flood	Every year flood affects Sitakunda upazila. Flood damages almost all unions. Havoc of flood is increasing. 3500 acres crop land is directly or indirectly affected by flood in Sitakunda upazila.
Agriculture	Hilly onrush of water	Sitakundu upazila is known as hilly upazila. Almost all unions of this Upazila are covered by hills. Hilly water onrush damages homes and this happens all the time during rainy season and this damages 1650 acres crop in each year.
Agriculture	River erosion	There is no river in Sitakundu upazila but people treat Sanwip Channel as river. River erosion is found in some unions like Salippur, Bhatiari, Kumira, Barabkunda and Bansbaria. 200-300 acres crop land is affected by river erosion and about 120 acres land are devoured by river.
Agriculture	Drought	Drought is seen in dry monsoon. Almost all unions are affected by drought. Drought affects as many as 300-350 acres crop land directly or indirectly.
Agriculture	Tornado	Every year Tornado affects Sitakundu upazial. The upazial is very close to sea and feel victims of tornedoes in each and every year. Tornado causes extensive damages to 2050 acres crop land. As a result people of 200 families are affected directly or indirectly by tornado.
Agriculture	Snow rain	Each and every year Sitakundu upazila experiences snow rain. Almost all unions are affected by snow rain. 400-450 acres crop land can be damaged partly or wholly if a snow rain like 2012 hits. 200-250 acres crop of Muradpur, Barabkunda, Saidpur, Bnabaria, Bariardal, Kumira and Barabkunda are affected by snow rain. Damages can be minimize if disaster resilient variety of crops are cultivated.
Livestock	Flood	14500 cows, 27200 goats and 23741 chickren 599 ducks and 39 bufflows can be flown away if a flood similar to 1988 or tidal surge similar to 1991 hits Sitakundu upazila again. As a result, 3500 families can be directly or indirectly affected.
Livestock	Tornado	Tornado hits Sitakundu upazila in each and every year. Every year the upazial becomes target of Tornado as it is close to sea and due to Climatic Change. 14500 cows, 27200 goats, 23741 chicken, 599 ducks and 39

Sectors	Hazards	Description
		buffolows and 2200 kucha houses are affected by tornedo. Almost 50% trees are uprooted or broken and it damages infrastructure partly. The extent of damages will increase if disaster resilient homes are not built in future.
Livestock	Hilly onrush of water	This upazila is known as Hilly upazila. There are hills in almost all unions. Sometimes death is occurred to people living on the hills due to poor awareness. Death may increase if hilly people are not removed and rehabilites to other places during excessive rain.
Livelihood	Flood	There are fishermen, farmers, businessmen, and day labourers in Sitakundu Upazila. 9000 fishermen, 67500 farmers, 48600 day labourers and about 14800 businessmen can be directly or indirectly affected if a flood similar to 1988 or a tidal surge similar to 1991 is happened again in this upazila.
Livelihood	Tornado	Tornado visits Sitakunda upazila in each year. It is due to its closeness to sea and adverse affect of Climatic Change. 700 Fisherrmen, 27500 farmers and 38600 day labourers and about 1800 businessmen can be directly or indirectly affated by tornado in each year.
Fisheries	Flood	Flood visits Sitakundu upazila in each year. Fishes of about 430 ponds washed away in each year. About 9600 families are involved in Fishing business at Sitakundu Upazial. So about 6000 families are affected by flood. It may be mentioned here that due to siltration of Sandwip Channel and rivers the severity of flood are increasing day by day. The above damages might increase in future if such trend continues.
Fisheries	Chemical wastes	Chemical wastages damages extensively to fisheries at sitakundu upazila. Fishes are getting rare in rivers and khalls and Charra due to chemical wastages. As a result people involved in fishing are facing lossess. 2400 families are directly or indirectly affecting due to this problem.
Fisheries	River erosion	River erosion is happened during rainy season in every year. Fishery suffered hugely if erosion occurs. River erosion is mostly caused to Kumira, Bansbaria, Salimpur, Barabkunda and Bhatiari union. 100 ponds are vanished into river due to river erosion. As a result, 150 families and 100 Fishermen are directly or indirectly affected.

Sectors	Hazards	Description
Health	Flood	Community health of Salimpur, Bhatiari, Sonaichari, Kumira, Bansbaria, Barabkunda, Muradpur, Bariardala and Saidpur union are affected by water born diseases. 11 health centers out of 33 are directly or indirectly affected by flood.
Health	Arsenic	Arsenic has been found at a level of 5.10% at Bansbaria, Bariardala, Muradpur, Barabkunda, Bhatiari and Sonaichari union including Pourashava. Arsenic has been found in 1212 tubewells. As a result, 15500 families are being affected out of 73315. They are affected by Skin Diseases. Different government and NGOs and development organizations detect arsenic and make colour red or blue. But in some areas people ignore it so the number of victims are increasing day by day. Scarcity of safe drinking water and level of arsenic will be reduced if arsenic free tubewells are installed and make people aware.
Health	Drought	Drought is seen during dry moonsoon at Sitakundu upazila. Almost all unions including Bariardala, Salimpur, and Barabkunda unions are more or less affected by drought. Scarcity of safe drinking water is occurred as a result of drought. Tubewell water becomes scarce as the underground water level get down during dry moonsoon. The risk can be minimized by installing deep tube wells and increasing forestation.
Trees	Flood	Flood visits Sitakundu upazial almost every year. 47500 fruit, forest and herbal trees and 19 nurseries can be affected if a flood similar to 1988 hits Sitakundu. Havoc of flood is increasing due to narrowing of Channel and Khals and less height of embankments. The damages will increase if the present trend continues.
Trees	Tornado	Tornado visit this upazila every year. The upazial becomes victims of tornados as the upazila is very close to sea and suffer from climatic Change. Tornados uprooted 30% trees and brings partial damage to infrastructures.
Infrastructures.	Flood	32 KM Kacha roads out of 301.40 KM, 12 Km HBB out of 73.55 KM, inundation of homes of 3540 Families out of 73315, 40 educational institutions out of 221, 5 Hat/Bazars out of 34, 4 Health centers out of 33 can directly or indirectly be affected by flood.

3rd Chapter : Disaster Risk reduction

3.1 Identification of causes of risks

Description of risks	Causes		
	Immidiate	Intermediary	Final
<p>Sector: Agriculture Hazard: Flood Flood affects Sitakundu upazila in each year. All unions are affected by the flood. About 3500 acres crop lands are inundated. Intensity of flood is increasing due to siltration of Sandwip Channel and its small tributaries and less height of embankments. The extent of damage will Increase if this trend continues.</p>	<ul style="list-style-type: none"> - Due to speedy disposal of water - Due to non availability of timely warning of flood. - Easy intrusion of sea water to crop land. - 	<ul style="list-style-type: none"> - Saline water intrudes during Joar & Bhatta. - No regulatory system for saline water. - Absence of Sluice gate in conjunction of rivers & Khals. 	<ul style="list-style-type: none"> -No appropriate steps of Water Development Board. -
<p>Sector: Domestic animals/ Livestock Hazard: Flood 12300 cows, 22500 goats, 23741 Chicks, 599 ducks and 39 Bufallows can be flown away if a flood similar to 1988 or tidal surge similar to 1991 hits Sitakundu again. As aresult about 3500 families can directly or indirectly be affected.</p>	<ul style="list-style-type: none"> - Kacha shed for cattles - Construction materials not disaster resilient. - 	<ul style="list-style-type: none"> - Lack of Safe place - Lack of treatment facilities 	<ul style="list-style-type: none"> - Less sheds for domestic animals - Lack of policies for livestock maintenance
<p>Sector: Trees Hazard: Flood Flood visits every year at Sitakundu Upazila. 47500 fruit, forest and herbal tress and 19 nurseries can be affected if a flood similar to 1988 hits Sitakundu upazila again. The intensity of flood is increasing due</p>	<ul style="list-style-type: none"> - Lack of speedy disposal of water - Non-availability of timely warning - Inundation of nurseries by flash flood 	<ul style="list-style-type: none"> -Sedimentation of small cannels / Chhrra and Khals. - Poor or no understanding on post flood 	

Description of risks	Causes		
	Immidiatae	Intermediary	Final
to siltration of Sandwip Channel and its small tributaries and less height of embankments. The extent of damage will Increase if this trend continues.	- Unplanned establishing of nurseries	responsibilities/ actions. - Poor navigability for siltration of rivers and khals. -Decrease of trees.	
Sector: Roads/Houses/Educational institions/ Culverts Hazard: Flood 55 KM kacha roads, 25 KM HBB, inundation of houses of 13090 families, 30 culverts and 15 educational institutions can be affected if a tornedo/ tidal surge similar to 1991 hits Sitakundu Upazila.	-Unplanned establishment of educational institutions. - Bamboo made houses destroys easily -- Construction of roads are not strong - Construction of culverts are not strong.	--Eduactional institutions are made of Kacha materais and on low lying land	- Lack of risk and hazard based infrastructure policies.
Sector: Agriculture Hazard: Hilly water onrush The upazila is considered as hilly upazila. There are hills in all unions of this upazila. All wards of all unions of the upazila are affected by hilly water onrush.	- Crop lands are attached to hills. - Lack of awareness of local people about hill water onrush - Lack of awareness of local people about Land slide. - Execlsive cutting of trees from hills.	-Non cultivation of water resilient crop varities. - No traini9ng for farmers. Steps should be planning more trees on hills.	- Cultivation of water resilient crops. - Impart training to framers - Policy formulation for hill cutting and implementation
Sector: Homes Hazard: Hilly water onrush Unions like Kumira, Bansbaria, Bariardala, Saidpur, Muradpur, Barabkunda, Bhatiari and Sonaichari are	-Hilly homes not strong	- Non awareness of hilly inhabitant about landslide.	- Non removal of people living in hills during rainy season.

Description of risks	Causes		
	Immidiatae	Intermediary	Final
directly or indirectly affected by hilly water onrush during rainiy monsoon.			
Sector: Trees Hazard: Hilly water onrush The upazila is known as hilly upazila. There are hills in all unions of this upazila. 34200 fruits, forest and Herbal trees and 14 nurseries are affected by excessive rain during rainy season.	<ul style="list-style-type: none"> - Location of nurseries is not away from hills. - Decrease of hilly trees 	<ul style="list-style-type: none"> - Nurseries land are low lying - No system for disposal of water 	<ul style="list-style-type: none"> - Lack of appropriate caring of forest department -Non creation of more forest.
Sector: Agriculture Hazard: Tornado Every year the Upazila is affected by Tornado. The upazila becomes victims as it is very close to sea and is affected badly by climatic change adversaties. 2050 acres crop lands of all unions are affected by tornedoes. As a result, 200 families are directly or indirectly affected.	<ul style="list-style-type: none"> -Affect of depression to sea shore - Increase of temperature Affect of green houses - Destroying of natural balance. - Climatic Change 	<ul style="list-style-type: none"> - Non availability of sufficient trees. - No planning for social afforestation - Black smoke of factories and vehicles - Non availability of Tornado forecasting 	<ul style="list-style-type: none"> - Non caring attitude of officials of DAE. - Non-presence of agricultural research centers - Lack of training of farmers - Absence of govt. hazards and risks polices
Sector: Homes Hazard: Tornado Homes of all unions can be affected directly or indirectly if a tornado / tidal surge similar to 1991 hit Sitakundu.	<ul style="list-style-type: none"> -Non construction of disaster resilient homes - 	<ul style="list-style-type: none"> - Non availability of pre-disaster forecasting 	<ul style="list-style-type: none"> - Destroying of natural balance

Description of risks	Causes		
	Immidiate	Intermediary	Final
<p>Sector: Trees Hazard: Tornado Trees of all unions will be affected directly or indirectly if a tonedo similar to 1991 hits Sitakundu.</p>	<ul style="list-style-type: none"> - Absence of sufficient trees. - Indiscriminate cutting of trees - 	<ul style="list-style-type: none"> - No drive for tree plantation - 	<ul style="list-style-type: none"> - Non caring attitude of forest department. - Non creation of awareness about the bad impact of fewer trees.
<p>Sector: Fisheries Hazard: Chemical wastages There are 988 small scale industries and 53 large scale industries in Sitakundu. The country, s largest ship beaking Industries has grown up in this upazila.</p>	<ul style="list-style-type: none"> - Establishment of industries through unplanned ways. - Easy entrence of Chemical wastages into fish firm - People are not aware about health - Fish firm is close to industrial units. 	<ul style="list-style-type: none"> - Negligence or non attention in establishing industries near to fish firm - Non awareness of fish farmers about the risks. 	<ul style="list-style-type: none"> - Lack of govt. initiatives. - Poor attention of PHE - Non availability of Fish advice centers.
<p>Sector: Health Hazard: Chemical wastage There are 988 small scale industries and 53 large industries in Sitakundu. The country, s largest Ship breaking Indsutries has developed in this upazila. Many people are being affected by unplanned disposal of Chemical wastage.</p>	<ul style="list-style-type: none"> - Unplanned establishment of Indsutries 	<ul style="list-style-type: none"> - Lack of awareness of people. 	<ul style="list-style-type: none"> - Absence of attention of PHE
<p>Sector: Agriculture Hazard: River erosion There are virtually no rivers at Sitakundu upazial, but people consider Sandwip Channel as river.River eriosion</p>	<ul style="list-style-type: none"> - Weak embankments - Increase of water flow in rivers - Lack of trees on 	<ul style="list-style-type: none"> - Elevation of rivers - Depth of rivers decreases due to siltration 	<ul style="list-style-type: none"> - Poor attention of Water Development Board

Description of risks	Causes		
	Immidiata	Intermediary	Final
is seen in allmost all wards of Salimpur, Bhatiari, Kumira, Barabkunda and Bansbaria unions during rainy season.	embankments		- Lack of insufficient government initiatives
Sector: Fisheries Hazard: River erosion River erosion happens in rainy season. River erosion causes huge damage to fisheries. 230 ponds of Kumira, Bansbaria, Salimpur, Barabkundu and Bhatiari unions or Fish Ghar can be directly or indirectly affected if river erosion occurs.	- Ponds close to rivers	- Lack of strong embankments. - Fish farmers are not aware about the risk	- Lack of poor attention of DoF - No actions to protect river erosion.
Sector: Homes Hazard: River erosion River erosion happens in rainy season. The erosion causes huge damages to homes. River erosion causes huge damage to fisheries. River erosion causes huge damages directly or indirectly to Kumira, Bansbaria, Barabkundu, Bhatiari and Salimpur unions.	- Lack of embankments - Increase of water flow during rainy season	- Decrease of river flow - Elevation of rivers through siltration	- Poor actions by government - Poor attention of Water development Board
Sector: Trees Hazard: River erosion River erosion happens in every year in rainy season. The erosion causes extensive damage to trees. Trees of Kumira, Bansbaria, Barabkunda, Bhatiari and Salimpur union can be directly or indirectly affected by river erosion.	- Insufficient trees on river - embankments	Impact of Climatic Change	- Non implementation of Social Forestry - Poor cooperation of donors
Sector: Agriculture Hazard: Salinity Salinity of Sitakundu upazila is increasing due to intrusion of sea saline water into crop land and the	- Firm land is close to sea coast - No system for water disposal	- Saline water intrusion during flood and Joar & Bhatta	

Description of risks	Causes		
	Immidiata	Intermediary	Final
production is also decreasing. There are prevalence of salinity at Salimpur, Kumira, Barabkundu, Bansbaria, Muradpur and Saidpur. Salinity is causing damage to 350 acres of firm/crop land.	<ul style="list-style-type: none"> - Easy entrence of saline water to farm land 	<ul style="list-style-type: none"> - Overflowing of ser or river water - Lack of sufficient sluice gates and maingates - No provision for saline water discharging 	
<p>Sector: Health Hazard: Arsenic</p> <p>Arsenic has been noticed in Bnasbaria, Bariardala, Muradpur, Barabkundu, Bhatiari and Sonaichari unions of Sitakundu Upazila. Arsenic has been found to 1212 tubewells. As a result, more peole are gradually affected by arsenicosis.</p>	<ul style="list-style-type: none"> -People,s poor awareness about health - Lack of arsenic free tubewells 	<ul style="list-style-type: none"> - Peoples poor awareness about red and green sign of tubewells. - lack of sufficient health centers 	<ul style="list-style-type: none"> -Lack of government initiatives. - Lack of attention of PHE
<p>Sector: Agriculture Hazard: Snow rain</p> <p>All unions of Sitakundu Upazilal are affected by snow rain. 2000 acres crop lands are affected by snow rain each year.</p>	<ul style="list-style-type: none"> - Low lying of firm land - Siltration of Khals and Charras. - Destruction of natural imbalance 	<ul style="list-style-type: none"> - Height of embankment is not high - No provision for water discharging. - Some Sluice gate and Culverts are worn out. 	<ul style="list-style-type: none"> - Poor attention of DAE - -Absence of Sufficient agr. Research centers
<p>Sector: Agriculture Hazard: Drought</p> <p>Drought is seen during dry monsoon at Sitakundu Upazila. Drought causes damage to almost all unions Droght causes damage to 300-350 acres crop land.</p>	<ul style="list-style-type: none"> - Due to climatic Change - Absence of rain in due time - Absence of sufficient large trees. 	<ul style="list-style-type: none"> - No provision to store water at Khalls and Charra. 	<ul style="list-style-type: none"> - Poor attention of DAE - Non invention of drought resilient crop varities

Description of risks	Causes		
	Immidiatae	Intermediary	Final
<p>Sector: Health Hazard: Drought Drought is seen during dry monsoon at Sitakundu Upazila. Drought causes damage to almost all unions including Bariardala, Salimpur, and Barabkunda. During drought scarcity of drinking water is seen. Drought causes damage to 300-350 acres crop land. Tubewell water becomes scarce due to decrease of ground water level. The extent of damage can be reduced through installing more deep tubewells and increasing forest.</p>	<ul style="list-style-type: none"> - Due to climatic Change - Non available of rain in need - Absence of sufficient large trees. 	<ul style="list-style-type: none"> - Lack of sufficient deep tube wells - People unaware about health 	<ul style="list-style-type: none"> - Poor attention of DoF.
<p>Sector: Trees Hazard: Drought Drought is seen during dry monsoon at Sitakundu Upazila. Drought causes damage to almost all unions including Bariardala, Salimpur, and Barabkunda. 33400 fruits, forest and herbal trees and 9 nurseries can be damage party or wholly if a severe drought occurs in future.</p>	<ul style="list-style-type: none"> - Climatic Change - Lack of sufficient deep tubewells - Huge destruction of trees 	<ul style="list-style-type: none"> - No ponds beside nurseries - No protection of sampling from heat - Plant more trees. 	<ul style="list-style-type: none"> - Indifference of Forest department

3.2 Identification of means for risk reduction:

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>Sector: Agriculture Hazard: Flood 235 acres out of 910 acres Aman, Boro, Aus and robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and fllood similar to 1988 hits Sitakundu upazila. As a result 2510 families out of 8000 families can be affected.</p> <p>228 acres crops out of 5500 acres Aman, Boro, Aus and Robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and flood similar to 1988 hits Saidpur union. As a result 2828 families out of 9000 families can be affected.</p> <p>220 acres crops out of 5432 acres Aman, Boro, Aus and Robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and flood similar to 1988 hits Muradpur union. As a result 2780 families out of 5045 families can be affected.</p> <p>210 acres crops out of 4700 acres Aman, Boro, Aus and Robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and flood similar to 1988 hits Bariardala union. As a result 2620 families out of 5875 families can be affected.</p> <p>270 acres crops out of 3500 acres Aman, Boro, Aus and</p>	<ul style="list-style-type: none"> - Measures should be taken for speedy discharge of water - Flood warning must reach in time. - Fish cultivation must be done through planned way. - Measures should be taken so that saline water of rivers can not enter to land 	<ul style="list-style-type: none"> - Embankments must be raised to prevent water not to enter land. - Saline water regulator must be established. - Build sluice gate in conjunction of rivers and Khals. 	<ul style="list-style-type: none"> - WDB must take appropriate steps. - Donor cooperation must increase to meet the needs. - People must be more aware.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>Robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and flood similar to 1988 hits Sonaichari union. As a result , 2960 families out of 12000 families can be affected</p> <p>221 acres crops out of 8000 acres Aman, Boro, Aus and Robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and flood similar to 1988 hits Bhatiari union. As a result, 2870 families out of 7000 families can be affected.</p> <p>207 acres crops out of 1425 acres Aman, Boro, Aus and Robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and flood similar to 1988 hits Barabkunda union. As a result, 2922 families out of 5680 families can be affected.</p> <p>290 acres crops out of 4750 acres Aman, Boro, Aus and Robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and flood similar to 1988 hits Kumira union. As a result, 2730 families out of 5915 families can be affected.</p> <p>240 acres crops out of 4550 acres Aman, Boro, Aus and Robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and flood similar to 1988 hits Bansbaria union. As a result, 2755 families out of 8850 families can be affected.</p>			

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
236 acres crops out of 5000 acres Aman, Boro, Aus and Robi including Guava, vegetables cultivation can be affected if a tidal surge similar to 1991 and flood similar to 1988 hits Pourashava. As a result, 3025 families out of 5950 families can be affected.			
<p>Sector: Agriculture Hazard: River erosion River erosion is seen in some unions like Salimpur, Kumira, Bansbaria, Barabkunda, and Bhatiari at Sitakundu upazila. Aman, Boro, Aus, Robi and guava, vegetable cultivation of 180 acres land out of 910 acres of Salimpur union can be badly damaged and about 41 acres land can be vanished into river if river erosion happens. As a result, 4800 families out of 8000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 130 acres land out of 8000 acres of Bhatiari union can be badly damaged and about 20 acres land can be vanished into river if river erosion happens. As a result, 3590 families out of 7000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 160 acres land out of 1425 acres of Bhatiari union can be badly damaged and about 23 acres land can be vanished into river if river erosion</p>	<ul style="list-style-type: none"> - Indiscriminate cutting must stoped 	<ul style="list-style-type: none"> - Impart training to farmers. - More trees must be planted. 	<ul style="list-style-type: none"> - Upazial DAE must take steps. - Government must undertake steps fro imparting training to farmers. -

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>happens. As a result, 3640 families out of 5680 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 135 acres land out of 4750 acres of Kumira union can be badly damaged and about 27 acres land can be vanished into river if river erosion happens. As a result, 4100 families out of 5915 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 175 acres land out of 4550 acres of Bansbaria union can be badly damaged and about 17 acres land can be vanished into river if river erosion happens. As a result, 3370 families out of 8850 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 175 acres land out of 4550 acres of Bansbaria union can be badly damaged and about 17 acres land can be vanished into river if river erosion happens. As a result, 3370 families out of 8850 families can be affected.</p>			
<p>Sector: Agriculture Hazard: Tornado Extensive damage is caused due to hitting of tornedoes at Sitakundu upazila. Aman, Boro, Aus, Robi and guava, vegetable</p>	<ul style="list-style-type: none"> - Actions must be taking to contain air pollution. - Environmental balance must be maintained by planting more trees. 	<ul style="list-style-type: none"> - Sufficient plantation must be done - Social afforestation 	<ul style="list-style-type: none"> - DAE must be more active - Establish more agricultural research centers

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>cultivation of 105 acres land out of 910 acres of Salimpur union can be badly damaged if tornedo hits. As a result, 1870 families out of 8000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 110 acres land out of 5500 acres of Saidpur union can be badly damaged if tornedo hits. As a result, 2140 families out of 9000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 100 acres land out of 5432 acres of Muradpur union can be badly damaged if tornedo hits. As a result, 2350 families out of 5045 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 122 acres land out of 4700 acres of Bariardala union can be badly damaged if tornedo hits. As a result, 2150 families out of 5875 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 130 acres land out of 3500 acres of Sonaichari union can be badly damaged if tornedo hits. As a result, 2213 families out of 12000 families can be affected.</p>		<p>initiatives must be undertaken.</p> <ul style="list-style-type: none"> - Tornado resilient tress must be planted. - Warning massage must reach people more easily. 	<ul style="list-style-type: none"> - UDMC,s must deliver their responsibilities. - Impart training to farmers. - Hazard and risk policies must be enforced by Upazial administration.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 120 acres land out of 8000 acres of Bhatiari union can be badly damaged if tornedo hits. As a result, 2360 families out of 7000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 125 acres land out of 1425 acres of Barabkunda union can be badly damaged if tornedo hits. As a result, 2182 families out of 5680 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 95 acres land out of 4750 acres of Kumira union can be badly damaged if tornedo hits. As a result, 2190 families out of 5915 families can be affected</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 110 acres land out of 4550 acres of Bansbaria union can be badly damaged if tornedo hits. As a result, 2315 families out of 8850 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 105 acres land out of 5000 acres of Pourashava can be badly damaged if tornedo hits. As a result, 2860 families out of 5950 families can be</p>			

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
affected.			
<p>Sector: Agriculture Hazard: Onrush of hilly water Aman, Boro, Aus, Robi and guava, vegetable cultivation of 110 acres land out of 4550 acres of Salimpur union can badly be damaged if an onrush of hilly water happens. As a result, 2010 families out of 8000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 250 acres land out of 5432 acres of Muradpur union can badly be damaged if an onrush of hilly water happens. As a result, 2490 families out of 5045 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 173 acres land out of 4700 acres of Bariardala union can badly be damaged if an onrush of hilly water happens. As a result, 2260 families out of 5875 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 245 acres land out of 3500 acres of Sonaichari union can badly be damaged if an onrush of hilly water happens. As a result, 2350 families out of 12000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable</p>	<ul style="list-style-type: none"> - Local people must make aware about onrush of hilly water. - People must be aware about land slide of hills. - Indiscriminate cutting must stoped 	<ul style="list-style-type: none"> - Cultivate water resilient crops - Impart training to farmers. - More trees must be planted. 	<ul style="list-style-type: none"> - Upazial DAE must take steps. - Government must undertake steps fro imparting training to farmers. - Formulation and implementation of policies about cutting of hills.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>cultivation of 200 acres land out of 8000 acres of Bhatiari union can badly be damaged if an onrush of hilly water happens. As a result, 2500 families out of 7000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 225 acres land out of 1425 acres of Barabkunda union can badly be damaged if an onrush of hilly water happens. As a result, 2322 families out of 5680 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 180 acres land out of 4750 acres of Kumira union can badly be damaged if an onrush of hilly water happens. As a result, 2330 families out of 5915 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 200 acres land out of 4550 acres of Kumira union can badly be damaged if an onrush of hilly water happens. As a result, 2455 families out of 8850 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 230 acres land out of 5000 acres of Sitakundu Pourashava can badly be damaged if an onrush of hilly water happens. As a result, 3000 families out of 5950 families can be affected.</p>			

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>Sector: Agriculture Hazard: Salinity Salinity of firm land of Sitakundu upazila is increasing day by day due to intrusion of Saline water to firm land during flood and Joar and Bhatta. Aman, Boro, Aus, Robi and guava, vegetable cultivation of 230 acres land out of 5000 acres of Salimpur union can badly be damaged and soil fertility can be decreased by salinity. As a result, 1640 families out of 8000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 75 acres land out of 5500 acres of Saidpur union can badly be damaged and soil fertility can be decreased by salinity. As a result, 1910 families out of 9000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 75 acres land out of 5432 acres of Murudpur union can badly be damaged and soil fertility can be decreased by salinity. As a result, 2160</p>	<ul style="list-style-type: none"> - Water discharging system should be make to discharge water from firm land. - Measures should be taken so that saline water can not enter to firm land. 	<ul style="list-style-type: none"> - Embankment should be high so that saline water can enter to firm land. - Sufficient sluiceways and culverts must be constructed. - Discharging of saline water must be made by government initiative. 	<ul style="list-style-type: none"> - WDB must take necessary actions. - Donors cooperation must increased - People must be aware - Government should take steps for decreasing salinity.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>families out of 5045 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 65 acres land out of 4700 acres of Bariardala union can badly be damaged and soil fertility can be decreased by salinity. As a result, 1920 families out of 5875 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 65 acres land out of 3500 acres of Sonaichari union can badly be damaged and soil fertility can be decreased by salinity. As a result, 1983 families out of 12000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 55 acres land out of 8000 acres of Bhatiari union can badly be damaged and soil fertility can be decreased by salinity. As a result, 2130 families out of 7000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 65 acres land out of 1425 acres of Barabkundu union can badly be damaged and soil fertility can be decreased by salinity. As a result, 1952 families out of 5680 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 60 acres land out of 4750 acres of Barabkundu union can badly be damaged and soil</p>			

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>fertility can be decreased by salinity. As a result, 1960 families out of 5915 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 67 acres land out of 4550 acres of Bansbaria union can badly be damaged and soil fertility can be decreased by salinity. As a result, 2085 families out of 8850 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 70 acres land out of 5000 acres of Pourashava can badly be damaged and soil fertility can be decreased by salinity. As a result, 2630 families out of 5950 families can be affected.</p>			
<p>Sector: Domestic animals/ Livestock Hazard: Flood 1887 cows out of 5985 cows, 787 goats out of 2707, 22580 Chicken out of 67981 chicken, 602 ducks out of 1809 ducks, 37 sheeps out of 114, 51 buffolows out of 155 can be flown away in Kumira union if a flood similar to 1988 or tidal surge similar to 1991 hits Sitakundu upazila.</p> <p>1990 cows out of 5989 cows, 732 goats out of 2709, 22730 Chicken out of 68207 chicken, 598 ducks out of 1785 ducks, 40 sheeps out of 107, 50 buffolows out of 145 can be flown away in Bansbaria union if a flood similar to 1988 or tidal surge similar to 1991 hits Sitakundu upazila.</p>	<ul style="list-style-type: none"> - Huge forest and other trees must be planted - Kacha homes must be made strongly - Homes should be made in a planned way. 	<ul style="list-style-type: none"> - Land beneath the homes should be elevated. - Disaster management activities must be activated. 	<ul style="list-style-type: none"> - Plantation program should be undertaken - Flod resilient houses should be made. - Government must formulate hazard and risk based home construction rules. - Governmnet and donors support should be increased.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>2545 cows out of 6120 cows, 878 goats out of 2629, 25699 Chicken out of 76988 chicken, 567 ducks out of 1692 ducks, 55 buffolows out of 159 can be flown away in Bariardala union if a flood similar to 1988 or tidal surge similar to 1991 hits Sitakundu upazila.</p> <p>2332 cows out of 6987 cows, 765 goats out of 2278, 26940 Chicken out of 80790 chicken, 609 ducks out of 1810 ducks, 44 sheeps out of 128, 38 buffolows out of 111 can be flown away in Saidpur union if a flood similar to 1988 or tidal surge similar to 1991 hits Sitakundu upazila.</p> <p>2430 cows out of 7275 cows, 1036 goats out of 3102, 22765 Chicken out of 68285 chicken, 628 ducks out of 1875 ducks, 30 sheeps out of 87, 34 buffolows out of 98 can be flown away in Muradpur union if a flood similar to 1988 or tidal surge similar to 1991 hits Sitakundu upazila.</p> <p>2307 cows out of 6917 cows, 1075 goats out of 3210, 23740 Chicken out of 71192 chicken, 542 ducks out of 1620 ducks, 40 sheeps out of 116, 57 buffolows out of 165 can be flown away in Barabkunda union.</p> <p>2307 cows out of 6917 cows, 1075 goats out of 3210, 23740 Chicken out of 71192 chicken, 542 ducks out of 1620 ducks, 40 sheeps out of 116, 57 buffolows out of 165 can be flown away in Barabkunda. As a result many families can be affected.</p>			

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>1902 cows out of 5694 cows, 801 goats out of 2987, 23479 Chickens out of 70432 chickens, 501 ducks out of 1490 ducks, and 37 buffolows out of 107 can be flown away in Pourashava. As a result many families can be suffered.</p> <p>1667 cows out of 4986 cows, 761 goats out of 2272. 25171 Chickens out of 75485 chickens, 531 ducks out of 1581 ducks, and 31 buffolows out of 83 can be flown away in Salimpur union. As a result many families can be suffered.</p> <p>1407 cows out of 4188 cows, 728 goats out of 2165. 23741 Chickens out of 71197 chickens, 599 ducks out of 1778 ducks, and 39 buffolows out of 109 can be flown away at Sonaichari union. As a result many families can be suffered.</p> <p>1388 cows out of 4141 cows, 731 goats out of 2183. 23629 Chickens out of 70874 chickens, 609 ducks out of 1815 ducks, and 51 buffolows out of 145 can be flown away at Bhatiari union. As a result many families can be suffered.</p>			
<p>Sector: Livelihoods Hazards: Chemical wastages Establishment of 35% industrial units of total 988 units through unplanned way, 5100 families out of total 73315 families can be affected by Chemical wastages.</p>	<ul style="list-style-type: none"> - Industrial units were not established in a planned way. - Not to allow chemical wastage enter into fish 	<ul style="list-style-type: none"> - The fact must keep in mind before establishing an industrial unit. 	<ul style="list-style-type: none"> - Government should take necessary steps. - PHE should put much attention.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>Besides fishing sector is badly damaging. 150 Fishermen out of 3040 fishermen of 5915 families can be affected by Chemical wastage.</p> <p>150 fishermen out of total 3040 fishermen of 5915 families of Kumira union can be affected by chemical wastage.</p> <p>164 fishermen out of total 4480 fishermen of 8850 families of Bansbaria union can be affected by chemical wastage.</p> <p>65 fishermen out of total 1714 fishermen of 8000 families of Salimpur union can be affected by chemical wastage.</p> <p>120 fishermen out of total 5320 fishermen of 12000 families of Sonaichari union can be affected by chemical wastage.</p> <p>55 fishermen out of total 2240 fishermen of 7000 families of Bhatiari union can be affected by chemical wastage.</p>	<ul style="list-style-type: none"> - firm directly. - Make people aware about health risks - Fish firm must establish away from - Industrial units. 	<ul style="list-style-type: none"> - Fish farmers should be aware 	<ul style="list-style-type: none"> - Establishment of more fish service centerers.
<p>Sector: Health Hazards: Arsenic Average 5.10% arsenic has been found at Bansbaria, Muradpur, Barabkunda, Bhatiari and sonaichari unions of Sitakundu upazial. There are arsenic contaminations to 1212 tybewells. As a result 155000 families out of total 73315 families are affected by arsenic. They are affecting by skin diseases. Different govt. and non-governmental development organization identify</p>	<ul style="list-style-type: none"> - People need to be aware about arsenic. - People vmust make aware about health. - Arsenic free tubewells should be installed. 	<ul style="list-style-type: none"> - People must make aware about red and green sign/ marks. - Health centers must run properly. 	<ul style="list-style-type: none"> - Government should take steps. - PHE must supervise. - Proper disaster Management must ensure.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
arsenic contaminated tubewells and put red or green marks. But some people ignore it due to non awareness. So the numbers of affected people are increasing day by day. The problem will address and risks can be minimizing if arsenic free tubewells are installed and make people aware.			
<p>Sector: trees Hazards: flood 9107 fruits, forest and herbal trees can be damaged and 19 nurseries can be affected at Kumira union if a flood similar to 1988 occures again.</p> <p>8251 fruits, forest and herbal trees can be damaged and 21 nurseries can be affected at Bansbaria union if a flood similar to 1988 occures again.</p> <p>8952 fruits, forest and herbal trees can be damaged and 15 nurseries can be affected at Bariardala union if a flood similar to 1988 occures again.</p> <p>7982 fruits, forest and herbal trees can be damaged and 19 nurseries can be affected at Saidpur union if a flood similar to 1988 occures again.</p> <p>8742 fruits, forest and herbal trees can be damaged and 23 nurseries can be affected at Muradpur union if a flood similar to 1988 occures again.</p> <p>8921 fruits, forest and herbal trees can be damaged</p>	<ul style="list-style-type: none"> - Arrangement should be made to speedy disposal of water. -Flood forcasting should reach timely -Nurseries should establish in planned way. -Volunteers should be trained 	<ul style="list-style-type: none"> - Chrra and Khals must be excavated. - People must keep knowledge on post flood responsibilities. - Number of trees must increase. 	<ul style="list-style-type: none"> - Government must take steps to excavate and reexcavate Khals and rivers. - Disaster management should be strengthened. - Impart training to Disaster committees of different levels.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>and 27 nurseries can be affected at Pourashava if a flood similar to 1988 occures again</p> <p>6983 fruits, forest and herbal trees can be damaged and 13 nurseries can be affected at Salimpur union if a flood similar to 1988 occures again.</p> <p>7181 fruits, forest and herbal trees can be damaged and 19 nurseries can be affected at Sonaichari union if a flood similar to 1988 occures again.</p> <p>7541 fruits, forest and herbal trees can be damaged and 24 nurseries can be affected at Bhatiari union if a flood similar to 1988 occures again.</p> <p>6840 fruits, forest and herbal trees can be damaged and 40 nurseries can be affected at Barabkunda union if a flood similar to 1988 occures again.</p>			
<p>Sector: infrastructures Hazards: flood 55 KM Kacha road out of 301.40 KM, 25 KM HBB out of total 73.55 HBB, inundation of 13090 homes out of toral 71315, 30 culverts out of 397, 80 educational institutions out of 221, 180 Mosques out of 408 mosques, 20 Temples out of 139 temples, 8 hat and bazaars out of 34, 7 health centers out of 33 health centers can be badly damaged if a tornedo / tidal surge similar to 1991 hits Sitakundu upazila. Besides 20 KM electric line can be affected by tornedo.</p>	<ul style="list-style-type: none"> - Educational institution must be made in a planned way. - Kacha homes of rural areas should build strongly by bamboo. 	<ul style="list-style-type: none"> - The base of educational and religious institutions should be elevated. - Homes should be build disaster resilient. 	<ul style="list-style-type: none"> - Risk and hazard based policies should be formulated. - GO & NGO should play their due roles.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>Sector: Agriculture Hazards: Snow storm Every year Sitakundu upazila is affected by Snow rain. Aman, Boro, Aus, Robi and guava, vegetable cultivation of 62 acres land out of 910 acres of Salimpur union can badly be damaged if a snow rain similar to 2012 hits. As a result, 1700 families out of 8000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 71 acres land out of 5500 acres of Saidpur union can badly be damaged. As a result, 1970 families out of 9000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 75 acres land out of 5432 acres of Muradpur union can badly be damaged. As a result, 2180 families out of 5045 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 68 acres land out of 4700 acres of Bariardala union can badly be damaged. As a result, 1980 families out of 5875 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 65 acres land out of 3500 acres of Sonaichari union can badly be damaged. As a result, 2043 families out of 12000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable</p>	<ul style="list-style-type: none"> - Restore natural balance through trees plantation - Farmers should impart training 	<ul style="list-style-type: none"> - Water disposal system should be installed - Repair damaged sluice gate/culverts - Cultivate snow resilient varieties crops. 	<ul style="list-style-type: none"> - DAE should come forward - Forest department should be more careful. - LGED should be more careful.

Hazards & risks	Probabale means of risk reduction		
	Shortterm	Midterm	Longterm
<p>cultivation of 70 acres land out of 8000 acres of Bhatiari union can badly be damaged. As a result, 2190 families out of 7000 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 85 acres land out of 1425 acres of Barabkunda union can badly be damaged.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 69 acres land out of 4750 acres of Kumira union can badly be damaged.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 73 acres land out of 4550 acres of Bansbaria union can badly be damaged. As a result, 2145 families out of 8850 families can be affected.</p> <p>Aman, Boro, Aus, Robi and guava, vegetable cultivation of 77 acres land out of 5000 acres of Sitakunda Pourashava can badly be damaged. As a result, 2690 families out of 5950 families can be affected.</p>			

3.3 Development plan of NGOs:

Sl. No.	NGO	Work on Disasters	No of beneficiaries	Duration of Projects
1.	EPSA	Disasters, Women & Child Development, Education, Health & Micro-credit	730	3 & 5 years
2.	CODEC	Education, Health & Micro-credit	650	5 years
3.	PROSHIKA	Education & Micro-credit	800	3.5 years
4.	VERC	Sanitatjion, Women development, Health & Micro-Credit	700	4 years
5.	ASA	Micro-Credit	600	4 years
6.	BRAC	Women development, Education, Health & Micro-Credit	540	5 years
7.	Marry Stops	Micro-Credit	920	3.5 years
8.	SUS	Health	800	4 years
9.	SDI	Micro-Credit, Education & Disaster	700	4 years
10.	PADAKEP	Micro-Credit	600	5 years
11.	TMSS	Micro-Credit	540	3.5 years
12.	DSK	Micro-Credit & Health	920	4 years
13.	Bureau Bangladesh	Micro-Credit	800	4 years
14.	SHAKTI Foundation	Micro-Credit	700	5 years
15.	SAJEDA Foundation	Micro-Credit	600	3.5 years
16.	GAHRONI	Education Sector	540	4 years
17.	Hadicaf International	Disaster Affairsr & Disable	920	4 years
18.	Red Cricent	Disaster Affairs	800	5 years
19.	Jano Seba	Micro-Credit	700	3.5 years
20.	Pratashi	Micro-Credit	600	4 years
21.	Badhon	Micro-Credit	540	5 years
22.	Bihongo	Micro-Credit	920	3.5 years
23.	Over Write	Education & Cultural	700	4 years
24.	Projanmo	Micro-Credit	600	4 years
25.	Norapod	Education, Cultural & Micro-Credit	540	5 years
26.	Prothiva	Education & Cultural	920	3.5 years
27.	Seedip	Micro-Credit	800	4 years
28.	Liprocip Vision	Health Affairs	700	4 years

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	90	80000	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	800000	Pourashava & Up	Feb. to march					
3	Plan to circulate advance massage for flood/hazards at local level	90	227000	Pourashava & Up	Feb. to march					
4	Circulate advance massage for Flood & disasters	90	45000	Village, ward, up & purashava	Feb. to march					
5	Deliver Health Services	34	34,00,000	Village, ward, up & purashava	Feb. to march					
6	Conduct drill activities	20	300000	Pourashava & Up	Feb. to march					
7	Repair of Shelters	64	1920000	Pourashava & Up	Feb. to march					
8	Impart training on Disasters & Primary Health	10	50000	Pourashava & Up	Feb. to march					
9	Keep ready of Dry foods and Medicines	Dry food 6 Ton, rice/pulse-9 ton	750000	Village, ward, up & purashava	Feb. to April					
10	Impart traing to school students on Disasters	100 Schools	300000	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. %	Comm unity %	UP %	NGO %	
1	Distribution of Dry foods	Dry food 6 Ton, rice/pulse- 8 ton	950000	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	35000 family	200000	Ward & Union	During disaster					
3	Transfer affected people to shelters or Health centers	30000 family	200000	Ward & Union	During disaster					
4	Take women, children, aged, ill and disabled to shelters and high land on emergency basis.	64	160000	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	90	360000	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	90	450000	In the disaster affected areas	After disaster					
3	Start early rescue operation	90	-	In the disaster affected areas	After disaster					
4	Emergency rehabilitation & support for livelihood	12000	240000	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	17.5 km	Per km 30 lac	1. Bhatiyari union 2 km. ward no. 7, 8 & 9 2. Barabkunda union 5 km. ward no. 2, 3, 5, 6, 8 & 9 3. Muradpur union 4.5 km. ward no. 1, 3, 4 & 5 4. Saidpur union 6 km. ward no. 2, 3, 5, 6 & 9	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 repair & brike soling	Kacca road 51 km. & HBB road 45 km.	Per km. 15 lac	1. Bhatiyari union Kacca road 5 km & HBB road 6 km. ward no. 1, 3, 5 & 9. 2. Sonaichari union Kacca road 9 km & HBB road 5 km. ward no. 2, 5, 6 & 8. 3. Kumira union Kacca road 7 km & HBB road 6 km. ward no. 1, 2, 4, 6 &	Nov. to January					

				<p>8.</p> <p>4. Bansbaria union Kacca road 8 km & HBB road 3 km. ward no. 1, 3, 5, 7 & 8.</p> <p>5. Barabkunda union Kacca road 8 km & HBB road 4 km. ward no. 1, 3, 5, 7, 8 & 9.</p> <p>6. Salimpur union Kacca road 4 km & HBB road 3 km. ward no. 1, 2, 3, 5 & 7.</p> <p>7. Bariadhala union Kacca road 5 km & HBB road 4 km. ward no. 2, 3, 4, 5 & 6.</p> <p>8. Sayadpur union Kacca road 5 km & HBB road 3 km. ward no. 2, 3, 4, 5 & 6.</p> <p>9. Muradpur union Kacca road 5 km & HBB road 3 km. ward no. 1, 2, 4,</p>		
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				7, 8 & 9.			
3	Emergency control room operation	-	-	Upazila & Union	After disaster		
4	Repair of shelter & reconstruction	3	Per 1.5 crore	Salimpur, Bansbaria & Muradpur	Nov. to January		
5		19	Per 20 lac	<ol style="list-style-type: none"> 1. Muradpur union no. of canal 3. ward no. 1, 3, 4 & 6 2. Sonaichari union no. of canal 2. ward no. 1, 2, 3, 4 & 5 3. Bhatiyarir union no. of canal 3. ward no. 2, 3, 5, 6 & 8. 4. Barobkunda union no. of canal 4. ward no. 2, 3, 5, 6 & 9. 5. Kumira union no. of canal 2. ward no. 4, 5, 6 & 8. 6. Bansbaria union no. of canal 2. ward no. 7 & 9. 7. Salimpur union no. of canal 1. ward no. 7. 8. Saidpur union no. of canal 2. ward no. 1, 2, 4 & 5 	Nov. to January		
6	Diging Chara	13	Per 15	1. Muradpur union no.			

			lac	<ul style="list-style-type: none"> of Chara 3. ward no. 7, 8, & 9 2. Sonaichari union no. of Chara 4. ward no. 1, 2, 3, 6, 7 & 9 3. Bhatayari union no. of Chara 1. ward no. 6 & 7 4. Barabknda union no. of Chara 1. ward no. 1 5. Kumira union no. of Chara 2. ward no. 1, 2 & 4 6. Bhatayari union no. of Chara 1. ward no. 6 & 7 7. Salimpur union no. of Chara 1. ward no. 1 & 3 	Nov. to January		
7	Cutvert construction	86	Per 1 lac 10 thd.	<ul style="list-style-type: none"> 1. Muradpur union no of culvert 9 (ward no. 1 to 9) 2. Sonaichari union no of culvert 8 (ward no. 1 to 9) 3. Bhatiyari union no of culvert 8 (ward no. 1 to 9) 4. Barobkunda union no of culvert 11 	Nov. to January		

				(ward no. 1 to 9) 5. Kumira union no of culvert 7 (ward no. 1 to 9) 6. Bansbaria union no of culvert 9 (ward no. 1 to 9) 7. Salimpur union no of culvert 8 (ward no. 1 to 9) 8. Sayadpur union no of culvert 12 (ward no. 1 to 9) 9. Bariadhala union no of culvert 10 (ward no. 1 to 9)			
8	Construction of Matir killa	18	Per 80 lac	All of unions of Sitakunda Upazila emergency construction of matir killa.	Nov. to January		
9	Sanitation	2500	Per 22000	All of unions of Sitakunda upazila arrange sanitation.	Nov. to January		
10	Rain water	20000	90 thd.	Vill. ward & Up	June to Aug.		
11	Tree plantation	170 km.	Per km. 15 thd.	Vill. ward & Up	Aug. to Sept.		
12	Disaster flexible crops	20000	60 lac	Upazila	After disaster		
	Volunteers training on disaster & shaelter	300	3 lac	Upazila	After disaster		

4th Chapter: Emergency Response

4.1 Emergency Operation Center (EOC)

An emergency operation center is organized during disasters at Sitakundu 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 vname, designation, and mobile no of responsible persons are exhibited in below table-

List of Sitakunda Upazila's Emergency Operation center

Sl. No	Name/Designation	Mamber	Mobile No
01	Abdullah Al Baker Bhuiyan, Upazila Chaurman	Chairman	01715-299961
02	Md. Ismail Hossain, PIO	Member Secretary	01816-143030
03	Masuda Begum	Member	01716-397482
04	Samsul Alam Agad	Member	01819-867233
05	Haradhan Chowdhury	Member	01631-594716
06	Jamal Ullah	Member	01558-661662
07	Md. Rafiqul Islam	Member	01611-443879

4.1.1 Operate Emergency control room:

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

2 members of upazila Disaster Manangement Committee (UzDMC) work in this control room by turns after just after occurance of disasters and a police also present in this center. Responsible 3 people deliver their dities 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, gumboat, 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 volentiars	Peopl e	9 union total 2700	Feb. to March	UP Chairman	UzDM C & NGO & Public	Impart Training & material supply	Representative of Union & Upazila disaster management community
2	Micking of warning	Popul ation	9 union 100%	Rescue of warning messages	Responsible volentaires	Rural police & Rural people	Through siren & dream	UDMC responsible representative
3	Ready to Boa/, Car/ Van	No	9 union 36	Before disaster	Responsible person of Union Parishod	UP member	Preserve phone no of boat, car & van drivers	UDMC responsible representative
4	Conduct rescue operation	Popul ation	800 people	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	No	9 union & 9 team	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	Medic ine	450 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/ri ce & house building materials	Dry foods totla 8 ton		Pre-disaster	Responsible person of UDMC	People of Non-govt. organization &	Through collecting phone no & discation with community people & agencies that capable of provides foods	Communication with UzDMC & UDMC to the responsible person
8	Vacine of domestic animal	Medic ine	900	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	No	2	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 reharshall	No	18	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 emergancy room	Room	7	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 homes of all wards as his own responsibilities.
- Circulation of 5 no danger warning shloud be done through Miking at least once in one hour.

4.2.3 Approach of removing community npeople

- 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 waring and volunteers will put pressure of taking sheler 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 Upazial 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 Maintanence 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 disbled 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, Atta, 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 Planning 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 Management 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-government 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

Shelter	Name	Union	Capacity
School cum shelter	Sheikerhat Govt. Pri. School	Saidpur	Approximately 900 person
School cum shelter	Dhakkin Bagachatar Govt. Pri. school	Saidpur	Approximately 1000 person
School cum shelter	Uttar Bagachatar Govt. Pri. School	Saidpur	Approximately 800 person
School cum shelter	Mohanagar Govt. Pri. School	Saidpur	Approximately 800 person
School cum shelter	Modha Bagachatar Govt. Pri. School	Saidpur	Approximately 700 person
School cum shelter	West Saidpur Govt. Pri. School	Saidpur	Approximately 600 person
School cum shelter	East Saidpur Govt. Pri. School	Saidpur	Approximately 500 person
School cum shelter	Bakhali Govt. Pri. School	Saidpur	Approximately 700 person
School cum shelter	Alakulipur Govt. Pri. School	Saidpur	Approximately 600 person
School cum shelter	Bagachatar Gulbahar Govt. Pri. School	Saidpur	Approximately 600 person
School cum shelter	Modhardhari Govt. Pri. School	Saidpur	Approximately 700 person

School cum shelter	Mohalanga Govt. Pri. School	Baroiyadhala	Approximately 600 person
School cum shelter	Terial Govt. Pri. School	Baroiyadhala	Approximately 500 person
School cum shelter	Kalabaria Govt. Pri. School	Baroiyadhala	Approximately 500 person
School cum shelter	West Lalanagar Govt. Pri. School	Baroiyadhala	Approximately 600 person
School cum shelter	Gondakhali Govt. Pri. School	Muradpur	Approximately 600 person
School cum shelter	Sadak Mostan Govt. Pri. School	Muradpur	Approximately 700 person
School cum shelter	Bhaterkhil Govt. Pri. School	Muradpur	Approximately 500 person
School cum shelter	Guliakhali Govt. Pri. School	Muradpur	Approximately 500 person
School cum shelter	Basratnagar Govt. Pri. School	Muradpur	Approximately 600 person
School cum shelter	Golabaria Govt. Pri. School	Muradpur	Approximately 600 person
School cum shelter	Uttar Bansbaria Govt. Pri. School	Bansbaria	Approximately 500 person
School cum shelter	Modha Bansbaria Govt. Pri. School	Bansbaria	Approximately 600 person
School cum shelter	Uttar Mosoddia Govt. Pri. School	Kumira	Approximately 700 person
School cum shelter	Court Para Govt. Pri. School	Kumira	Approximately 600 person
School cum shelter	Kumira Govt. Pri. School	Kumira	Approximately 600 person
School cum shelter	Dakhin Mosaddia Govt. Pri. School	Kumira	Approximately 700 person
School cum shelter	Baro Aulia Govt. Pri. School	Sonaichari	Approximately 600 person
School cum shelter	Dakhin Ghoramara Govt. Pri. School	Sonaichari	Approximately 500 person
School cum shelter	Emmam Nagar Govt. Pri. School	Bhatiyari	Approximately 500 person
School cum shelter	Bhatiyari Govt. Pri. School	Bhatiyari	Approximately 600 person
School cum shelter	Hossainia Govt. Pri. School	Bhatiyari	Approximately 600 person
School cum shelter	Kadamrasul Govt. Pri. School	Bhatiyari	Approximately 700

			person
School cum shelter	Latifpur Govt. Pri. School	Salimpur	Approximately 800 person
School cum shelter	Modha Salimpur Govt. Pri. School	Salimpur	Approximately 700 person
School cum shelter	Uttar Salimpur Govt. Pri. School	Salimpur	Approximately 600 person
Shelter Center	Jelapara Cyclone Center	Salimpur	Approximately 2000 person
Shelter Center	Kagipara World Vision Shelter Center	Kumira	Approximately 2000 person
Shelter Center	Alekdia World Vision Shelter Center	Kumira	Approximately 2000 person
UP Bhaban	Union Parishad Bhaban	Salimpur	Approximately 1200 person
UP Bhaban	Union Parishad Bhaban	Sonaichari	Approximately 1200 person
UP Bhaban	Union Parishad Bhaban	Sayedpur	Approximately 1000 person
UP Bhaban	Union Parishad Bhaban	Barabkunda	Approximately 1000 person

4.5 List of Upazila resources:

Infracutures / Resouerces	Number	Responsible person	Brief description
Shelters	4	Responsibilities are given instantly.	Almost all items are in damaged condition. Cyclone shelters have been useless and unprotected.
Godowns	01		
Small megaphones	1 Set		
Wireless	1		
Lifejackets	No		
Gumboats	No		
Sirens	1		
Helmets	No		
Bi-cycles	No		
Torch lights	No		
Apron	No		
Flagstand (with flag)	No		
Engine driven boats	No		
Rescue tool boxs	No		
Wireless sets	1 set		
Strechers	No		
Mikes	1		
Radios	1		
First AID Box	1		
Tables	2		
Chairs	5		
Almirah	1		
Radios (out of order)	1		

4.6 Financing:

The income of union parishads comes from local tax, lease of hat/ bazaars and issuing of trade licence 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 parishads from land registration.

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

Type of source	Annual income								
	Kumira	Bansbaria	Baroiyadhala	Sayedpur	Muradpur	Bhatiyari	Sonaichari	Barobkunda	Salimpur
Annual residential house tax	2,00,000/-	-	40,000/-	3,51,600/-	3,00,000/-	40,000/-	-	40,000/-	40,000/-
By the license and license issue fees for permits	1,00,000	1,80,000/-	20,000/-	-	70,000/-	-	34,00,000/-	20,000/-	-
For the lease (, Market, Ghat, ponds, etc)	30,000/-	45,000/-	20,000/-	20,000/-	40,000/-	-	5,02,000/-	20,000/-	20,000/-
Income property	-	-	-	-	-	-	-	-	-
General Fund of Union	-	-	-	-	-	-	-	-	-
Others	-	10,000/-	1,00,000/-	1,55,000/-	2,20,000/-	1,00,000/-	-	1,00,000/-	1,00,000/-

(b) Government donation:

Type of source	Annual income								
	Kumira	Bansbaria	Baroiyadhala	Sayedpur	Muradpur	Bhatiyari	Sonaichari	Barobkunda	Salimpur
Allowance of Chairman & Mambers	3,30,600/-	1,55,700/-	-	3,30,000/-	1,60,000/-	-	1,55,400/-	-	50,000/-
Salary of secretary & other workers	6,40,000/-	2,20,000/-	6,00,000/-	5,68,800/-	3,10,000/-	6,00,000/-	4,80,000/-	6,00,000/-	6,00,000/-
Developing fund of reparing road/L.G. S.P	-	13,52,500/-	12,00,000/-	-	15,00,000/-	-	-	12,00,000/-	-
1% of Land	15,00,000/-	35,50,000/-	-	4,00,000/-	65,00,000/-	-	-	-	-
Construction and home repair, the development Fund	-	-	-	-	10,000/-	-	-	-	-

c) Local Government:

Local government	Annual income								
	Kumira	Bansbaria	Baroiyadhala	Sayedpur	Muradpur	Bhatiyari	Sonaichari	Barobkunda	Salimpur
Upazila Parishad	1,50,000/-	15,500/-	1,00,000/-	1,50,000/-	-	1,00,000/-	-	1,00,000/-	1,00,000/-
District Council	-	-	-	-	-	-	-	-	-

(d) Developing non-govt. organization:

Non-govt. developing organization	Annual income								
	Kumira	Bansbaria	Baroiyadhala	Sayedpur	Muradpur	Bhatiyari	Sonaichari	Barobkunda	Salimpur
CDMP	-	-	-	-	-	13,000/-	-	-	-
ADP	-	-	-	-	-	3,00,000/-	-	-	-

4.7 Assessment of Planning and Work Pain

S.I No	Name	Designation	Member	Mobile No
01	Abdullah Al Baker Bhuiyan	Upazila Chairman	Chairman	01715-299961
02	Md. Shahin Emran	Upazila Nirbahi Officer	Co-Chairman	01715-270101
03	Md. Ismail	Project Implementing Officer	Member Secretary	01816-143030
04	Md. Asharaf Uddin Rumi	Upazila Co-operative Officer	Member	-
05	Md. Nazrul Islam	Engineer, LGERD	Member	01713-460958

5th Chapter: Rescue & Rehabilitation Plan

5.1 Assesment of damage

Sectors	Descriptions
Agriculture	The amount of total firm land is 21654 acres. About 15500 acres Aman, Aus, Boro, and Robi crops and cultivation of Guava and vegetables can badly be affected if a flood similar to 1988 occurs or hits this upazila. About 700 acres crop out of total 21654 acres can be damaged each year by hilly water onrush. Partly damage of 2050 acres crop is occurred by tornedos. About 1200 acres crop out of total 21654 acres is damaged by salinity. Soil fertility is decreasing day by day. About 450 acres crop out of 21654 acres can be affected if a snow rain hits like 2012. About 350 acres crop out of 21654 acres can be affected if a major drought hits this upazila.
Fisheries	Fishes of about 950 ponds out of total 2865 are flown away if a flood hits the Upazila. Fishes of about 1430 ponds out of 2865 ponds are washed away if a tornado hits the upazila. Fishes of about 15 Khals out of 24 Khals is perished completely due to attack of chemical wastage. About 220 ponds out of total 2865 ponds are affected by river erosion.
Livestock	About 10500 cows out of 58242, 14535 goats out of 25642, 225 sheeps out of 552 Sheeps, 50400 chicken out of 711431, 4080 ducks out of 17255, and other wild animals and birds can be washed /flown away if a flood similar to 1988 occurs in the upazila.
Health	People of about 5100 families out of 71315 families can be affected with various diseases due to rise of 35% of small and large industrial units 988 and 53 respectively and its closeness to sea. Besides 10 health centers out of 33 health centers are directly or indirectly affected by tornado or hailstorm. 360 tubewells out of 26777 are affected by tornado. 5.10% arsenic has been found in Bansbaria, Bariardala, Muradpur, Barabkundu, Bhatiari and Sonaichari unions including Pourashava. Arsenic has been found in 1212 tubewells; as a result 15500 families out of 73315 are being affected by various skin diseases. In addition, Water scarcity is found due to lowering of underground water of tubewells during dry monsoon.
Livelihoods	About 90200 farmers out of 24278 farmers, 25500 day labourers out of total 62069 lost employment due to flood. In addition, goods of 150 small and large shops are damaged. About 20200 day labourers out of 62069 lost their employment due to tornado. In addition drought takes away employment of 30200 day labourers out of total 62069 and 80500 farmers out of 248278 farmers. Besides 3980 fishermen out of 30326 fishermen directly or indirectly affected by drought.
Trees	About 5690 fruits, forest, and herbal trees of Kumira union can be affected if a flood similar to 1988 hits Sitakundu upazila again. About 6107 fruits, forest, and herbal trees of Bansbaria union can be affected. About 5890 fruits, forest, and

	herbal trees of Bariardala union can be affected. About 6210 fruits, forest, and herbal trees of Saidpur union can be affected. About 8986 fruits, forest, and herbal trees of Muradpur union can be affected. About 5781 fruits, forest, and herbal trees of Pourashava union can be affected. About 4192 fruits, forest, and herbal trees of Salimpur union can be affected. About 5127 fruits, forest, and herbal trees of Sonaichari union can be affected. About 4989 fruits, forest, and herbal trees of Bhatiari union can be affected. About 6229 fruits, forest, and herbal trees of Barabkunda union can be affected.
Sanitation	There are a total 69315 latrines at Sitakundu upazila. 28967 are Pucca and 40348 are Kacha. About 20458 latrines can be affected if a flood occurs. About 11472 latrines can be affected by tornado.
Infrastructure	About 55 KM Kacha road out of total 301.40 KM, 25 HBB out of 73.55 HBB, inundation of 3540 homes out 73315 homes, 40 educational institutions out 221, 10 Hatbazars out of 34 Hatbazars, 13090 Kacha homes out of 73315 homes and 30 culverts out of 397 culverts can be affected by floods. About 80 educational institutions out of 221, 180 mosques out of 408 mosques, 20 Temples out of 139 temples, 8 hatbazars out of 34 Hatbazars and 20 Km electric lines can be affected by tornado.

5.2 Early Recovery:

5.2.1 Re-establishment of Administration

S.L No.	Name	Designation	Member	Mobile No
01	Abdullah Al Baker Bhuiyan	Upazila Chairman	Chairman	01715-99961
02	Md. Shahin Emran	Upazila Nirbahi Officer	Co-Chairman	01715-70101
03	Md. Ismail	Project Implementing Officer	Member Secretary	01816-43030
04	Md. Sadil Hossain	Upazila Accounts Officer	Member	-
05	Md. Nazrul Islam	Engineer, LGERD	Member	01713-60958
06	Sheikh Ahmed Chowdhury	Upazila Education Officer	Member	01712-28231

5.2.2 Cleaning of Garbage:

S.L No.	Name	Designation	Member	Mobile No
01	Abdullah Al Baker Bhuiyan	Upazila Chairman	Chairman	01715-99961
02	Md. Shahin Emran	Upazila Nirbahi Officer	Co-Chairman	01715-70101
03	Md. Ismail	Project Implementing Officer	Member Secretary	01816-43030
04	Md. Sadil Hossain	Upazila Accounts Officer	Member	-
05	Md. Nazrul Islam	Engineer, LGERD	Member	01713-60958
06	Sheikh Ahmed Chowdhury	Upazila Education Officer	Member	01712-28231
07	Md. Asharaf Uddin Rumi	Upazila Co-operative Officer	Member	-

5.2.3 Resums of Public Services:

S.L No.	Name	Designation	Member	Mobile No
01	Abdullah Al Baker Bhuiyan	Upazila Chairman	Chairman	01715-99961
02	Md. Shahin Emran	Upazila Nirbahi Officer	Co-Chairman	01715-70101
03	Md. Ismail	Project Implementing Officer	Member Secretary	01816-43030
04	Md. Sadil Hossain	Upazila Accounts Officer	Member	-
05	Md. Nazrul Islam	Engineer, LGERD	Member	01713-60958
06	Sheikh Ahmed Chowdhury	Upazila Education Officer	Member	01712-28231
07	Md. Asharaf Uddin Rumi	Upazila Co-operative Officer	Member	-

5.2.4 Emergency Livelihood Assistance:

S.L No.	Name	Designation	Member	Mobile No
01	Abdullah Al Baker Bhuiyan	Upazila Chairman	Chairman	01715-99961
02	Md. Shahin Emran	Upazila Nirbahi Officer	Co-Chairman	01715-70101
03	Md. Ismail	Project Implementing Officer	Member Secretary	01816-43030
04	Md. Sadil Hossain	Upazila Accounts Officer	Member	-
05	Md. Nazrul Islam	Engineer, LGERD	Member	01713-60958
06	Sheikh Ahmed Chowdhury	Upazila Education Officer	Member	01712-28231
07	Md. Asharaf Uddin Rumi	Upazila Co-operative Officer	Member	-

Annexure 1

Checke List of Implemeting Planing

Sl no.	subject	YES/NO
1.	campaign volunteers alerted elected as members of the team called about danger to start work on it.	Yes
2.	It is risky to rescue people from the area for the responsibility of a person/team if there is to be made.	Yes
3.	Whether publicity has been made to keep dry foods and safe drinking water for 2/1 days beneath soil.	Yes
4.	Life jackets for the security of volunteers members have been supplied.	Yes
5.	Necessary manpower have been deployed to keep control room rinning 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/lattrin 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	

For information: Md. Ismail, PIO, Sitakunda, Chittagong, Mobile no. - 01816 - 143030

Annuxer 2

List of Upazila Disaster Management Committee

Sl.no	Name/Designation	Member	Mobile No
1	Parliament Member, Ctg.03	Advisor	01914-745308
2	Chairman, Upazila Parisad, Sitakunda	Chairman	01715-299961
3	Upazila Nirbahi Officer	Co-Chairman	01715-270101
4	Meyor, Sitakunda	Member	01711-174855
5	Vice Chairman, Female, Sitakunda	Member	01817-770019
6	Vice Chairman, Male, Sitakunda	Member	01711-307172
7	Chairman, Saidpur U.P	Member	01819-630491
8	Chairman, Baroiyadhala U.P	Member	01819-837993
9	Chairman, Muradpur U.P	Member	01730-162039
10	Chairman, Barobkunda U.P	Member	01819-174106
11	Chairman, Bansbaria U.P	Member	01819-973782
12	Chairman, Kumera U.P	Member	01819-319215
13	Chairman, Sonaichori U.P	Member	01817-748382
14	Chairman, Bhatiyari U.P	Member	01819-329878
15	Chairman, Salimpur U.P	Member	01819-3291190
16	Upazila Agriculture Officer	Member	01718-114480
17	Upazila Health & Family Planing Officer	Member	01717-804169
18	Upazila Livestock Officer	Member	01810-073651
19	Assistance Commissioner (Land)	Member	01552-326865
20	Upazila Fisheris Officer	Member	01814-324062
21	Upazila Education Officer	Member	01712-728231
22	Upazila Engineer	Member	01713-460958
23	Upazila Social Work Officer	Member	01552-378463
24	Upazila Family Planning Officer	Member	01611-130637
25	Upazila Food Controller Officer	Member	01199-269970
26	SP, Sitakunda	Member	01713-373645
27	Assistance Engineer, Health	Member	01715-612006
28	Upazila Youth Development Officer	Member	01718-079974
29	Upazila Co-operative Officer	Member	01714-595689
30	Upazila Education Officer	Member	01716-599062
31	Upazila Women's Officer	Member	01815-200370
32	Upazila Ansar VDP Officer	Member	01819-465983
33	Fair Service Station Officer	Member	01818-097009
34	Assistance Director, CPP	Member	01716-523842
35	Chairman, BRDB	Member	01191-259986
36	Agent, Ipsa	Member	01711-989281
37	Agent, Handicap International	Member	01732-868912
38	Agent, Sajeda Foundation	Member	01939-920076
39	Chairman, Sitakunda Press Club	Member	01811-808104
40	Principal, Bijoy Sarani Degree College	Member	01715-297707
41	Commendar, upzaila Freedom Fighter	Member	01819-354431
42	Chairman, Desable People Organization	Member	01196-180352

Annuxer 3

List of Volunteers Bhatiyari Union

Sl no	Name	Word no	Training	Mobile No
1	Md. Rasel Mia	1	Micking of signal	01818-069046
2	Md. Shahidul Islam Pappu	4	Rescue	01819-612395
3	Md. Nurul Alam	1	Rescue assistance	01819-021341
4	Md. Sabar Ahmed	8	Warning assistance	01812-497710
5	Md. Jasim Uddin	3	Primary treatment	01815-675244
6	Md. Lokman Mia	3	Primary treatment	01812-678158
7	Md. Alamgir Hossain	5	Relieve assistance	01811-315415
8	Md. Badruzaman	5	Shelter	01829-328944
9	Md. khorshed Alam	2	Shelter assistance	-
10	Md. Faruk Ahmed	2	Relieve	-
11	Md. Salauddin	9	Primary treatment	-
12	Md. Abul Kalam	9	Relieve	-
13	Md. Abdul Hamid	4	Micking of signal	01822-783822
14	Ejaha Mia	6	Shelter	01917-429399
15	Md. Bholia Mia	6	Rescue	01811-893412
16	Arafatul Islam	7	Shelter	01837-218923
17	Md. Mizan	7	Rescue	01825-288430
18	Md. Nurul Kabir	8	Primary treatment	01678-885726

List of Volunteers Muradpur Union

Sl no	Name	Word no	Training	Mobile No
1	Md. Asharafullah	4	Micking of signal	01836-651967
2	Md. Sujaudullah Helal	4	Rescue	01816-345941
3	Farida yeasmin Panna	5	Rescue assistance	01833-859092
4	Babi Rani Nath	1	Warning assistance	01827-244831
5	Md. Sohel Rana	1	Primary treatment	01814-924367
6	Suvas Chandra Nath	7	Primary treatment	01831-977301
7	Delower Hossain	3	Relieve assistance	01811-532939
8	Md. Noyab Mia	3	Shelter	-
9	Md. Rafiq Mia	2	Shelter assistance	01732-087998
10	Ranjit Shil	2	Relieve	01911-113801
11	Md. Abu Taher	5	Primary treatment	01818-571767
12	Dilip Kumar Nath	6	Relieve	01711-715927
13	Kamrunnher	6	Micking of signal	-
14	Md. Jafor Ullah	8	Shelter	-
15	Md. Alauddin	8	Rescue	-
16	Md. Jamal Ullah	7	Shelter	-
17	Haritos Majumder	9	Rescue	-
18	Md. Amir Hossain	9	Primary treatment	-

List of Volunteers Kumira Union

Sl no	Name	Word no	Training	Mobile No
1	Rubel Nath	1	Micking of signal	-
2	Samir Nath	1	Rescue	01817-235980
3	Md. Abu Taher	2	Rescue assistance	-
4	Md. Abul Kasem	2	Warning assistance	01819-612395
5	Md. Nurul Amin	3	Primary treatment	01819-021341
6	Md. Ismail Hossain	3	Primary treatment	01812-497710
7	Md. Joynal Abedin	4	Relieve assistance	01815-675244
8	Md. Harunur Rasid	4	Shelter	-
9	Mohammad Ali	5	Shelter assistance	01814-230188
10	Abu Taher	5	Relieve	-
11	Milon Jaldas	6	Primary treatment	01911-113801
12	Samsul Alam	6	Relieve	01818-571767
13	Harun or Rasid	7	Micking of signal	-
14	Md. Mainuddin Mollah	7	Shelter	01915-235400
15	Md. Manik Mia	8	Rescue	-
16	Gobinda Jaldas	8	Shelter	-
17	Md. Manjur Morsed	9	Rescue	-
18	Sapad Hossain	9	Primary treatment	-

List of Volunteers Sonaichari Union

Sl no	Name	Word no	Training	Mobile No
1	Md. Emtiaj Hossain	1	Micking of signal	01818-694177
2	Md. Salim Uddin	1	Rescue	-
3	Jahangir Alam	2	Rescue assistance	01815-985203
4	Md. Saddam Hossain	2	Warning assistance	-
5	Mohammad Hossain	3	Primary treatment	01819-944069
6	Md. Harun Mia	3	Primary treatment	-
7	Rakhil Chandra Das	4	Relieve assistance	-
8	Anil Das	4	Shelter	01846-031985
9	Surja Mohan	5	Shelter assistance	01818-069569
10	Ruhidas	5	Relieve	-
11	Md. Borhan	6	Primary treatment	01830-480240
12	Md. Jafor Ahmed	6	Relieve	01817-530299
13	Md. Khorshed Alam	7	Micking of signal	-
14	Md. Jahangir Alam	7	Shelter	01819-853201
15	Rabindra Jaldas	8	Rescue	-
16	Krishna Jaldas	8	Shelter	-
17	Arjun Jaldas	9	Rescue	01817-553698
18	Md. Salaha Jahur	9	Primary treatment	-

List of Volunteers Baroiyadhala Union

Sl no	Name	Word no	Training	Mobile No
1	Md. Yousuf	1	Micking of signal	01827-913409
2	Md. Shafiul Alam	1	Rescue	-
3	Md. Samsul Alam	2	Rescue assistance	-
4	Md. Tajul Islam	2	Warning assistance	01961-911814
5	Md. Shaful Islam	3	Primary treatment	-
6	Md. Sayed Hossain	3	Primary treatment	-
7	Md. Jasim Uddin	4	Relieve assistance	-
8	Md. Monirul Islam	4	Shelter	01811-922295
9	Krishna Mohan Nath	5	Shelter assistance	01813-186709
10	Ruhul Amin	5	Relieve	01813-707272
11	Didarul Alam	6	Primary treatment	01838-828255
12	Md. Chatta Mia	6	Relieve	01815-512480
13	Md. Nurul Alam	7	Micking of signal	01837-174247
14	Md. Chaton Mia	7	Shelter	01824-822911
15	Nurul Alam Nani	8	Rescue	01820-169818
16	Akashi Rano	8	Shelter	-
17	Ratna Rani Debi	9	Rescue	01840-716997
18	Abul Hadi	9	Primary treatment	01811-504390

List of Volunteers Salimpur Union

Sl no	Name	Word no	Training	Mobile No
1	Md. Nurul Islam	1	Micking of signal	01821-935298
2	Hasan Shah Newaj	1	Rescue	01815-520197
3	Shah Alam	2	Rescue assistance	01819-009740
4	Nur Islam	2	Warning assistance	-
5	Sujaul Karim	3	Primary treatment	01814-421232
6	Jahangir Alam	3	Primary treatment	01819-386501
7	Jamal Uddin	4	Relieve assistance	01819-323187
8	Md. emrul	4	Shelter	-
9	Sudhansu	5	Shelter assistance	01812-766077
10	Ali Akkash	5	Relieve	01819-649414
11	Hasan	6	Primary treatment	01670-296691
12	Mohammad Ali	6	Relieve	01814-108735
13	Nijam Uddin	7	Micking of signal	-
14	Monir Hossain	7	Shelter	01819-821746
15	Jane Alam	8	Rescue	-
16	Kamal Uddin	8	Shelter	-
17	Kawser Karim	9	Rescue	01814-728002
18	Himanshu Jaldas	9	Primary treatment	01676-648673

List of Volunteers Sayedpur Union

Sl no	Name	Word no	Training	Mobile No
1	Enamul Noiwsed	1	Micking of signal	01817-177519
2	Abdul Mannan	1	Rescue	01814-986270
3	Belayet Hossain	2	Rescue assistance	01835-892366
4	Bhashani	2	Warning assistance	01686-222466
5	Ahasanul Islam	3	Primary treatment	01713-622606
6	Mosharraf Hossain Ripon	3	Primary treatment	01840-056499
7	Kamal Hossain	4	Relieve assistance	01818-604617
8	Ibrahim	4	Shelter	01190-181869
9	Nurchapa	5	Shelter assistance	01818-991949
10	Didarul Alam	5	Relieve	01823-964998
11	Shahidul Haque	6	Primary treatment	01816-692310
12	Enam Uddin	6	Relieve	01827-463336
13	Dulal Kanti Das	7	Micking of signal	01814-000433
14	Sekander Badsa	7	Shelter	01765-152161
15	Saiful Islam	8	Rescue	01812-230443
16	Iqbal Hossain	8	Shelter	01818-692180
17	Sajal Kumer	9	Rescue	01814-766887
18	Shakhwet Hossain	9	Primary treatment	01819-021110

List of Volunteers Bansbaria Union

Sl no	Name	Word no	Training	Mobile No
1	Md. Jabbar Mia	1	Micking of signal	01815-022657
2	Shahabuddin	1	Rescue	-
3	Kashem	2	Rescue assistance	-
4	Palash Babu	2	Warning assistance	01818-991949
5	Jahangir Alam	3	Primary treatment	01823-964998
6	Shahjahan Ali	3	Primary treatment	01816-692310
7	Md. Noman	4	Relieve assistance	01827-463336
8	Md. Taslim Uddin	4	Shelter	-
9	Md. Jamal Ahmed	5	Shelter assistance	-
10	Md. Nurul Alam	5	Relieve	01815-0335789
11	Aminur Rasul	6	Primary treatment	01814-660324
12	Abul Mansur	6	Relieve	-
13	Md. Jahangir	7	Micking of signal	01825-023548
14	Abdul Jabbar	7	Shelter	-
15	Jaharul Islam Chowdhury	8	Rescue	-
16	Delower Hossain	8	Shelter	-

List of Volunteers Barabkunda Union

Sl no	Name	Word no	Training	Mobile No
1	Mahatub Uddin	1	Micking of signal	01855-504343
2	Md. Jia	1	Rescue	01813-704720
3	Parvin Akter	2	Rescue assistance	-
4	Md. Mamun Khan	2	Warning assistance	01818-075659
5	Md. Shahid	3	Primary treatment	-
6	Titu Mia	3	Primary treatment	01811-609861
7	Nargis Akter	4	Relieve assistance	-
8	Md. Rafiq	4	Shelter	01818-691695
9	Mahbub Alam	5	Shelter assistance	-
10	Md. Abu Taher	5	Relieve	-
11	Jamsed Alam	6	Primary treatment	01815-025703
12	Mohammed Ali	6	Relieve	-
13	Md. Salauddin	7	Micking of signal	-
14	Md. Jashim Uddin	7	Shelter	-
15	Md. Ibrahim Mollah	8	Rescue	01814-815294
16	Md. Jahid Hasan	8	Shelter	-
17	Md. Abdul Jalil	9	Rescue	-
18	Sakkur Mia	9	Primary treatment	-

Annexure 4

List of Shelter centre Mangement Committee

Name of Shelter Centre	Responsible Person	Mobile No
Shekhertek Govt. P.S	Abdul Motaleb Nijami	01825-034026
Dakhin Bagachator Govt. P.S	Golam Faruk	01816-557490
Uttor Bagachator Govt. P.S	Atul Chandra Nath	01812-346527
Mohanagar Govt. P.S	Monirullah	01819-526046
Modha Bagachator Govt. P.S	Ajmol Khan Nijami	01812-776689
West Sayedpur Govt. P.S	Monoyara Akter	01197-198578
East Sayedpur Govt. P.S	Srity Rani Satta	01812-631872
Bakhali Govt. P.S	Jahurul Haque	01824-373926
North West Sayedpur Govt. P.S	Farhana Islam	01822-909440
Alakuli Govt. P.S	Mukul Roy Chowdhury	01820-281006
Bagachator Gulbahar Govt. P.S	Altaf Hossain	01815-681377
Modher Dhari Govt. P.S	Kamrul Hassan	01817-260755
Baroidhala Govt. P.S	Ishak Nijami	01816-725079
Terial Govt. P.S	Kagi Nijam Uddin	01812-132897
Baroidhala Mohalanga Govt. P.S	Salauddin Mahbub	01818-568394
West Lala Nagor Govt. P.S	Ahmed Shobhan	01818-524014
Muradpur Govt. P.S	Humayun Kabir	01819-349705
Guptakhali Govt. P.S	Nurul Alam	01814-477610
Chadekmosthan Govt. P.S	Golam Rasul	-
Bhaterkhil Govt. P.S	Lilaboti Datta	01813-965040
Guliakhali Govt. P.S	Sheli Rani Datta	01815-638534
Muradput Basrot Govt. P.S	Saggad Hossan	01553-408631
Golabaria Govt. P.S	Ismot Ara Sultana	01719-198277
Uttar Bansbaria Govt. P.S	Samsur Nahar	01721-471347
Utta Mosgidda Govt. P.S	Dipali Rani Datta	01819-510255
Kotpara Govt. P.S	Kamrunzamman Begum	01620-623897
Kumira Govt. P.S	Sharifa Akter	01915-757472
Baro Aulia Govt. P.S	Sultana Suria	01719-175212
Dakhin Ghoramara Govt. P.S	Sabita Kar	01710-800585
Immam Nagor Govt. P.S	Salma Khatun	01715-183405
Bahtiyari Govt. P.S	Gagi Humayun Kabir	01818-774074
Hossainia Govt. P.S	Prvin Akter	01817-730770
Kadam Rasul Govt. P.S	Hosnara Ara Begum	01734-042872
Latifpur Govt. P.S	Mamataj Jahan	01712-031393
Modha Rasulpur Govt. P.S	Mukul Chandra Das	01925-346655
Darogarhat Govt. P.S	Sayed Md. Atikur Rhaman	01718-618854
Sitakunda Govt. P.S	Nur Nahar Begum Rina	01718-113875
Obaida Sheikh Para Govt. P.S	-	-

Government/Non-government Organization

Name of Shelter Center	Responsible Person	Mobile No.
Uttar Salimpur Jelepara cyclone center	Md. Salauddin Aziz	01818-903477
Kagi Para World Vission Shelter Center	Nur Uddin Md. Jahangir	-
Alekdia World Vission Shelter Center	HM Tajul Islam	-
UP Bhaban	Chadakot Ullah	-

High Road & Embenkment:

No embankment in this Upazila

Health Management Committee

List of health management committee in the table below:

Name of Health Center	Responsible Person	Mobile No.
Upazila Health Center	Dr. S.M.S Abdul Momem	01711-130637
	Abdullan Al Baker Bhuiyan	01715-299961
	Dr. Nazrul Ahasan	01816-251553
	Kagi Sahera	01819-866448
	Dr. Md. Ashek Elahi	01819-612448
	S.M Shah Alam	01715-612006
	Md. Jahirul Haque	01716-084971
	Md. Eskandor Hossain	01715-978794
	Susama Rani Sarker	01817-775795
	Md. Nur Nabi	01815-073523
	Bebekananda Chakraborti	01815-326706
	Md. Mostafa	01818-857973
	Dr. Abdul Salam Chowdhury	01816-511941
	Dr. S.M Eftakharul Islam	01819-366697
	Md. Jahirul Islam	01825-397364
	Dr, Md. Hasanul Arefin	01717-135059
	Md. Mahidul Islam	01714-763977
	Dr. Sultana Akter	01713-104340
	Dr. S.M.N Alam Siddiki	01818-442992
	Dr. Kamrul Hasan	01554-338878
	Mr. Rezaul Karim	01730-162039
	Md. Rehan Uddin	01819-837993
	Md. Salam	01713-133412
HM Tajul Islam	01819-630491	
Ibrahim Bin Manjur	01717-894167	

Fire Safety Committee:

Fire Safety Committee list of Sitakunda Upazila in the table below

Name of Fire Station	Responsible Person	Mobile No.
Abdullah Al Baker Bhuiyan	Upazila Chairman	01715-299961
Md. Shahin Emran	Upazila Nirbahi Officer	01837-711450
Sitakunda Fire Station	Md. Fakuruddin, Station Officer	01199-558500
Kumira fire station	Md. Omor Faruk, Station Officer	01711-515312
Md. Islmail Hossain	Project Implementing Officer	01816-143030

Engine-driven

Sitakunda boat sub-district-driven profession engaged in a list of people who are given to provide.

Name Union/Ward	Choose	Mobile no.
Sonaichari Union	Rakhal Chandra Das	01846-031985
Sonaichar Union	Anil Das	01818-069569
Sonaichar Union	Ravi Chandra Das	-
Sonaichar Union	Surja Mohan	-
Sonaichar Union	Krishna Das	-
Sonaichar Union	Arjun Das	01830-480240
Sonaichar Union	Deb Das	
Salimpur Union	Khorshed Alam	01830-556565
Bhatiyari Union	Shahidul Hasan	01815-345920
Kumaria Union	Joseph	01827-577462
Barobkunda Union	Ibrahim	01811-175712
Muradpur Union	Kamal	01839-151081

Local Business:

Sitakunda Upazila locally engaged in various professions in person below. A list of is given to.

Name Union/Ward	The local businessman name	Mobile no.
BansbariaUnion	Upendra monoranjan jaldas	01814-138847
Bansbaria Union	Monoranjan jaldas	01824-550537
Bansbaria Union	Gias Uddin	01824-907287
Bansbaria Union	Md. Jahangir	01817-776331
BansbariaUnion	Babul Das	
BansbariaUnion	Md. Idris	01823-621084
Bansbaria Union	Mohammad Iqbal Bahar	
Salimpur Union	Jamal Ahmed	01819-369023
Salimpur Union	Md: Osman	01813-793720
Bahtiyari Union	Rashedul Hasan	01813-952856
Bahtiyari Union	Fayez Ahmed	01819-842033
Bahtiyari Union	Salahuddin	01812-600800
Bahtiyari Union	Mohammad Nabi	01817-757462
Kumaria Union	Nachima Begum	01671-684627
Kumaria Union	Md. Safi	01815-146541
Kumaria Union	Sarwar Kamal Khokon	01924-303535
Barobkunda Union	Md: Iqbal	01819-171982
Barobkunda Union	Sirajul Islam	
Barobkunda Union	Gautam	01711-714111
Barobkunda Union	Md. Hanif	01816-828310
Barobkunda Union	Md. Shahidul Islam	01819-622080
Barobkunda Union	Mohammad Mohiuddin	01819-874213
Sonaichari Union	Shah Alam	01811-258849
Sonaichari Union	Dipak Kumar Pal	01989-781590
Sonaichari Union	Manjurul Islam	01819-176564
Baroidhala Union	Sunil Chandra Nath	01912-258079
Baroidhala Union	Mohsin	01813-398961
Baroidhala Union	Ali Hossain	
Muradpur Union	Al Amin	01819-886748
Muradpur Union	Shahjahan	01818-871065
Muradpur Union	Nizam Uddin	01824-787764
Muradpur Union	Ishaq alako	
Muradpur Union	Ezharul Islam	01720-047425
Muradpur Union	Noor Hossain	
Muradpur Union	Mosharraf Hossain	01819-636256
Municipality Sitakunda	Alamgir	01819-382510
Municipality, Sitakunda	Zahidul Islam	
Municipality, Sitakunda	Liton	01815-483840
Municipality Sitakunda	Md: Tuhin	
Municipality, Sitakunda	Didar	01717-586918
Municipality, Sitakunda	Belal Hossain	
Municipality, Sitakunda	Mithun	01819-889689

Annuxure 5

At a glance of Sitakunda Upazila

SI No.	Area	483.96 Km.	SI No.	church	04
1	Union/sub-district	09 unions and 1 Pourashava	23	Idgah ground	12
2	Maujas	65	24	Bank	34
3	village	120	25	post office	16
4	Family	73,315	26	Clube	90
5	The total population	6,20,695 people	27	Bazar	35
6	Men	3,35,583	28	Place grave	476
7	The	2,81,059	29	Crematory	140
8	Educational Institution	221	30	Poultry firm	27
9	Government Primary School	94	31	industrial factory	4
10	Primary School (Resi.)	11	32	Deep tube-wells	25
11	Secondary School	32	33	shallow tube-wells	26750
12	College	06	34	Tube-wells	-
13	Madrasa, filing, Fazil, started under	18	35	River	1 (33 km).
14	Brac school	10	36	Canel	24
15	garden school kindergartens	41	37	Bill	There is no
16	% of education	20% 59.	38	Haor	There is no
17	community clinics	09	39	Ponds	2865
18	Dam	1 (dam).	40	Water	36 acres of
19	Sluice Gate	23	41	Road	301. What is 40. me.
20	Bridge	116	42	Concrete road	157. 78. Km.
21	Mosque	408	43	Mobile tower	-
22	Culvert	397	44	play ground	49

Annuxure 6

Bangladesh Radio broadcast on some important program list

Radio center	The program is broadcast name	Broadcast time	The name
Dhaka-Ka	Krishi Samachar	At 6:55 and 7:00	Every day
	Sukher Thikana	At 7:25 and 7:30	Every day
	Health is Wealth	At 11:30 12:00	Every day except on Friday
	Sonali Fashol	At 06:05 - 6:35	Every day
	The weather news	At 06:50 - 7:00	Every day
Chittagong	Krishi Katha	6:55 am-07:00	Every day
	Krishi Samachar	At 06:10 - 06:50	Every day
	Sukhi Sangshar	At 06:55 and 08:30	Every day
Rajshahi	Khet Khamar Samachar	06:55 am-07:10	Every day
	Green Bangla	At 06:05 and 06:50	Every day
Khulna	Health Information	06:55 am-07:00	Every day
	cultivation	At 06:10 - 06:50	Every day
Rangpur	Sukher Thikana	07:25 AM-07:30	Every day
	Khet Khamar	At 06:05 and 06:30	Every day
Sylhet	In today's cultivation	06:55 am-07:00	Every day
	Sukher Thikana	07:25 AM-07:30	Every day
	Shymol Sylhet	At 06:05 and 06:25	Every day except on Friday
Thakurgaon	Kishen Mati Desh	At 06:05 and 05:25	On Saturday, Monday and Wednesday
Cox's Bazar	In today's Agriculture	At 03:07 and 03:25	Every day
	Sonali Prantor	At 03:40 and 03:45	Tuesday and Thursday
Barisal	To agriculture	At 03:15 03:30	Every day except Saturday and Wednesday
	Small family	At 03:35 03:50	Monday, Wednesday and Friday every day except
Rangamati	Giboner Katha	At 01:40 and 01:55	Every day
	Khamar Bari	At 03:05 and 03:15	Every day

At 06:50 PM in all the weather message center was to be broadcast by a.

The community radio broadcast schedule Below is an important program is given

Radio center	The program name is	Time	modified
Radio সাগড়গিরি F M 99.2	A healthy life (AIDS), Promo, PSA	At 12:35 and 1:00	Every day
	Nazrul music Beena, Promo, PSA	1:00 and 1:30	
	I am aware the change in a nice, healthy life for all	1:30 - 2:00	
	The lyrics of the song a touch (Bhakti Mulok Gan)	2:00 - 2:30	
	The students for program	2:30 - 3:00	
	Variety shows were The lyrics of the song (Rang Dhanu)	3:00 - 3:30	
	The interviews with garlands (Kather Mala)	3:30 - 4:00	
	The local artists of the lyrics of the song (Sarothe)	4:00 and 4:50	
	The next day the declaration to end the title	4:50 - 5:00	

The source of the sub-district office all government, all Union Council, and the respectable personalities among some senior people of various levels of learning through an interview.



Development of Disaster Management Plan at Upazila Level

Upazila: Sitakunda, District: Chittagong

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

Co-ordinated by:



GHARONI

July 2014

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Comprehensive Disaster Management Program
(CDMP-2)

Ministry of Disaster Management & Relief



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